

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

NEWS CONFERENCE:

FINDINGS OF ASTRONAUT HEALTH REVIEWS

Speakers:

SHANA DALE, NASA Deputy Administrator,
ELLEN OCHOA, Director, Flew Crew Operations,
NASA Johnson Space Center, Houston,
DR. RICHARD S. WILLIAMS,
Chief Health and Medical Officer, NASA Headquarters,
and [via telephone]
COLONEL RICHARD E. BACHMANN, JR.,
USAF, Chairman,
NASA Astronaut Health Care System Review Committee

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

1:00 p.m., EST
Friday, July 27, 2007

[TRANSCRIPT PREPARED FROM A DIGITAL RECORDING.]

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, NASA's Assistant Administrator for Public Affairs. Thank you for joining us today for a news conference that addresses two recently released reports regarding astronaut physical and behavioral health.

Joining us today are the Deputy Administrator of NASA, Shana Dale; NASA's Chief Health and Medical Officer, Dr. Richard William. Also joining us is the director of Flight Crew Operations from NASA's Johnson Space Center in Houston, Ellen Ochoa, and finally joining us by telephone is Dr. Richard Bachmann, U.S. Air Force Colonel and Chairman of the NASA Astronaut Health Care Review Committee.

We will have opening statements from Deputy Administrator Shana Dale and then from Dr. Bachmann, and then we would go on to your questions both here at Headquarters and at participating NASA centers around the country.

So let me now introduce the Deputy Administrator of NASA, Shana Dale.

DEPUTY ADMINISTRATOR DALE: Thank you, David.

In the wake of former Astronaut Lisa Nowak's arrest in February 2007, the Astronaut Health Care System Review Committee was formed when NASA Administrator Mike Griffin directed the agency's Chief Health and Medical Officer, Dr. Richard Williams, to conduct a review of the medical and behavioral health services available to NASA's astronauts at the Johnson Space Center.

The review committee, chaired by Air Force Colonel Richard Bachmann, commander of the U.S. Air Force School of Aerospace Medicine, was comprised of eight representatives of other Federal agencies.

Let me take a moment to acknowledge the important work done on such short notice with great dedication and time commitment by members of the Astronaut Health Care System Review Committee. You will hear from Colonel Bachmann in just a minute.

The first major issue is our need to revisit how to most effectively deliver medical and behavioral health care for NASA's astronauts.

The Johnson Space Center internal review, led by JSC Director Mike Coates, outlined and evaluated the

Johnson Space Center's extensive health care programs for our astronauts, which include their behavioral health, and recommended improvements to those programs which we are going to implement. A more extensive behavioral health assessment will be added to annual flight physical examinations for all astronauts.

We also are emphasizing the importance of behavioral health support to Shuttle crew members and offering time with behavioral health providers before, during, and after flights, and we are committed to improving the quality and usefulness of our psychological testing and assessment during the astronauts' election process.

These enhancements are aimed at improving the psychological care and testing procedures for astronauts which was the key focus of JSC's internal review. We thank Mike Coates and the team of experts who worked on this review, and we believe the resulting modifications will be good for the Astronaut Corps and for NASA.

NASA's Medical Policy Board, consisting of senior Government medical experts from inside and outside NASA, will further assess the medical and behavioral findings and

recommendations in the JSC internal review as well as the report of the external review committee. The board will provide advice on policy changes that will improve the NASA health care system and will provide oversight of the implementation of those policies.

The second major area of NASA's focus is undertaken with the recognition that the members of our Astronaut Corps, civilian, and military represent a group of America's most extraordinary and talented individuals by any standard. We take the recommendation of developing an astronaut code of conduct very seriously. It actually has been under discussion at NASA before this report.

For almost the entire history of the Astronaut Corps, our experience has been that NASA's astronauts conduct themselves with integrity, professionalism, and a desire to bring honor to America and America's space program. A written code of conduct, one that is initiated by the astronauts themselves will only strengthen this commitment. We are looking at how such a process will be collaboratively implemented.

Third, we will examine the structure of the Astronaut Office, as the review committee report comments,

with a renewed interest in establishing what are referred to as "enduring supervisory relationships." We plan to develop an anonymous survey to be completed by members of the Astronaut Corps and flight surgeons to initiate even more feedback on the findings and recommendations of the report in order to optimize supervisory relationships, health care delivery, and mission success. There may be other issues that astronauts and flight surgeons are interested in resolving or clarifying with this report.

Fourth, we will act immediately on the more troubling aspects of this report with respect to alcohol use and the anecdotal references of resistance by agency leadership to accepting advice or criticisms about the fitness and readiness of individuals for space flight.

I must emphasize that this report does not provide specific information about alcohol-related incidents, and the review committee has left it to NASA to determine the scope of these alleged incidents.

Let me bring you up to date on this fourth category and share with you what has been done since the draft report was briefed to NASA senior management. The Administrator and I have directed NASA's Chief of Safety

and Mission Assurance to undertake an internal safety review. He will gather information, conduct necessary analyses, and determine the facts of the reported alcohol-related incidents.

If any incidents occurred, he will determine the causes and recommend corrective actions. He also will review all existing policies and procedures related to alcohol use and space flight crew medical fitness during the immediate preflight preparation period to ensure that any risks of flight safety are dealt with by appropriate medical authorities and flight crew management, and if necessary, elevated through a transparent system of senior management review and accountability.

In the meantime, NASA's existing T-38 Aircraft Alcohol Use policy that historically has been applied to space flight has been explicitly extended as an interim policy to flight on any space craft. This interim policy prohibits alcohol use for 12 hours prior to flight and further states that astronauts will neither be under the influence nor the effects of alcohol at the time of launch.

A comprehensive review of alcohol use policy prior to aircraft use or space flight is already underway.

Mike Griffin and I will closely monitor progress on these issues. After the review is completed, it is our intention to share the findings of this review with the American public to the maximum extent possible.

One final thought. Much of the information contained in this report is or comes from anecdotal material. Whatever specific information, the Astronaut Health Care System Review Committee obtained in the course of its study, if it is of a health nature, it is subject to rules of medical record privacy. Therefore, the review committee has stated it cannot disclose this information.

Having said that, we do intend to apply the lessons learned from this exercise and to use this as an opportunity to move our culture closer to the optimum in responsiveness, care, professionalism and performance integrity that we all expect.

With that, I thank you, and I would like to turn it over to Dr. Bachmann for his remarks.

COL BACHMANN: Good afternoon. My name is Colonel Richard Bachmann. I am the chairman of the NASA Astronaut Health Care System Review Committee. This committee was chartered by NASA in February 2007 to conduct

a review of the medical and behavioral health care provided to astronauts and to provide opinions as to what, if any, procedures or testing could be put in place to predict disorder conduct or acts of passion.

In order to accomplish this review, the NASA Chief Health and Medical Officer contacted the senior medical officers of various Federal agencies, such as the Department of Veterans Affairs, the Department of Defense, and the Federal Aviation Administration, and solicited nominations of, and I quote, "appropriately credentialed physicians and mental health professionals employed by the Federal Government or on active duty in the military services and experienced in medical and behavioral health support to organizations and personnel engaged in critical or hazardous operations," end quote.

The NASA Chief Health and Medical Office selected the committee members from the pool of nominees based on professional credentials, operational experience, and availability. Assignment and notification to the committee members occurred in late February 2007.

