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INDUSTRY ADVISORY PANEL MEETING

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Reported and transcribed by Deborah Turner, CVR

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P R O C E E D I N G S

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GEN. WILLIAMS: Good morning. Delighted to see everyone here today. And I must start off by apologizing for being ten minutes late, I guess it is, or 15 minutes.

But there have been three meetings this

morning already, one with the Secretary and another one on Iraq, and then a separate meeting with the Undersecretary of Management in all of our facilities. And I know you can understand and accept 15 minutes and I'll find a way to make it up to you.

Before we get started this morning, I want to ask Gina to cover some administrative matters and then we will take care of a few introductions and then I'm going to give you a few minutes of update on sort of where we have been, bridge a few gaps and then we'll move right into the discussion. Gina.

MS. PINZINO: Good morning everyone. This morning I just wanted to welcome back Mr. Papadopoulos.

MR. PAPADOPOULOS: Thank you.

MS. PINZINO: He was away due to an illness. He's back with us. And welcome back also, Robin Olsen. And all of you, I just wanted to mention that we do have escorts outside the doors should you need to leave the room for any reason.

And I just hope we have a wonderful meeting and thank you again for coming and being so kind to us when we have our security restrictions. And with that

I'm going to turn it over to Coston Burnes who's going to mention just a few security details.

MR. BURNES: Good morning. First thing I ask is that all cell phones, if you have them, if they're in the conference room, please take them up front. In case of an emergency, follow the green arrow signs to the nearest emergency exit and then follow the escort to the nearest emergency exit.

GEN. WILLIAMS: Okay. First I want to welcome all of our panel. We're missing Anne Lewis today but she had to be away. It was something that was prearranged and I knew about it. So this will limit our discussions today on value engineering but nevertheless we have everyone else in place.

And for those who are here, particularly the visitors, for the first time, I think it's appropriate that I do introduce our panel. This is Robin Olsen. You can just raise your hand, Robin. Craig Unger.

MR. UNGER: Good morning.

GEN. WILLIAMS: S.G. Papadopoulos.

MR. PAPADOPOULOS: George Papadopoulos.

GEN. WILLIAMS: And listen, delighted to have you back.

MR. PAPADOPOULOS: Thank you, very much, General. Glad to be back.

GEN. WILLIAMS: S.G. was involved in an accident and he is back with us. So that's an indication that things are going well. We're delighted to have you back, S.G.

Ida Brooker, and Tom Wolfe is sitting in today for Harold Adams so we'd like to welcome Tom here.

MR. WOLFE: Thank you, sir.

GEN. WILLIAMS: And the other Tom. Tom Rittenhouse. Derish Wolff, the dean. And Joel the procrastinator. (Laughter.)

Okay. Well, you know you can tell the veterans here. We can loosen things up a little bit. I have my senior staff here as well. There's one person may be out. I'll start from my left here and pick up Terry Wilmer and work around and come back and end up with Bob Etheridge.

MR. WILMER: Good morning. I'm Terry Wilmer, Managing Director for Planning and Development.

MS. CONRAD: Suzanne Conrad, Chief of Staff.

MR. TOUSSAINT: Joe Toussaint, Managing Director for Project Execution.

MR. HICKS: Jay Hicks, Managing Director of Real Estate and Property Management.

MR. SMYTH: Rich Smyth, Managing Director for Operations and Maintenance.

MR. COQUIS: Roberto Coquis, Director for Management Support Division.

GEN. WILLIAMS: And he’s new, so he’s fresh meat.

MR. ETHERIDGE: Good morning. I’m Bob Etheridge. I’m representing Jurg Hochuli. I’m his Deputy for Resource Management.

GEN. WILLIAMS: Okay. That covers the staff. And as we do at each one of these we have a collection of visitors here as well. We’re delighted that you are here. At some time before the day is over we’ll get you properly introduced as well.

You understand that this is an open meeting. We do all of our deliberation openly. It’s the panel's responsibility to carry this meeting. And we are delighted that you can be here and join and listen in on what we are doing.

Let me make a couple of -- oh, one other person that -- where's our court reporter? This nice lady has been with us now for over two years and our minutes are recorded professionally and she does a wonderful job and I'd just like to welcome you back again. Thank you.

Okay. I think we have covered now all of the administrative matters and I will take a moment and kind of bridge the gap for you on where we have been since our last meeting.

At this juncture, we have 28 new facilities under our management for design and construction. Since most of our work is design-build, obviously, the majority of this is in the, quote, construction side of the house.

As we speak and over the next 45 days or so we will be intensely involved with making awards for another 11 new facilities. This then will give us a total of 39 new facilities that we have under our management.

And obviously, all of this works out to be in excess of $4 billion in terms of what our organization is currently managing. Now, that's only

significant if you compare it to some other point in time in order to give you some notion as to what all of that means. What does the 28, the 39 or the $4.4 or so mean?