I was asked to serve as chairman. I am an Air Force flight surgeon, specialist in aerospace and

occupational medicine, and currently am the Commander and Dean of the U.S. Air Force School of Aerospace Medicine.

The committee members are as follows: Colonel Timothy Sowin, Air Force flight surgeon, specialist in both psychiatry and aerospace medicine, and currently the chief of the Aviation Neuropsychiatry Branch at the U.S. Air Force School of Aerospace Medicine; Colonel James Bagian, Air Force Reserves flight surgeon, specialist in aerospace medicine, former NASA astronaut physician, and currently the Chief Patient Safety Officer, Department of Veterans Affairs; Mark Bauer, specialist in psychiatry, professor of psychiatry, Brown University and Providence Veterans Affairs Medical Center; James Fraise [ph], captain, U.S. Navy Retired, specialist in aerospace medicine, currently the Deputy Federal Air Surgeon, Federal Aviation Administration; Sandra Yerkes, Captain, U.S. Navy Retired, specialist in psychiatry, currently the director of NAVMED Medical Accessions; Elizabeth Holmes, Captain, U.S. Navy Retired, clinical psychologist, currently on faculty at the Stockdale Center for Ethical Leadership; and Paul DeLaney, Captain, U.S. Navy, Judge Advocate General Corps, currently assigned to the U.S. Navy Chief of Staff, Office of the

Judge Advocate General.

Ex officio members of the committee are James Duncan, NASA Chief of Space Medicine Operations at Johnson Space Center, and Wayne Fraizer, NASA Office of Safety and Mission Assurance. Our consultant was Ellen Baker, who is a current NASA astronaut physician, and the executive secretary for the committee is John Allen, NASA Program Executive, Crew Health and Safety.

The committee membership provides diverse backgrounds and extensive experience which have been invaluable during the review and deliberations. The committee's over-arching goal is to enhance the ability of NASA to perform its missions safely and effectively. The individual members of the committee feel greatly honored to have been selected for this task and look upon it as a civic duty to the nation.

It is important to reiterate that the committee's findings, recommendations, and opinions provided to NASA in this report do not reflect the official positions of the Air Force, Navy, Department of Defense, FAA, or VA. The committee was called into being by NASA to provide this report, and with the delivery of the report, the

committee's mission is complete.

The committee members will continue to be available to NASA to provide clarification or explanation on the report itself, but the work of further evaluation, deliberation, and action on the information contained in the report falls to NASA.

Our focus was to identify potential vulnerabilities in the NASA medical and behavioral health system and to recommend correction action or areas requiring further study.

The committee convened for its first meeting at NASA Headquarters in Washington, D.C., on March 28th, 2007, and received informational briefings from a wide variety of NASA functional experts. NASA provided the committee with an extensive set of policy documents and reports for review and further reference.

After several weeks of document review, research, and meetings by teleconference, the committee met at Johnson Space Center from 23 to 26 April 2007. During this period, Johnson Space Center personnel presented informational briefings and were interviewed by the committee. Then the committee divided into small teams and

conducted on-site reviews throughout the medical and behavioral health areas.

These reviews consisted of document reviews and staff interviews. NASA Astronaut and Family Support Office personnel assisted in soliciting astronaut and family member volunteers to be interviewed by the committee. Although the astronaut and family members interviewed did not represent a random or exhaustive sample of the larger population, the issues they raised were remarkably consistent and compelling and deserved focused action.

The committee met at the U.S. Air Force School of Aerospace Medicine from 30 to 31 May to draft the report and continued on the final working for the next few weeks.

The committee out-briefed the findings and recommendations to the NASA Administrator and senior NASA staff on July 16th. After some very minor revisions to provide clarity, the report was finalized this week and delivered to NASA.

The committee received outstanding support from NASA at every level of the organization. It was clear from every interview that NASA personnel are dedicated to accomplishing their mission. The interviews were characterized by openness, honesty, cooperation, and a

palpable desire to make things better.

As the review progressed, it became apparent that major vulnerabilities underlying root causes and contributing factors extend well beyond the specific medical aspects of NASA operations. Many of the cultural and structural issues identified in the report have existed for many years, predating the current leadership term, are deeply ingrained and will take senior leadership action to remediate them.

The committee concluded that NASA's astronaut health care system provides easily accessible care to astronauts and their families, and the care is consistent with accepted standards. There is room for improvement in the provision of behavioral health services, particularly as it interfaces with selection, training, evaluation, and support of astronauts preparing for and participating in space missions.

Members of the medical and astronaut communities raised significant concerns regarding barriers to communication. They described instances where medical personnel or fellow astronauts raised concerns about an astronaut's fitness for flight due to astronaut use in the

immediate preflight period, and these concerns appeared to them to be disregarded or overridden. The committee was concerned about this perception of disregard for human factors input and recommends that NASA conduct further evaluation using tools such as anonymous surveys to determine the extent of such perceptions and ensure that human factors concerns are appropriately identified and dealt with.

Human behavior is complex. Prediction of future behavior, even by behavioral health experts, is extremely difficult to perform accurately. Systemic procedures alone cannot predict disorder conduct, but human factors concerns or issues that arise or are identified in one realm could be more effectively shared with others and potentially result in earlier intervention.

The committee identified a number of structural and cultural issues that currently exist in NASA that make it even more difficult to predict an episode of disorder conduct and made recommendations to ameliorate them. These recommendations include institute a formal written code of conduct, creating enduring supervisory and mentoring relationships with effective feedback and evaluation, and

empowering supervisors, peers, and support staff to bring forward concerns.

This report contains a wide range of findings and recommendations. Some of these recommendations will be relatively simple to administer, such as writing standard operating procedures, to document processes which are already in place. Some will take substantially more time and effort to implement, such as restructuring astronaut supervisory relationships or focusing the intention of psychologists on astronaut performance enhancements.

Some recommendations entailed changing deep-seated, longstanding aspects of astronaut flight surgeon and safety cultures regarding alcohol use, code of conduct, acknowledgement of human performance issues, selection, training, evaluation and professional development, communication, and policy. None of these issues lend themselves to easy analysis or correction of a single factor. All of them require further study and evaluation by NASA. Solutions will require a systems-based approach and will take time to achieve.

The committee appreciates the openness of and assistance provided by NASA leadership, astronauts, medical

personnel, and family members. They clearly share the over-arching goal of the committee to enhance the ability of NASA to perform its mission safely and effectively.

With the delivery of this report, the committee's mission is complete. I think I can safely say that we have nothing further to add that was not addressed in my comments or in the report.

Thank you.

MODERATOR: Thank you, Colonel Bachmann.

We will now go to your questions. We will start here at Headquarters. We will try to get in as many of the reporters' questions as we can. So, if you could please try to limit your follow-ups, and please wait for the microphone to come to you, and if you could please give your name and media affiliation, please.

So let's go ahead and start right down here in the front, please.

QUESTIONER: Hi, there. Jeff Brumfield with Nature Magazine.

I see here that they said that the alcohol was being used in the immediate preflight period. Can Dr. Bachmann be any more specific how short or how many hours

before flight that alcohol was being consumed by the astronauts?

COL BACHMANN: Throughout the report, you will find the committee worked very hard to pick exactly the right wording to convey the information that we had. In that particular case, we did not get an exact time when the first or last drink was consumed or exactly what time the launch was scheduled.

The relevant point is actually the concern that the flight surgeon had and that that concern appeared to them to be disregarded.

I have seen some of the reports, and we did not get that level of detail from the interviews to be able to answer that question any better than we did in the report.

MODERATOR: Okay. Let's stay over in this section a little and just come across.

QUESTIONER: Duncan Kennedy from the BBC. I have a question for Ms. Dale.

Any week when we have got allegations about sabotage and earlier you have the sex scandal involving Lisa Nowak and now we have these allegations of drunkenness among astronauts, how embarrassing here is this turning out

for NASA?

DEPUTY ADMINISTRATOR DALE: Well, you know, NASA deals with issues as they come forward, and what we have been given from the committee is some allegations in regards to alcohol use. They did not verify these claims.

Their desire was to send them over to NASA for us to do further review, and as I noted in my statement, we have already initiated an internal safety review to determine if these events occurred, and if they did, what was the scope, what were the causes, what are the facts and circumstances surrounding them, and then also recommend corrective actions.

So, with any issue that arises with NASA, our intention is to have as open a culture as possible and to figure out what exactly the facts are in any incidents that we have been provided with and figure out what our course of action is going to be.

QUESTIONER: [Inaudible.]

DEPUTY ADMINISTRATOR DALE: No. I wouldn't say that.

DR. OCHOA: What I would like to say is that I joined the Astronaut Corps 17 years ago, and the absolute

best part of my job is the people that I work with in the corps and in the people that support us, the flight controllers, the trainers, the flight surgeons. I mean, it is an incredible group of people. They are intelligent. They are bright. They are dedicated, enthusiastic, and they are really focused on making sure that we carry out our mission safely and successfully.

So there have been events in which isolated cases have happened which I think baffle us, and in this case, they really don't even have the details and don't fully understand it, but it really shouldn't paint a picture of the Astronaut Corps or of how we carry out human space flight at NASA.

DEPUTY ADMINISTRATOR DALE: I would just like to emphasize again that at this point, what we are dealing with are allegations, and we have to find out what the ground truth is. That is our job.

QUESTIONER: I am Alison Smith with the Canadian Broadcasting Corporation. Perhaps I could direct this question to you, then.

When you talk about the best and the brightest in the work that you do, the report identifies a culture

where, whether it is alcohol abuse or other so-called risky behaviors, when they are reported up the line are apparently disregarded.

What is it in the culture that exists there now and as was suggested here earlier has existed for sometime that prevents that kind of awareness and those kinds of incidents from being acted upon?

DR. OCHOA: Well, all the information I have is what is in the report, and so I don't know what they are referring to in the report because in my experience, people all the time are talking about safety issues, safety issues they have found, that they have seen. We spend a lot of time in our training saying how do we protect for errors on orbit as we are preparing for flight, how do we back each other up when we are tired or not feeling well, when you may be distracted doing one task and not another. So that is totally ingrained in everything that we do.

So, in order to understand exactly what might be being referred to in the report, what I would like to do, what is going to happen at Johnson Space Center, is that we are going to survey the Astronaut Office and the flight surgeons, and we are going to do a systematic comprehensive

look and ask them questions about the topics that are specifically addressed in this report. I think that is the only way I can get a better feel for what might actually be going on, what the concerns of people are, what barriers there might exist or that people perceive exist, and then understand how to try to address them.

We do have lots of procedures, policies, and just general practice in place, and we are constantly emphasizing to people that they need to address anything that affects flight safety or mission success, many pathways to do that, and we need to understand better what might be preventing people from using those pathways.

DEPUTY ADMINISTRATOR DALE: I would like to just make a couple of points here. There are several recommendations in the report; in particular, recommendations related to behavioral health that we are already prepared to accept. Several other recommendations are going to require further deliberative review by NASA's Medical Policy Board.

But in particular, one of the recommendations that we are accepting today is ensuring that other astronauts, flight surgeons, and trainers feel free,

willing, and able to raise any safety-related concerns.

As I mentioned, we have initiated an internal safety review to be headed by Bryan O'Connor, the Chief of Safety and Mission Assurance. He is at Johnson Space Center today in Texas. He has already had discussions with the crew commander of STS-118, our next Shuttle Mission that is to be launched on August 7th, as well as that mission's flight surgeon and other people that are associated with this flight, and his goal was to communicate not only the allegations that are contained in this report, but our expectations at NASA in terms of alcohol use and getting into a spacecraft, and that ensuring that the flight surgeon and the crew commander know that they are expected and they are empowered to raise any flight safety issue that they have. That is our expectation, and we want people to feel that this is an open culture where they can do so without fear of retaliation.

In fact, the culture of NASA is actually already starting to change, and that has been shown in the Shuttle Flight Readiness Review. For those of you who are not familiar with a Flight Readiness Review, an FRR, that is

the intensive technical review that occurs before any Shuttle launches.

Previously, there were complaints about it being a closed system and people being fearful of raising technical issues. I can tell you that that has changed under the leadership of Mike Griffin, the Administrator of this agency. I have seen it with my own eyes when I have attended FRRs. People are very willing to raise any technical or safety-related issue that they have. They do that -- [webcast audio break] -- they felt comfortable not sharing specific information in regards to these allegations.

Dr. Bachmann, would you like to handle the rest of this question?

COL BACHMANN: As I said in my opening remarks and in the first question, the two specific incidents of alcohol use that we put into the report were specifically chosen to illustrate a larger problem, to call attention to the larger issue which is the role of the flight surgeon in protecting both the individual's health, flight safety, and mission completion, and the fact that the flight surgeons and other astronauts who described their role in these

incidents and in others which we did not obtain further details on used these to say that they felt concerned that their professional input seemed to be disregarded, at least at the local level, and that they were demoralized by that disregard to the point that they felt like they would be less likely to report concerns or performance decrement in the future.

The committee was not concerned in the details of the specific incidents to the degree where we felt compelled to get names and dates and times. It was not a legal investigation. We did not take sworn testimony or depositions or make transcripts. We were performing a review and an overview to identify areas of concern back to NASA for them to do exactly as they have just described, to conduct a much more extensive and rigorous anonymous survey in order to find out whether these isolated incidents are, in fact, isolated or whether they are pervasive, how deeply the concern runs throughout the community.

We picked the highlights to point NASA's attention to specific areas of concern, and that, we felt was our charter, and that is where we left the information.

QUESTIONER: Demian McLean, Bloomberg News.

With these reported drinking incidents, I think the public would maybe feel a little more at ease if they knew when they happened, given that the space program has been flying for several decades. Were these alleged incidents things that took place during the Shuttle program earlier?

DEPUTY ADMINISTRATOR DALE: We have not been provided information on the timeline of these alleged incidents.

QUESTIONER: Hi. Max Cacas from Federal News Radio, here in Washington, D.C.

I am kind of wondering. Dr. Bachmann or Colonel Bachman, you mentioned that when you talked to a lot of the flight surgeons, there was some concern that this was something, that this was a culture. It sounds to me like this was something ingrained in the culture where the concerns of these flight surgeons were being disregarded, and it seems to have been happening for sometime now.

Are you concerned maybe that this has been an ongoing problem, and how far back would you be willing to say that this has been a problem?