In ‘91, I’m sorry, 2001, about 40 months ago, these numbers were as follows: I think two or three under construction and $.7 billion in terms of management. So the dollar swing and the production swing over the last 40 months would be as stated.

Also, since we last met we have done some fine tuning on another major initiative we have and that is to support the Department of State’s new mission in Iraq.

And I mentioned that I was in an Iraq meeting this morning. We have in OBO a facilities team that is led by Terry Wilmer. And we have senior representation from our organization and others that assist Terry with day-to-day overwatch of the whole collection of facilities matters relating to Baghdad.

We have presented a path forward for our new approach and new facilities in Baghdad. I delivered that personally in Baghdad. We have briefed this to all of the stakeholders in our system, that is, the

Congress and the like including the Secretary. So we understand how we want to go about doing is.

It will be a major, a massive undertaking. In fact, the next couple of days, Terry and Jay Hicks will be dispatched to Iraq to lead our property negotiation matters. This was one of the things that I was in deep conversation with before I arrived out here, discussing a little bit about the overarching strategies we were going to use for that.

Hopefully, out of that visit we will have clarity around properties, those that we want to retain, those places that we want to utilize, et cetera, et cetera. And this is not just in the city of Baghdad but it's in Iraq because we will have some requirements in other locations as well.

In respect to the work, we have work ongoing, roughly $60 million or so, that is being done as we speak. And we are about 60 percent away through that process, of doing certain work to some interim facilities that we are going to utilize until such time that the new facilities are built.

You know on 1 July Department of State assumed the responsibility that had once been held by

the CPA or Ambassador Bremer being our senior representative. Now, the senior representative for the U.S. government in Iraq is John Negroponte, who is a seasoned ambassador, was previously our ambassador of the U.N. He is leading the U.S. representation there.

The decisions about things in Iraq now are being made by the Iraqis because the interim government, obviously, made that assumption when Mr. Bremer's tenure expired.

So that's what's going on now. We have a normal diplomatic apparatus in place with a full embassy in place and operating just as we would operate in any other country with Iraq.

So that's where we are. The new work that will hopefully be the first that we will do after this interim work can take many ranges in terms of the size. The size of this work will be a function of what we end up with in terms of the population to be served.

But we do know that whatever we build it will be a diplomatic community of a sort, that is, having all of the functions, all of the facilities

that it would need to take care of our people, including housing.

There will be the obvious slice of diplomatic facilities to handle all the types of diplomatic and consular operations, and also community facilities as well to support our people, such as chapels and recreational areas, et cetera, et cetera.

So it will require a slightly different approach than we have used to stand facilities up before because this particular path forward will be a simultaneous operation, that is, this three-tiered family of facilities, housing, diplomatic and community.

Our strategy is that they will be built simultaneously using the same concept that a few of you know we used when we built Ft. Drum, upstate New York. So it's kind of a proven concept and that's what we will put in place here and make that work.

Okay. More to come on that. You know the whole industry can stay tuned. Whenever we are ready to do something about that you will be so informed as you have been informed on all the rest of our work.

Okay. Are there any questions on any of

that bridging information to just get you up to speed? Okay. I know all of you did your homework and you are ready to dive right in on our business of today.

We're going to start off by looking at Number 6 in the book dealing with the graying workforce and how it relates to retention, et cetera. And we are just a little bit concerned as to what are your thoughts or what are you doing or what's out in industry that we need to know about that will help us sort of deal with this national dilemma, if you will, because there is no question that every day we get older and there is obviously a concern about retention.

We are not suggesting that OBO has any particular specific problem but we are trying to be thoughtful here and think ahead so that when we meet that bump in the road, which we know we will, we'll be in a position to try to deal with it. Yes, Robin.

MS. OLSEN: Are you talking about trying to get new people to come in, younger people, or keeping the older people there, or overlapping the two?

GEN. WILLIAMS: I think, Robin, I'm talking about all of that.

MS. OLSEN: Okay.

GEN. WILLIAMS: I think, and this is just Chuck Williams speaking, I think we have to give some consideration to the people who are in the system because of experience, et cetera, but we have to balance that against what is coming in. So I guess I'm talking about all of it.

MR. URMAN: If I could just add to that, we've done lots of hiring in recent years. We have good people, we think. We think it's exciting working for State and working for OBO but there's a lot of competition out there, too. So we want to do everything possible to keep them.

And we have initiated a number of measures but we are interested in what you all are doing, particularly, do you have performance measures on retention rates and things like that? We have orientation programs. We have a rigid training program, but we're just interested in what the private sector is doing.

GEN. WILLIAMS: Yes, Tom.