COL BACHMANN: As far as the timeline, we really

did not get specific information on exactly when things were felt to have occurred.

Some of the astronauts that we spoke to have been in the agency for several decades, and several of them were relatively new. All but one had flown in space. So we felt like they were a representative sample of the larger group.

Again, what we transmit to NASA in this report is concerns. People were willing to raise them to us with assurance of anonymity, and we were not taking names and not writing down who said what, when; that our interest was in safety, and our interest was in making NASA even more effective, and so I think they spoke openly to us, and they gave us their perceptions.

None of this can we say for certain that they factually did or did not occur, but whether they did or did not is almost besides the point. If the larger group feels like they did occur and used them as examples, how the human factors issues that they raised do not get appropriate attention, they are illustrative, and that is why we included them in the report. Again, as NASA described, the anonymous survey of the entire astronaut

population and the entire flight surgeon population is exactly what we feel the next step should be for them.

QUESTIONER: Paul Korsan [ph] from CNN.

Ms. Dale, one question we have is about the alcohol policy. You said it has been in place historically. How can making it more explicit somehow provide you with a better enforcement mechanism? The report itself cites that there may have been a long history of this sort of problem since much of this is self-reported and that alcohol flows freely in crew quarters. How can the existing policy get to that?

DR. OCHOA: I will answer that because it is really our policy and my area.

The policy is actually documented in our T-38 Aircraft Operating Procedures about alcohol, and it has been my practice, my understanding that everybody in the office realized it applied to space flight as well, and that that's the way we have always treated it.

But there wasn't any actual documentation that said "space flight" on it, and so obviously, as this report came out and we looked at it, we thought, well, that is an obvious hole, and in case there is any doubt in anybody's

mind, we should simply make sure that there is a policy that specifically refers to space flight and not just "before flight," which is what this other policy did.

So I have actually put out a memo to all of the astronauts explicitly giving that information now and also reminding them and everybody in my organization of the responsibility to raise any concerns about flight safety.

QUESTIONER: The idea of upgrading the policy by making it more explicit, how will you ensure compliance?

DR. OCHOA: At the moment, we are going to use the same processes we have in place, which is making sure people understand the policy.

When you are in crew quarters, there are already managers in the Astronaut Office, and in the Flight Crew Operations, flight surgeons' residence with the crew members there observing everything that is going on, and again, since we are not really sure what may have happened or something, it is hard to understand if there is someplace in the process that we need to revise or expand, and that is one of the things that Bryan O'Connor is going to look at and help us with, okay, we do have this policy, is there something missing, is there something else that we

should add.

QUESTIONER: Hi. I am Alex Michelson from NBC News.

We know that there are just allegations that are being alleged, but is there any sense that we can get whether the alcohol incident was something that happened that actually went into space or whether it was a pilot or a mission specialist or just a routine jet play? Colonel --

DEPUTY ADMINISTRATOR DALE: Dr. Bachmann?

COL BACHMANN: Yes. Again, the details of the specific incident in question, we really didn't get firm assessment at the moment that the astronaut was prepared to fly. He was in the preflight period when either the flight surgeons or a fellow astronaut was concerned enough about the astronaut's condition, that that was raised to the local leadership.

As far as the specifics of how much more time elapsed before they actually flew, we cannot say with any certainty whether they, in fact, were at all under the influence or affected at the time that they actually flew.

The issue of concern was that the medical

advisors or the people who should be empowered to raise questions felt like they were not, and it is that sense of disregard that the committee commends back to NASA to evaluate.

We didn't get the information, and I can't share it because I don't have it as far as how much time elapsed, how high the blood alcohol was likely to have been. We just don't have it.

QUESTIONER: Is flight specifically space flight, or is it another type of flight?

COL BACHMANN: There were incidents involving both aircraft and spacecraft. There was no one -- they covered the spectrum.

QUESTIONER: Chris Shawn [ph] with NBC News. I guess this is a question again for Colonel Bachmann.

Following up on what you just said, you don't have names, dates, and times, which I understand, but what type of spacecraft are we talking about? Are we talking about Space Shuttle, T-38 trainers? What are we looking at here?

COL BACHMANN: The sense that we got was the issues that are being raised are not mission type or

craft-specific. They were described in all the settings. So it is not unique to the Shuttle. It is not unique to T-38. It is not unique to the Space Station.

DEPUTY ADMINISTRATOR DALE: Again, I would emphasize that what was stated in the report was that there were allegations of two reported incidents that we are going to look into and get ground truth on.

MODERATOR: Let's take one more question here from Headquarters and go around to the centers, and then we can come back.

Frank?

QUESTIONER: Frank Moring with Aviation Week for Shana Dale.

Dr. Bachmann just told us that there were at least apparently more than two incidents that they heard about allegations.

My question deals with a concept that we were told about after the Columbia accident, which the sociologist on the Columbia Accident Investigation Board referred to as "normalization of deviants," where things go -- you get past a dangerous situation enough times, it doesn't seem dangerous after all.

Is that in your view possibly what is going on in the Astronaut Office, perhaps as a result of the way the Astronaut Office is structured?

DEPUTY ADMINISTRATOR DALE: Let me start off by saying that in our discussions with the committee, which have been fairly limited in nature, what they have said to us were there were allegations of two reported incidents that appeared indicative of maybe a broader issue, but we didn't hear any allegations behind potentially two. So let's make that straight to begin with.

In terms of the culture, as I have stated, we want to make sure that there is an open culture here and people are empowered to raise any safety-related concerns.

That is why we are prepared to accept that recommendation today. That is why Bryan O'Connor is down at Johnson Space Center today having discussions with both the crew commander and the lead flight surgeon. He wants to make sure, particularly for this upcoming Shuttle flight, that everybody on that mission is aware of their responsibility and aware of the policy, and it is also why Ellen has sent out the memo about this is the explicit policy; you knew what the historic policy is, let's just make it explicit.

So we want to make sure everybody understands what our expectations are, which is that you will not consume alcohol within 12 hours of flight, and also that you will not be under the influence nor the effects of alcohol at the time of launch. So, at this point, we are looking at communication in terms of our policy and also the desire to, I guess, spread the word that we want an open culture where everybody is enabled and empowered and feels free to raise any safety-related issue that they need to raise.

DR. OCHOA: I don't know how to speculate because I don't know any more details than there were in the report. All I can tell is from my experience, I have never seen any issue with people either not understanding the policy, not following the policy, and not being always thinking about flight safety and flight concern -- [webcast audio break] --

QUESTIONER: [In progress] -- to echo criticism in the past and even going back to a report, that of the Challenger, of people concerned that their criticism will be disregarded or they will be demoralized.

How do you assure astronauts that this time

things will be different when even the report says that these are deep-seated, long-standing elements of a culture that status quo, you know, needs to be shaken up? How is it going to be different this time?

DEPUTY ADMINISTRATOR DALE: I would point again to the Flight Readiness Review, and I think that is a prime example of how the culture is changing inside of NASA, and in this intensive review that we conduct prior to any Shuttle launch, people -- anybody that has an issue speaks up in that meeting. It is one where it goes on for quite a while. It usually lasts 2 days, and it is a very robust discussion now.

Changes in culture do not happen overnight. It is a process, and I think we have seen success in terms of what we experience with the Flight Readiness Review for which the astronauts and Ellen Ochoa as the director of Flight Crew Operations is intimately involved, and if she has issues, she expressed those freely in the Flight Readiness Review.

If we have issues here in terms of flight safety that should be raised by astronauts, by flight surgeons, by trainers, we want this to be an open communication. If you

have issues, bring them up.

Mike Griffin and I are absolutely committed to an open culture here in NASA.

DR. OCHOA: I would also just briefly like to add that as we talk about the Flight Readiness Review, we should realize that the last 2 days in Florida, which is where I was, it is really the culmination of a process that has gone on. There have been many reviews in the previous weeks as well as many decisions made by the Space Shuttle and Space Station programs in the previous months leading up to a successful flight, and I often represent the crew at a lot of those other meetings.

I can attest that in many, many topics, there are differences of opinion, and person after person will come to the table and say, "Well, have you considered this? This is what I am worried about. This is what I am thinking about." It happens over and over, and we have long and involved discussions. So I see it every day, and I think the other astronauts do as well. That is happening.

It is troubling to realize that there are still folks that feel that there is a problem. I am thinking

that part of the issue, maybe there are some medical privacy issues, and that can prevent some people from feeling like maybe they want to speak up, but that is why we want to do a survey of both the astronauts and the flight surgeons and understand, if there are barriers that you are perceiving, you know, what is the genesis of those, what is it that we can do to help break down those barriers.

DR. WILLIAMS: If I could make a quick follow-on to that well in reference to the Flight Readiness Review process.

In harking back to the days immediately after the CAIB report was published, one of the first International Space Station Flight Readiness Review processes that occurred in the wake of that accident and the resultant report, there were some life sciences concerns, both on the part of a physician and one of the environmental health monitors, senior environment health monitor down at the Johnson Space Center.

Those concerns were vetted through the Space Life Sciences Directorate. They were advanced to the Flight Readiness Review forum. Those managers had a chance to

discuss their issues in the form of the Flight Readiness Review. At the end of the day, the responsible chain of technical management consisting of the Space Life Sciences director, with my concurrence, made the decision that we were safe to fly that particular assets mission, but I would submit that the first Flight Readiness Review tangible evidence of culture change involved life sciences personnel and life sciences decision right after the CAIB report was published.

MODERATOR: All right. Let's go now to the Kennedy Space Center for a few questions, and then we will come back to Headquarters in just a few minutes.

QUESTIONER: This is Marsha Dunn of the Associate Press with a question for Colonel Bachmann.

You said earlier that the alcohol problems covered the spectrum of both aircraft and spacecraft, and I wanted to specifically ask if spacecraft were among the two specific instances cited for alcohol use that were included in the report, and is your impression that these were perhaps incidents that occurred in both the United States and Kazakhstan?

COL BACHMANN: I think as I said previously, the

two specific instances that were described to us in more detail than any of the rest were used as examples and covered both operations for the International Space Station and Shuttle T-38 operations, and that is really all I know is the settings were in all of those operational areas.

MODERATOR: Other questions from Kennedy Space Center?

QUESTIONER: To clarify whether or not this involved the Shuttle or Soyuz, can these two incidents --

COL BACHMANN: I think that is what I just said, that the incidents described covered all of those three mission areas.

QUESTIONER: This is Bill Harwood with CBS News, just a follow for Marsha.

You mentioned two specific instances, but you are giving us three things, and that just doesn't compute to us undergraduate liberal arts majors.

And Colonel, you know, your report basically, if you read that one paragraph about alcohol, it kind of impugns the entire Astronaut Corps with what you say yourself are unsubstantiated allegations without any indication of how widespread you believe this problem

actually is. So I don't understand the lack of context.

I mean, is this in your view -- is the alcohol abuse a widespread problem, or is this more of a culture issue between the way astronauts and flight surgeons have interacted over the past couple of decades?

Thanks.

COL BACHMANN: There is certainly no intent to impugn the entire Astronaut Corps. Our desire when these concerning incidents were told to us by volunteer NASA personnel who accepted the opportunity to come and talk to us, we were compelled to raise those to NASA's attention.

We don't have enough data to call it alcohol abuse. We have no way of knowing if these are the only two incidents that have ever occurred in the history of the Astronaut Corps or if they are the tip of a very large ice berg. We have no way of making any judgments on that, and that is why we recommended to NASA that they do a lot more evaluation, and the only way you are going to get that kind of information is, number one, leadership has to ask for it and support it, and number two, the people that you are asking for it from need to feel safe, that they can participate in this process without endangering their

careers.

So the widespread, broad-based, specifically targeted, anonymous survey of the Astronaut Corps and the support staff is exactly what we felt that NASA should do next, and I am very glad to hear that that is exactly what they intend to do.

MODERATOR: We will take questions from Kennedy.

QUESTIONER: Todd Halvorson of Florida Today.

I was just wondering how you are going to -- well, I guess, process with trying to ensure that you don't have an astronaut who has been using alcohol get on the Shuttle. Are you going to require breathalyzer tests before flight?

DEPUTY ADMINISTRATOR DALE: Well, you know, in terms of our medical evaluations, the flight surgeons conduct a medical evaluation of every single astronaut that is going to get on board a Space Shuttle, 10 days before prior to launch and 2 days before prior to launch. At the 2-day mark, the flight surgeons are there continuously with the astronauts.

For those of you who are unaware, in the United States, the astronaut crew is quarantines for 24/7 for

about a week preceding any launch. So 2 days prior to launch, the flight surgeon is there continuously with the flight crew, and as the flight crew is suiting up to get into the Space Shuttle, there is a final medical interview.

Rich, I don't know if you want to add any more to that.

DR. WILLIAMS: Yes, Shana.

The observation of the crew is continuous up to and including an interview and a focused exam, if necessary, on the day of launch or right before suit-up and departure to the pad.

We trust the judgment, clinical judgment of our flight docs. They are the highest professional quality and integrity. We believe the same thing -- we trust the crews. They are the best and brightest we have in this country.

But to get to the point of your question, I think the first step that the agency took or is taking in looking at these allegations was to send the Chief of Safety and Mission Assurance down to the Johnson Space Center where he has interviewed both the commander of the STS-118 mission as well as the crew surgeons assigned to that mission and

ensure that they fully understood the material that was reported in the report and to make sure that that extra attention is paid both on the part of the crew and the flight surgeons with regard to preparations for this mission.

MODERATOR: Okay. We have got one more follow-up question from Kennedy Space Center.

QUESTIONER: Just a quick follow-up. Given -- I am sorry. Just a quick follow-up. Given the fact that you guys do not train backups for Shuttle missions, I am wondering what you would do if you were ever faced with the situation where you had an astronaut who was deemed by a flight surgeon incapable of flying without jeopardizing flight safety, and two, I am wondering what penalties are going to be put in place.

I mean, if somebody breaks the rules, breaks the code of conduct, does that mean they are going to be thrown out of the Astronaut Corps? What penalties are going to be put in place?

DEPUTY ADMINISTRATOR DALE: I will address the second question first, and then the issue of impairment, I will leave to both Ellen and Rich, if they want to make

comments.

We are at the very beginning of this process. We received this final report yesterday, and as Mike Griffin and I committed to you in February, we are going to be open about this process, and that is why today, we are releasing both this final report of the Medical Review Committee as well as the JSC internal review.