MR. RITTENHOUSE: We don't have a system in place that will measure the retention of our employees

but we have put forth a great deal of effort in mentoring and tutoring because we see that problem.

We saw, actually, I've had several conferences on this topic, of the different generations. And one of the interesting things that we've seen is that the current generation, the youngest generation, is most like the veteran generation.

Then there's that Generation X in between which is a very difficult group to deal with and retain with the weekly what have you done for me lately, Mr. Employer.

And so, basically, and I've told people in that group that have tried to -- but what we really try to do is to mentor and train these people so they feel like they're part of the system from the early days and they work side by side with the elder employees.

But I think the one thing that I've seen people who join us or stay with us is because we empower them. Once we train them and give them direction we empower them to do certain things.

And I've seen -- there are pockets within

our own organization and there are other organizations around that say well, you have all the training but you're just not ready to represent us.

And I don't know when you are ready to represent -- nobody knows because -- it's just, you know, a bit -- you try, you hope for the best but just like with your children you raise them and hopefully they turn out to be good people. If they're raised properly and well-educated they'll turn out to be decent people.

So it's the same thing. It's really the empowering of them. Of course, you try to reward them as well, and we have been fortunate that I cannot -- you know, we go back about seven or eight years before we lost an employee to the industry.

We've been losing employees to parenthood. We've been losing employees to going back to school and things like that, but we are not losing them to other engineering firms. I'm speaking as an engineer.

One funny thing we've seen lately is we're losing engineers because they're going to where their spouse is. It's just kind of not -- many people in this room aren't of this understanding of, you know,

my girlfriend has a job and I want to go join her in Chicago. It's just not something that we're used to. So we can't combat that.

But what we try to do is empowering people. We've trained you; we've educated you; we've seen you operate. Now, go do something. And they feel tremendous loyalty to you once you trust them and they know you trust them. And they do a good job.

And yes, they mess up from time to time but you understand what their limitations are and you keep them from -- give them enough rope but don't let them hang themselves with it. So I'd say the number one thing is empowerment and trust.

GEN. WILLIAMS: Well, Tom, that's very useful. I wonder if there are any other ideas because clearly that's something we can think about. Yes. Craig and then Robin.

MR. UNGER: The program, and again, when I was with government, I'm thinking back a few years when we all just -- this Workforce 2000 was going to be a major shortages. It took so long, if you wait until you have a vacancy and then advertise and go through that protracted selection process.

We established a leadership forum, trying to identify key people that maybe they were only GS 5, 7, 9, 11, instead of going through that several years of grooming to be our future leaders we came up with a succession planning program and we tried to identify, keep the people that attributes, characteristics of perhaps our future leaders and fast track them through the, again, I know you've got to be in a position so long before you get promoted but actually grooming them to step up to that level.

And it seemed to work fairly well of motivating and getting some folks excited about maybe just not doing their job but thinking a little more globally than they might have otherwise.

GEN. WILLIAMS: Good. Yes, Robin.

MS. OLSEN: I was just going to add, not from -- being in an association it's a different thing, but in observations, in government or in private sector, it would seem to me that when a person feels valued and doesn't have to worry about their job every minute, that makes a big difference.

If they're worried, like some of the big companies in the past used to be a security blanket,

you would go somewhere and work forever.

And then people started looking back and that's, I guess, where Generation X learned to be like that. You better have five jobs lined up because you never know which one you're going to be able to keep.

So I would think, especially for people nearing retirement age, you would want to feel valued and that your expertise is appreciated. And perhaps if you're going to be maybe not needed full-time being able to come in three days a week or working together to help the new people coming in but then helping the person who maybe it's time for them to leave or they've decided to leave, having a good incentive and retirement packages which everyone appreciates.

GEN. WILLIAMS: Very good. Yes, Tom.

MR. WOLFE: A number of our members have established formal mentoring programs and I think they've had very good results from them. I think the problem that they are trying to solve there is young people coming into an organization and feeling isolated from the folks that are the equity partners, the people that are doing the work and feeling that they are really running around below serving as a

gofer.

A formal mentoring program gets the more mature person in the workforce to associate with the junior level person and give them an idea of where they're going, give them an idea of what the future can hold and it gives them a much more tight buy-in to the company. And I would think the same would be true in a government position.

GEN. WILLIAMS: Excellent. Was there another -- yes, George.

MR. PAPADOPOULOS: I would like to reflect for a second on what has happened to the engineering community in the Washington, D.C. area, particularly back in the '89-90 era where the average number of employees in an engineering company in the Washington, D.C. metropolitan area dropped from 17.2 to 7.6. That was due to the economic recession that had faced the construction industry at that particular time.

What happened to the people? Well, we feel that the majority of them left the industry. They left the profession. They found other fields. And what was happening so far is that every engineering firm hires a couple of young people every year which

sort of provides a certain amount of training and mentoring.