Our job now in terms of the allegations related to alcohol use is to determine if they occurred, and if they did, what is the scope, what are the facts and circumstances that might surround these alcohol-related incidents, and then what are the corrective actions that we are going to take.

It is way too premature to talk about punishment.

What I can tell you is that alcohol use in regards to spacecraft or aircraft and anybody that is impaired is not going to be tolerated by this agency.

DR. OCHOA: And we have procedures in place to discuss any time a crew member may be impaired and not be able to carry out the duties for any reason, you know, and there is a medical issue that wasn't there the day before.

That is why the crew surgeon is there. That is why the

chief of the Astronaut Office is there. That is why the director of Flight Crew Operations is there.

So, if there is any question on Launch Day for any crew member for any reason that they are concerned about being able to continue with the mission, you would discuss it, and if necessary, delay the launch.

DR. WILLIAMS: I would agree. It is the duty of the flight surgeon. If any medical problem that might pose an impairment of an ability of a crew member to fly or compromise in any way for any reason that it is detected, then it is the duty of the flight surgeon and this has happened in the past to notify all appropriate levels of authority above him for appropriate discussions and actions be taken.

DEPUTY ADMINISTRATOR DALE: And when you say, Rich, that this has happened in the past, that was in regards to a particular medical issue.

DR. WILLIAMS: That is correct.

MODERATOR: And one more question from the Kennedy Space Center, please.

QUESTIONER: Kevin Oliver with WSTV, here in Orlando.

Colonel Bachmann, I hate to believe there is a point, but I was wondering if you could just be more specific about these. There are three incidents or three space -- or two spacecrafts and T-38's. I am wondering if you could be more specific about what these incidents were. Was it the Soyuz, the Shuttle, or the T-38?

COL BACHMANN: There were two incidents described to us in more detail as representative of a larger concern.

One of those incidents involved two -- one of those incidents involved both the Shuttle and the 38 during the course of the same incident. I know the math isn't working for you guys. I am telling you what I can tell you or what I know.

One incident involved both the Shuttle and the T-38. The second incident involved the Soyuz ISS.

So does that clarify a little bit more? There were still two incidents, but they were structured such that they involved all three operations. I really can't give you any more detail than that.

MODERATOR: We will go to Johnson Space Center now for a couple questions. Then we will come back to Headquarters.

QUESTIONER: Jeremy Diesel [ph] with
KH-[inaudible], here in Houston.

I am curious what the extent of availability is of alcohol in the crew quarters during quarantine and why that alcohol is available at all.

DR. OCHOA: It has been the practice because astronauts are in quarantine 24 hours a day for anywhere from a week to even up to 3 weeks before flight, and in their off-duty time, they can participate in activities as they would in any regular off-duty time. Of course, they can't leave crew quarters, but there is alcohol available.

It is permitted, and people understand that it is only for off-duty time, and that it always -- the use of it has to fall within the policy that we have always had.

MODERATOR: One more question from Johnson, please.

QUESTIONER: Have you observed alcohol use at all during the preflight period?

DR. OCHOA: You are talking about the 12 hours and the policy? Never. Absolutely never.

Well, I should make one change because there is actually one -- I never observed it. There is a ceremony

in Kazakhstan that happens about 7-1/2 hours before launch.

I don't know if crew members have actually ever drank alcohol. I have even been in the ceremony, and I still don't know the answer to that. It is really a situation in which there is a chance to say a few parting words, and the Russians who, of course, manage and sort of control the practices of that, for them it is a great tradition. In their society, it was done with Yuri Gagarin went and flew, and they had a few parting words.

Really, the intent of the ceremony is to share a few special moments with a crew that is about to go off on a mission. I actually don't know if any crews have ever had a sip of the champagne that is handed around or not. That is a potential situation, though, in which alcohol is present in that 12 hours. I don't believe there is any -- well, I know I don't have any concern about there being a crew member under the influence or effects of alcohol.

The policy that I have put out explicitly states the 12 hours. I am going to be having discussions with members of the Russian Space Agency to talk over this and to talk with our Expedition crew members, to talk about how we can respect the culture and traditions of the Russian

Space Agency and making sure that we are doing everything that complies with our practice and our desire to make sure that everything is safe and that we have no issues with safety or mission success.

DEPUTY ADMINISTRATOR DALE: Well, also, the policy that Ellen sent out to the Astronaut Corps that extends the T-38 Aircraft Alcohol Use Policy to spacecraft, explicitly states that all astronauts flying on U.S. spacecraft as well as NASA astronauts flying on any spacecraft will abide by the 12-hour prohibition.

MODERATOR: Another question from Johnson.

QUESTIONER: Ryan Korsgar [ph] from KPRC TV in Houston. My question is probably for Ms. Ochoa.

What do you tell the school child dreaming of becoming an astronaut who now hears that his astronaut hero needs a code of conduct in order to be a responsible adult?

DR. OCHOA: Well, I would certainly like to make sure that we complete our investigation and understand what the situation really is. As I mentioned, I have never worked with a finer group of folks. I consider myself one of the most fortunate people in the world. It is a privilege to represent them.

I have had the chance to talk, give over 300 talks since I have gone to the Astronaut Corps, most of them to school children and school groups, groups of teachers, science teachers, math teachers, and space is a wonderful vehicle to explain to them about what we are trying to do to push the boundaries, to encourage kids to setting math and science. I think kids still get that, and they understand that. They see what we are accomplishing in space every single day.

We had a magnificent space walk earlier this week. We have got this incredible vehicle up in space that people live in and work in every day, and we are learning how to do more and more in space. There is so much to talk about with school kids, and I get such great feedback from them. It is a very rewarding part of my job.

MODERATOR: Okay. Let's do one more question at Johnson before we come back.

QUESTIONER: But how do you explain that we have to explain to the astronauts, don't drink and fly?

DR. OCHOA: Again, I am waiting to understand. Bryan is going to go through. I want to understand what has really happened here, and if there is some isolated

cases, where our policies break down.

I guess, you know, it is an inescapable fact that human space flight involves humans, and I think that is what makes it both compelling and complex, and it is complex in terms of how we design vehicles and prepare them for flight, and it is complex in making sure that as we train people both on the ground and in orbit to carry out their tasks, to understand that everybody is human, what can we do as managers and as people and as astronauts. We try to have the policies, the expectations, the practices that make sure that we can do it as safely as we can and as successfully as we can, and I really think the results speak toward that.

DEPUTY ADMINISTRATOR DALE: I would also like to say in regards to alcohol use policy, that is not unique to NASA. The Federal Aviation has their rules in regards to alcohol prior to flight on civilian aircraft, as well as the military has their rules in regard to alcohol use prior to taking off in a military aircraft. So that is pretty pervasive in terms of the aircraft community and also spacecraft community.

MODERATOR: Okay. Still at the Johnson Space

Center for just a couple more questions.

QUESTIONER: Andy Saroto [ph] with KTRK TV here in Houston. This question is for Ms. Dale.

You talk a lot about tweaking your policies and procedures regarding alcohol use. Yet, you stop short of talking about what the penalties or punishments will be. What kind of message does that send? Does it really say that you are serious about this?

DEPUTY ADMINISTRATOR DALE: I think it sends a message that we want to find out what the facts are, and we are going to act on facts. I need those first. That is my responsibility as a senior leader at NASA to know what the facts and circumstances are of these alleged alcohol-related incidents, and then we will move forward, and we will take whatever corrective action is necessary.

QUESTIONER: Can you be specific when you say corrective action? What are you specifically talking about here?

DEPUTY ADMINISTRATOR DALE: Well, for example, the internal safety review that is going to be conducted by Bryan O'Connor, the chief of our Safety and Mission Assurance Office. One of his tasks is determine facts and

circumstances and then recommend corrective action. So it is really far too premature right now for me to speculate about corrective actions or punishment. We intend to take whatever action is necessary, and I can tell you that we take these allegations very seriously. That is why we are moving out immediately on this internal safety review to determine what actually happened.

MODERATOR: Okay. Still in Houston for one more.

QUESTIONER: It is Mark Carreau from the Houston Chronicle. I have two questions.

The first one, why 12 hours? I know there is historical precedence, but why not just impose no alcohol throughout the quarantine period? And I have a follow-up.

DEPUTY ADMINISTRATOR DALE: Well, 12 hours is obviously the historical time period for alcohol use policy, but we also have an expectation that the 12 hours is going to be reviewed, both by Bryan O'Connor and also the Medical Policy Board.

Does it need to be longer? I don't know, but we are going to look into that.

QUESTIONER: My second question is this, and you know, I am asking this from a big perspective, but why does

this issue not rise to the level that you need to stop flying the Space Shuttle until you can figure out whether or not the behavior of astronauts is a safety issue that equals other safety issues that you pay such close attention to?

Thank you.

DEPUTY ADMINISTRATOR DALE: Well, again, what we are dealing with right now are allegations of incidents. Our obligation at this point is to take those allegations and find out what the ground truth is. That is our first obligation.

As Ellen has mentioned, the Flight Readiness Review, the intensive, technical, and safety-related review that happens before Shuttle launch and just occurred on STS-118 is the opportunity for everybody, including the Astronaut Corps, to raise any safety-related issues.

My understanding from this Flight Readiness Review is that right now, we are a go for launch. Based on the discussions that Bryan O'Connor, our chief of Safety and Mission Assurance had this morning with the crew commander of STS-118 and the flight surgeon and the rather intensive and lengthy discussion that they had, what came

out of all of those discussions is also at this point that flight operations, safety and mission assurance, as well as flight crew operations continue to be a go for this launch. So we take safety extremely seriously.

DR. WILLIAMS: If I could add a comment. Never has any complaint or concern related to alcohol been raised even to mid-level management, medical management in our infrastructure or senior medical management from the point of important or to me as supervisor of that entire system, and there have been no untoward events or bad outcomes or anything related to this.

So I think before we took action of that magnitude, it is incumbent on the agency to find out what did really happen.

MODERATOR: Okay. For the folks here at Headquarters, we have got one more person in Houston. Then we are going to go to the Ames Research Center, and then we will be right back to Headquarters, so just a couple more minutes. Thanks.

Houston?

QUESTIONER: Jeremy Diesel again from KH-[inaudible].

Isn't the simplest solution to this to simply remove alcohol from availability during the quarantine period while this is all being reviewed? Isn't that just the simplest solution to solve the problem for now?

DEPUTY ADMINISTRATOR DALE: You know, I have to say the vast majority of astronauts that we have in the Astronauts Corps and maybe almost all of it at this point, our experience with them has been that they are really responsible adults, and as Ellen said, in terms of alcohol that is contained within the crew quarter, after the crew has finished their day, in the United States their quarantine for a week, in Kazakhstan their quarantine for almost 3 weeks preceding launch, and after they finish their regular day of work, if they want to go back to crew quarters and have a beer, I think that is okay.

And we have said that we are dedicated to this policy that there is no alcohol use in the 12 hours immediately preceding launch, and with this heightened awareness and the fact that Bryan O'Connor is down there, that Ellen has issued her memo, and we will be having ongoing discussions with this crew, I don't think we are going to have a problem.

DR. OCHOA: And I will just reiterate that the practice that we have is the flight surgeon lives in crew quarters with the crew. So does the chief of the Astronaut Office. So does the director of Flight Crew Operations or the deputy director. So it is not that there is nobody there on launch morning understand what is going on or the night before, any time that week. People understand what is going on and have a chance at any point to talk to them about anything that they think might be inappropriate or have any question about, including any medical issue, anything like that.

And because we are close to a launch, again, we have had some specific conversations with the upcoming crew, and Bryan O'Connor talked with them this morning, and someone who was representing my office was there. They are aware of our expectations regarding alcohol, their responsibility for flight safety, their authority and responsibility to stop the mission if there is impairment of any kind for any reason of a crew member. They understand the medical authority of the flight surgeon. They understand their chains of commands, how they would put forward dissenting opinions, how they would have

independent safety and medical chains to do so, and that as a manager, I will back up anyone on my crew who for any reason comes to me with an issue.

MODERATOR: Okay. We have got a question now from the Ames Research Center in California.

QUESTIONER: Yes. Corrine Arusk [ph], ABC-7 KTO TV, San Francisco, with two questions.

My first, given the seriousness of the issues involved here, is NASA prepared for congressional hearings, and what are your thoughts on whether that public discussion and review would be valuable?

DEPUTY ADMINISTRATOR DALE: Well, you know, we are in receive mode. Obviously, if a committee on the Hill wants to hold a congressional hearing in this regard, then we will be open and receptive and do whatever we can to help out with that. We haven't had any indication of that.

QUESTIONER: Okay. My second question is specific to NASA Ames research here, and that is, the astronauts do come here for VMS training, to practice landing techniques. How might the policies or new procedures apply to that?

DR. OCHOA: If you are talking about that they

fly out in T-38's, usually -- of course, this is standard alcohol policy that they use any time that they get in an aircraft.

MODERATOR: Okay. Back to Headquarters now.

Brian?

QUESTIONER: From what Colonel Bachmann said, there was one incident that involved both the T-38 and a Shuttle, and just in the interest of being crystal-clear, can you explain if that was a single incident in one day, and if so, could Ellen Ochoa explain to us how an astronaut might come to be on both a T-38 trainer aircraft and a Space Shuttle in a single day?

DR. OCHOA: Okay. Was the first part of that directed to Dr. Bachmann?

DEPUTY ADMINISTRATOR DALE: Yes.

DR. OCHOA: Okay.

DEPUTY ADMINISTRATOR DALE: Dr. Bachmann?

COL BACHMANN: Yes.

MODERATOR: Is Dr. Bachmann still on?

COL BACHMANN: Yes, I am still here. I didn't think that question was addressed to me.

MODERATOR: Do you want to repeat it, Brian?

QUESTIONER: Can you just clarify for us when you talk about an incident involving both a T-38 and a Shuttle that you weren't just talking about an individual --

COL BACHMANN: This was an individual on the same day, single incident, preparing to launch in the Shuttle, and when the Shuttle mission was delayed, was to fly back in a T-38, if that helps.

QUESTIONER: Thank you.

QUESTIONER: Patty Reinert with the Houston Chronicle.

How long do you expect this review at JSC to take, and what is the current policy, the T-38 policy, as far as consequences or discipline for breaking the 12-hour alcohol rule?