And whether that person stays within the firm or gets hired away by a competitor is perfectly all right because you will hire his employee who is also trained so the pool was being replenished. But what we're facing today is that that gap that developed back in the '90s, about 10 to 15 years ago, that gap is really hitting us very hard today.

We have very good experienced people in the over 55 group, if you please, 50, 55 group and above it and very junior people. And what we are thinking about as engineering firms is again to develop a very aggressive mentoring program whereby you try to teach the young people and mentor them.

We realize that when a firm loses personnel the duties of the senior people expand and the duties of the junior people expand, but not as much. So nobody really has any time to do mentoring and training.

There's a gap that has developed so the only aggressive approach we're taking is committing ourselves back to enhance and train the so-called

junior people to start making more key decisions in the design phase of our business.

There doesn't seem to be any other solution. Outsourcing has taken place and a lot of people are finding not the expectation that they had being fulfilled properly. You cannot really do accurate and proper engineering designs by outsourcing a project in Korea or in India or something along those lines.

They are finding the same things that perhaps financial institutions and IT people who have outsourced over there. The quality is not what we are accustomed to. And that's what I want to offer, that we are facing this particular gap and we need to overcome it somehow by aggressive mentoring and training of younger people, younger professionals in the engineering companies.

GEN. WILLIAMS: That's very good. Yes, Tom.

MR. RITTENHOUSE: One other remark on this, we looked at the same problem, missing that gap, and a lot of people missed that group, and a lot of people, younger people, saw that as a bit of a problem.

And so they -- these people with 7 to 15 years experience actually came to us and they helped

to develop some plans for our formal mentoring program and some of our other programs like that. That was all part of that, you know, it's part of the empowerment but it's also part of getting involved and feeling like they're part of the solution, not being part of the problem, part of the workforce, but the part of the solution and ownership towards working together. And we found that that was very helpful for these people.

Our number one resource is our staff, right? Our number one investment is that, is in our staff. So if somebody works for us for three or five years and goes down the street for more money, now I've got to go and steal someone from that firm. And it's a cycle that just kills us.

So that's when we decided to invest. Now, we talked before about investing in staff and I had talked about you can take anything related to personal development in Boeing. We don't go that route. We're much smaller than Boeing. But we received accolades from --

MS. BROOKER: Today.

MR. RITTENHOUSE: Sorry?

MS. BROOKER: Today. (Laughter.)

MR. RITTENHOUSE: Today. We received lots of accolades for keeping our staff. And you lose a staff member you're not just losing somebody you've got five years invested in you've lost what you would have gained down the road. You're losing your future leaders.

We spoke last time about outsourcing and for many times people come with these great contracts -- I hate these contracts -- but where we're going to do just the early design and we're going to outsource the balance of the design and construction management to somebody else.

It's a horrible thing for engineers and for many others because you're foregoing the learning process of the real construction. And you have a lot of people who think the design or the project is only to come up with a great idea and let someone else solve the problems.

And so we've really stepped away from outsourcing as we discussed last time because that's where you learn your mistakes and that's where you really learn how to handle this problem in the future.

So we have stepped away from that and so it’s a combination of educating, training, letting them do this, letting them learn from their mistakes and making them feel part of the process. And that's where you get the loyalty and people stick around a lot longer.

GEN. WILLIAMS: Yes, Ida.

MS. BROOKER: I agree with what has been said today and those are probably the areas that we would initiate first.

Another area that I already know that Derish doesn’t agree with is the process that we use of education. And the way we utilize that is that we are definitely a performance metric kind of a company and especially in the area where I am in that we look at certain criteria and look at the performance of the employees against that criteria.

Well, part of that process when we do that is also to understand what the company goals are, what the department goals are and what the individual person’s goals are. And whether or not they are absolutely compatible or supplemental or totally different we try to meet them all.

And one of the ways we do that is that we have a tremendous educational program that allows anyone to take a course from an accredited college or university and the company will pay for it 100 percent.

And we feel that it's not just the education, what that is is the engagement of the employee in furthering themselves in some way. And by implementing that engagement in that area they are also engaging in the workplace in a way that may not have been there before.

And one of the problems we have is because we are so big we have a lot of people that I affectionately call as RIP, being retired in place. And those are the people that you really need to engage because they are there for a reason. They're well-educated. They've got lots of experience and they’re on the retirement route.

Well, we can’t be there anymore. The competition and the workplace doesn’t allow for that. But as all of you know, and it’s even twice as bad for organizations that are as big as ours, the cost of replacing someone is horrendous, far greater than you

can even count anymore. And you don't want to do that.

So what you do is you want to look at what you have. And, of course, we, in our organizations have reduced in number because of the economic picture and out in the marketplace and especially in the areas that I support because it’s the commercial airline area.

So what we have is we have to value what we have left. And in getting them engaged in that then they become a far more viable member of the team and go forward. But again, that’s the third or fourth item on the list because I think mentoring and some of these things do come first but that's just another thing that we use to help engage the people that are there.

GEN. WILLIAMS: Excellent. Are there any other members or members of my staff have any other comments about that?

MR. HICKS: Tom, in your mentoring programs do you pair people up within the same functional areas and divisions? In other words, would you, in our role, would you have someone in construction paired up

with a junior person in real estate or do you keep people within their core areas?

MR. RITTENHOUSE: I try to have -- in setting it up we have -- it will not be their supervisor and it will not be there task boss. In other words, not the person they're working for.

I try to find someone about five or seven years senior to them, maybe a little more, it really depends on the personalities, but try and find someone they will look up to and learn from and try to take someone from a different area within our group.

If the person is focusing on blast design I take someone from the conventional structural group or someone in conventional structure might get put in with a bridge engineer. I try and match up the right people so that they're learning from someone and they don't have to respond to that person.

Because one of the problems that people have is not always where's the bathroom, where do I get pencils and I ran out of ink but I've got a problem with my boss and I don't know how to deal with it or I have a problem with -- I've done 16 concrete buildings in a row and I need to do something else with my life,

steel, timber, whatever it is.

And so I try to separate them from their work track. So yes, I would choose someone from real estate to mentor someone in construction or whatever the case may be but someone outside, been around, knows how we work and where we keep the spare pencils.

But it's important that they can talk to that person and the person, the way we set it up is that person, just say, Joel's going to talk to Ida. Well, it's not just Ida being the superior person in this group. It's not Ida's role to come back to me and say, by they way, Joel's got a problem with his boss. It's to counsel Joel on how to approach me or whoever they have to approach.

And I've asked Ida to tell me when you meet and keep track of it but I just have check marks. We had lunch on this date and we discussed 16 important things or whatever. I don't want to know what they are but I want Joel to get out of how to go to his boss or to rectify the problem or to tell us, listen, if I do one more concrete building I'm quitting.

Sometimes people do leave for the simplest reasons. It's so easy to fix. Fine, I'll give you a

timber building. I'll put you in charge of something different.

We forget, when you have a staff, depends on how you -- I have a staff of about 75 people and I forget sometimes that the 74th guy on that list has done three of these in a row and maybe wants to do something different.

So if the mentoring process to get him to learn how to deal with the workplace, learn how to deal with New York City -- that's where we're located, which is difficult for some people -- but it's not to have Ida be the spokesman for him but to teach Joel, who's a very good communicator, how to deal with problems. So we try to work it that way.

MR. URMAN: Is it a challenge keeping up the number of mentors?

MR. RITTENHOUSE: Yes. I've found there's good mentors and bad mentors and some guys come to me and say I can't do it. I try to separate, spread it out. We don't hire a lot of people so I keep it on a 12 to 18-month mentoring track. And if it continues beyond that it's at their request. I only ask them to stay with it for a minimum of 18 -- 12 months to 18

months.

I try to spread it around. Some people are good at it. Some people think they're good at it and aren't good at it. That's the biggest problem. I love to chat with these guys and take them out to lunch and we talk about sports. Well, that's not really what I -- so it's understanding the personalities is probably the biggest issue.

MR. URMAN: I would think you would have to train the mentors exactly what --

MR. RITTENHOUSE: Yes, yes. We've found we get together and say okay, what's good with this mentoring program? What's bad with this mentoring program?

GEN. WILLIAMS: Good. Joel.

MR. ZINGESER: I've been sitting here procrastinating. (Laughter.)

GEN. WILLIAMS: Okay. He got me back.

MR. ZINGESER: To me the interesting thing about this question is what does all this mean from your side of the table.

I don't think there's a company out there in whatever facet of this industry today that doesn't

have all the bells and whistles in places in the form of mentoring and training and different ways of trying to see that people are effective and productive and so forth.

From the general contractor's point of view, of course, the issues that we have as an industry are not enough people, period, at different levels. And so good people are really important to hold onto.

I would underscore and the reason I just wanted to chime in I would just underscore that communications is really the key. With the way we work in our company is trying to keep the balance between empowering somebody who's out there doing a job and let him alone or let her alone to do what they're supposed to do and making sure they don't feel like they're on an island.

And it's communications and open doors that allow that, that keep people basically feeling like they're committed, they're engaged, that they're part of the company, that they have a stake in what the other guy's doing as much as what they're doing.

And I would think, again, from the government side in general, from the State Department

side in particular, people that are here working in the United States Department of State, I'm sure are here because they know this is where they want to be.

I mean, there's a mission. There's something that's important to them in their point of view and how they can be most effective in doing whatever their job is is to me the key.