DEPUTY ADMINISTRATOR DALE: In terms of anybody that breaks T-38 rules, my understanding is it goes before the Flight Evaluation Board.

Is that correct, Ellen?

DR. OCHOA: Yes. We have policies in place that are pretty standard for flying organizations. I have the authority to ground anybody at least temporarily and then to discuss it with the director of Johnson Space Center.

Normally, what we would put together, if somebody has violated a policy or has exercised -- we think there is an issue with judgment during a flight or something like that, we would put together what is called a "Flight Evaluation Board" and try to gather the facts and then make recommendations as to what any disciplinary action would be.

DEPUTY ADMINISTRATOR DALE: In regards to the timeline of the JSC review, I don't have a specific time frame. I don't think it is going to take that long.

We did just get the final report yesterday. So we are moving out as quickly as we can on this.

QUESTIONER: Mike [inaudible] with the Washington Examiner.

How can you say that you know the vast majority of your astronauts are responsible enough to have a beer off duty when, in fact, the culture that you are talking about keeps you uninformed of what is going on, your flight surgeons aren't able to tell you what is going on with the astronaut?

DR. OCHOA: I was basing that comment on my 17 years of actually having been in the office and been in

crew quarters many times and observed behavior.

DR. WILLIAMS: Let me add, I have been in NASA 9 years, in the role I play now, more or less, and it has been my experience that there has never been a hesitation on the part of the flight docs to raise concerns up through their immediate medical chain of command right on up to me.

I ultimately get informed of any issue of concern that emanates from that point of implementation.

QUESTIONER: These two incidents that we have been -- allegations that we have been talking about so far have been preflight, before you get in space. Would alcohol on board a spacecraft be considered contraband?

Over to you, Ms. Dale.

DEPUTY ADMINISTRATOR DALE: Contraband? Well, no, it is not allowed. No. Under our policies, we don't allow alcohol, spacecraft or aircraft.

QUESTIONER: Do the Russians?

DEPUTY ADMINISTRATOR DALE: Not that I know of.

MODERATOR: Frank?

QUESTIONER: Frank Moring with Av Week.

Just to follow up again on the question of the T-38/Shuttle incident, Dr. Bachmann, do you know why the

Shuttle mission was delayed? Was it because of the astronaut's condition?

COL BACHMANN: I don't believe the interviewee actually told us why the mission was delayed. I believe the assumption that -- that both they made and then he transmitted to us was that it was an engineering mechanical problem and did not have anything to do with the astronaut's condition.

QUESTIONER: I guess to follow up on that, too, so then did the astronaut then get onto a T-38 in the impaired condition, and was there any type of safeguard to stop him from flying, or did they go through with the flight after that?

COL BACHMANN: At that point when the individual was going to fly in the T-38 is when the issue was raised, and I honestly couldn't tell you. There was a delay. The individual relating the story did not give us any further information on what kind of evaluation was done or what the final outcome was, just that this person had presented for flight -- presented for flight for the Shuttle, and then subsequently to the T-38, in a condition that to that person did not seem to be fit for duty.

QUESTIONER: So was that delay then specifically caused by a flight surgeon saying we need to delay this --

COL BACHMANN: No. In this particular case, it was a fellow astronaut rather than a flight surgeon who identified the concern.

MODERATOR: Okay. We have got one more question from Houston, which we will go there and then come right back.

QUESTIONER: This is Andy Saroto KTRK TV. This question is for Ms. Dale.

You say you won't ban alcohol in the crew quarters before flights, and you claim that astronauts are responsible. Yet, you are here holding this news conference to talk about these allegations.

DEPUTY ADMINISTRATOR DALE: Uh-huh. Well, the vast majority of this report actually had recommendations concerning behavioral health assessment and medical care delivery and also supervisory relationships within the astronaut office.

What you were referring to is basically one paragraph out of the entire report that was dedicated to allegations of alcohol use, and as I have stated, we are --

take these issues very, very seriously.

This is a safety-related issue. We want to get to the bottom of what actually happened, and we intend to do that, and we are not going to be satisfied until we get the full truth.

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

QUESTIONER: Warren Leary, New York Times, for Ms. Dale.

As you just mentioned, the alcohol issue for a couple paragraphs in this report, can you summarize the major findings of this report and the recommendations NASA is going to deal with now on the behavioral issues and other things? What else was here, and what are you going to move on right away?

DEPUTY ADMINISTRATOR DALE: Well, I can tell you some of the specifics about the recommendations that we are prepared to accept today, and that includes the recommendation that we institute behavioral health assessments as a part of annual flight physicals for all astronauts, and we are going to do that, enhancing the use of psychological evaluation data in our astronaut selection

process, adopting an astronaut code of conduct, ensuring that safety-related concerns that may be with other astronauts, trainers, or flight surgeons, that they feel free and able to raise these safety-related concerns, enhancing the external peer review process for our medical and behavioral health staff, and I think there were a couple more as well. I can't remember the specifics.

But there are also other recommendations that are going to take longer to review, and that includes one of the things that I mentioned in the opening statement, and that is supervisory relationships within the Astronaut Corps. We are going to go back and take a very serious look at that, and that is being charged to the center director of Johnson Space Center, Mike Coates.

QUESTIONER: Just a follow-up on that code of conduct. Now, is there a template from another agency or the military that you are going to use as the basis of that? You had mentioned the astronauts also would have input into this. Is this on a blank sheet of paper, or are you coming from a certain area in trying to develop this code of conduct?

DEPUTY ADMINISTRATOR DALE: Well, I know the

astronauts have already had discussions about principles surrounding a code of conduct.

So, Ellen, you may want to address this one.

DR. OCHOA: [Inaudible] -- Astronaut office talking with the whole office, and I think some of the points that have been discussed over the years that I have heard many times are that we understand that astronauts represent the agency wherever they go and whatever they do, and it is important for astronauts to always keep that in mind.

What I think is the right way to go -- and Steve Lindsey, the chief of the Astronaut Office agrees and he is already starting to put this in place -- is to get a group of astronauts together, let them talk to their fellow astronauts, put together a draft, and then come make recommendations to us about what it would include. I see it as a very positive document, again, one that emphasizes expectations, their role for the agency, expected attributes, that kind of thing.

MODERATOR: Any further questions here at NASA Headquarters? Yes.

QUESTIONER: Max Cacas from Federal News Radio

again.

I know that this briefing was to focus on the Health Care System Review Committee, but I was wondering if you have anything else to share with us regarding the sabotage of the computers on board the -- that were to fly into space. Do we know anything else about that at this point, and what does this tell you about the -- what can you tell us about the supervision of contractor employees when it comes to dealing with equipment that is going to go up on the Shuttle?

DEPUTY ADMINISTRATOR DALE: This continues to be under investigation by the NASA Inspector General. So I can't share with you any more details than were shared in the press conference that was held yesterday after the Flight Readiness Review.

Having said that, I do think this is actually an example of NASA's policies and procedures that are in place in regards to quality assurance and quality control, and that those policies are working, because this qual unit that was sabotaged apparently was detected. So I think that is actually an indication that quality control is working.

MODERATOR: Okay. That should probably do it for today. Thank you very much for joining us.

For copies of the two reports as well as the Deputy Administrator's statement, please check our website, www.nasa.gov.

Thank you very much, and have a good day.

[End of News Conference of July 27, 2007.]

- - -