I worked with a guy years ago and I'll tell this very quickly but he said I'll tell you how we can get more effective government -- and this was when I was in the government -- he says I'll tell you how we'll get more effective people working here in this agency.

He said, we're going to go in and we're going tell everybody that we're cutting their pay in half and then you'll get a whole bunch of people that will leave. And then a bunch will stay.

And he said, what we'll do then the next day is we'll fire everybody who stays and we'll go back and hire the ones that left for twice as much money. Now, we've got the people that we need. (Laughter.)

But as you well know, in industry the databases, all of them say it isn't about the money.

I mean, the money isn’t why people stay. And I’m sure it's not what it’s all about here. It’s about the work. And I don't know if there’s a silver bullet or not.

GEN. WILLIAMS: Thank you, Joel. You know, this is very stimulating discussion because we sort of lifted this issue first because it’s dealing with an area of our business that we have collectively been giving some thought to.

Just as recent as two weeks ago, annually, we bring in our project directors who work for Bill Prior and it's a week or so of training, orientation, just getting spun up and the like.

And this particular session, at least that part that I participated in, we spent a lot of time talking about some of these issues: the importance, the role and responsibilities or empowerment, if you will; what’s the limits of authority, et cetera, for our project directors because these individuals who, quote, are on the front line.

They are making it happen. They get blamed for the good, the bad and indifferent. But the point that we were trying to make is that the job is

significant but you cannot, and I'm picking up Joel's words, leave them out on an island. And that's what we were pointing out.

As most of you know, I don't know what other people did who were in this job before me but I try to get out to see where the work is.

Number one, I want to see the work because I'm accountable to a whole system for the work because ultimately the buck stops here plus the fact we have that very key person out there who's doing some very important work. And they would like to see somebody every once in a while. So that's the whole purpose of that.

And I think it ties in very nicely with empowerment, and throughout this collection of comments here I picked up several themes: the communication happens to be one, and you do that through a lot of media. Just the fact that we aired it today will help us with what we are doing.

But also, and correct me if I don't have this right, I also heard something embedded there about rotational assignments, that this might be helpful as well.

Just because you've got Mr. X or Ms. Y who have been hired, who've been working for the last X number of years in lane X what would happen in terms of that person's motivation or their further buy-in if you offered that person an opportunity to rotate into something else. Did I hear that in the -- yes?

MR. ZINGESER: Again, I'll just speak from the point of view of my company and not for the industry, but I'm sure other companies do the same thing.

We definitely have a program, especially with new hires of making them aware of different aspects of the business and the industry and what we're doing. So we'll bring people in and they'll work in estimating for a period of time and then they may go out on a job site or they may end up in purchasing where they're working with subcontractors and getting to know people. And we try and do that in a structured way to a certain extent.

The other thing though is, in our case, many of our project last for many years. They're not typical six-month or 18-month type of construction project. Many of them go on for two, three, four, six

years, eight years.

We're renovating the Department of Interior's headquarters here. That project will go on for a number of years. It's very important that you hit a balance in projects like that of bringing people in, not in waves, but in cycles so that many get the experience.

Obviously, it's a good business decision because now a number of people have it on their resume that they worked on these buildings but also it's vitality to the job.

You need to have certain -- somebody show up who's got, who hasn't seen it over and over and over again, whatever it may be.

So I can't speak for the other people on the panel or others in the room, but certainly that's something that we pay a lot of attention to in a very structured way and try to do it as it relates to the person's desires.

Again, back to Ida's point of going -- in the performance reviews the last part of every performance review is what do you want to do? What can we do for you? Is it take a course? Is it go do

something? And we really try to listen to that.

And again, I think at the end of the day, it's not all about money; it's about the work. So I think that’s really what’s important.

GEN. WILLIAMS: That's very good. Very good. Yes, Robin.

MS. OLSEN: I was just going to say, I would think you would be looking at this kind of as a validation of what you’re already doing. I mean, I see many faces here who have been here for a long time. There’s got to be your sandbox and everything that you do so I would think you take all this as part validation.

GEN. WILLIAMS: Right. Yes, that's an excellent point. And of course, the members of the panel know that these issues, these questions, these discussion topics are not suggestive that there's any particular problem but it's reinforcement for a course of action that we have taken. It’s given us traction to make certain that we stay on the right path.

And through the discussion we can pick up a nugget or two like I just sense this whole rotational matter which might be useful to look at going forward.

So it is very helpful to us to go through this.

Let's look now at Number 4 on the first page and may I ask the staff that had all the detail around this to add some explanation to that?

MR. SMYTH: We do follow some what I've been told are industry standards in determining what our staffing requirements are going to be for the new facilities we have.

We do face a lot of particular challenges though. In some countries where we're going where an electrician is somebody that knows the difference between a battery and a wall socket to some of our very sophisticated systems that we're putting in our new buildings going up now.

We do, under our current contracts, do ask for a recommended staffing list from our contractors for the maintenance personnel and we balance these against our own estimates of our people that have worked in the field, who have worked for people of differing capabilities as they come in, the local employees that we're going to hire.

But what do you see as the role of the contractor, the architect in maintaining their

investment, in a sense, because all of you from the industry, the architects, the contractors, this is also your building. This is part of your heritage, what you're leaving behind, what you're going to show future customers.

What do you see as your role in determining the staffing and the training for the people occupying these buildings?

MR. PAUL BECKWITH: General, if I could ask a question relevant to this topic? I'm sure curious if OBO has considered exploring the possibility of doing design-build-operate-maintain funded procurement similar to what the Navy and others are doing?

GEN. WILLIAMS: Sure. We have done that. Okay, panel, are there any -- yes, Derish.

MR. WOLFF: Well, Rich, my answer was already taken that a lot of clients, especially on sophisticated facilities, are putting in one, two, three-year, and I know you're doing it, maintenance periods. And then you find out what the contractor really thinks he needs.

You also train, if you're a little luck, he trains some people for you. So I think that's one of

the best ways to know it is to just put it into your one or two-year maintenance.

The other thing that I have been preaching for years -- it’s probably getting too old -- is that of all the organizations in the world sort of Intercontinental Hotels and OBO should be ideally equipped to get these cut sheets, computerize them on the CAD from which you periodically did and then keep track of them.

And don't let them, with due respect to the architect, engineers, don’t let them out of the room until they give you these computerized cut sheets. And then use those back here in your operation for -- I mean, no one in the world should know more about which elevators work than OBO or, say, Intercontinental Hotels.

And just build it up. And they’re not expensive. It’s just a matter of the minute you know you just don’t let a building be turned over without computerized cut sheets. And the architect, the engineer or the contract estimate of when the maintenance comes then test it.

You know, if someone comes in every six

months and the elevator and never fixes anything it's a good idea to stretch it out to nine months. So you have a lot of tools that could be used and they're not expensive.

MR. SMYTH: Thank you. Thank you, very much for that. One of the issues relating to that is that we do require, the contracts do require these cut sheets. They come in about six months before the facility is due to be occupied and, I mean, most of my background is in South Asia.

If you get the cut sheet six weeks before the facility is going to open and you say you need three HVAC mechanics and you're in Afghanistan you don't know where you're going to find them. You need a little more lead time on that.

But I very much appreciate that and these experiments that the general has pushed through on the maintenance contracts going on I think is going to yield us quite a bit.

GEN. WILLIAMS: Yes, Joel.

MR. ZINGESER: Also, commissioning has become not just a catch phrase but, in fact, commissioning has become a really important part of

the design-build process and the turning over of facilities.

And the government is taking the lead in looking for full commissioning, which means it starts the day the project starts. Again, that's also part of the green building program, et cetera.

So I would say that to the extent, especially where you're working in a place where the training, the manpower, who’s going to do it, what they need to know, is a long-lead item, then you really do need to look at putting full commissioning in, even a project where you're not having a design-build-operate-maintain and then get that started early.

You’ll pay for it but you’ll get -- at the end of the day you’ll at least get where you need to be.

GEN. WILLIAMS: Thanks, Joel. Yes, George.

MR. PAPADOPOULOS: I would like to echo what you’ve just mentioned on the commissioning. But staying with the essence of the question, what role we see in the M and O type of phase of the project, while commissioning is extremely important I think what

element’s lacking these days is the fact that you want the design architect, the design engineer to be part of that commissioning process.

I think it's extremely important that that training to your operating and maintenance personnel includes the unwritten portions of the design into that phase of the commissioning and essentially will result in lesser personnel.

And once the maintenance and the operating personnel understand what the intent, particularly in HVAC and electrical systems, things that are intensive in maintenance, once they understand the intent of the design and what the idea is things are much smoother and easier.

It’s when you take a design and you give it to an independent person to do the commissioning and then that independent person basically transmits this to the operating and maintenance person it just doesn’t happen. There are too many disconnects in the flow of the design intent to the actual operation of the building.

The most successful buildings that we have, particularly being a mechanical engineer, is it’s

training the future personnel of what the system is supposed to do and what are the intricacies about it. They are very sophisticated systems and it's like buying a new car. You're not going to read the manual; you're going to drive it, okay? So it's a good idea to have a little bit of training up front.

GEN. WILLIAMS: Yes. Are there other comments on this? Yes, Craig.

MR. UNGER: Two comments. The first, again, on track with the question, I think again talking to some of our members what you require in the area of the submittals there may be, and I don't know if you do this, or they certainly could be acceptable, is to go ahead and require a man-loaded O and M bar chart for a certain maintenance period is something that they would probably not react negatively to, that could perhaps be helpful.

Then the second comment, back to, again, Joel's comment and George on the commissioning part of what I have seen in the design-build world of out of municipalities, particularly in water-wastewater where they are requiring design-build and not operate but extended commissioning for two, three years for a

different reason perhaps is that trying to strike that balance between, in design-build, innovation and proven technology when people promise things.

Boy, if that commissioning is pushed out and again, back to water-wastewater, it’s going to meet the effluent discharges that you promised in the performance-based specifications and also energy consumption instead of saying how are we going to heat or air condition, if it’s going to between 69 and 71 degrees through an extended period with whatever, again, energy consumption.

Again, there’s a little safety net or comfort zone there that we maybe aren’t just throwing caution to the wind again on a truly innovative performance-based design-build contract.

GEN. WILLIAMS: One of the reasons that this is a very centered topic for us because we also, as you know, involve ourselves in a lot of rehab type work, the type of work that Joel talked about early on. And in many cases there's a linkage between when a rehab is necessary to the level of maintenance that the building, the facility has enjoyed through the years.

So since we are very sensitive to the investment that our taxpayers are making and we are doing five, six times what State was doing in the past, it's important that we start thinking a lot now about this whole idea of M and O, of maintenance.

So we're trying to extract wherever we can. We've got a lot going internally ourselves but we're looking to make certain that we can explore and pick up other points as well.

The whole issue of commissioning as you know, particularly older members know, that when we defined the sand boxes, these management areas, we added another C in the construction box because that was missing. And that's commissioning.

So today we have a formal process once substantial completion's done and basically the construction is in place then we take a period of time and try to have everyone understand how the building is supposed to function, that is how to drive the new car, not just park the new car out and pass the keys.

But this is how you turn the lights on. It's like this is a very, very methodical process. And that's done with a small dedicated team that Bill

Prior leads and plays with the same person who built the facility.

Now, our problem is a cultural transition because you know you haven't done that in the past so there's a little sluggish in getting everybody to make that crosswalk. So we are getting better as we move along. We have to spend more attention to that and that's sort of our dilemma.

The other one deals with what Rich was getting at and that is getting the documents, getting the material from the technical side of building in the hands of people who have to plan and program resources against that. It is important.

So this is an ongoing issue for us. It's a work in progress. We think we know it's an issue. That's the important thing. And we're just trying to work the best we can to stay on top of it. Yes, Joe.

MR. TOUSSAINT: I just want to offer something to that, and maybe Bill wants to, Bill Prior wants to add to this, but because we're design- build we have basically the person who is building it is the engineer of record. I mean, they are responsible for the total project.

So to assure that we have a third party come in, an outside commissioning agent as it were, and that’s a contractual requirement for the team to provide. And that's to make sure that we have all the training take place and all the systems are objectively looked at and we haven’t -- you know we turn it over in good condition.

But Rich’s question really is the one that's always been plaguing the thing because you imagine the context where we may be moving from a very primitive and basic type of operating environment in an embassy and then we put in the best of its type in the country, a modern functional building built to the best standards.

So there's this very key learning curve that people have to go through and it falls on Rich’s folks to see that the staff is recruited and this and that and the other and trained. And that’s the challenge that we always have.

We used to call them sort of lunar landings, you know? But now that we have ten of these happening every year or 12 of these happening every year it becomes a real problem. It's not just one that hits

us once or twice a year. It's a major program.

And the funding for that comes from another source. It doesn't come within our budget. So that’s -- I think we’re going to have a bit of sales to have folks like the project in China, we’re ahead in that so we’re able to work with the bureau to lay out what they’re going to have to do to put in the proper operation and maintenance program.

And thinking four years ahead on this we have to sort of, I think, start to look at that for our regular program and not just say, well, gee, you know, we didn’t have a big bill like this last year. Well, you didn’t have a facility last year and you really weren’t accounting for what your real costs were after that, the cost to the taxpayer.

We have to think that what we’re doing is improving efficiency, safety, security and in the end run we’re getting a better value for the dollar overall for what we do out there.

GEN. WILLIAMS: That's the culture. I appreciate Joe bringing it in. That’s part of the culture within our department we’re dealing with because you know we’re delivering faster and if you

are used to a certain pace then you kind of get accustomed to that.

So we have been working through all of these to try to make them work better. But once again, the important thing, I think, what is significant is that we recognize that this is an area that needs fine tuning, needs some work and we're trying to deal with that. Bill, would you like to add anything?

MR. PRIOR: I would like to ask a question. One of the things that we find where we have the most success is when we do get the maintenance staff involved in the actual construction, not necessarily doing the construction but witnessing it, meeting the people who are installing it, getting the hands-on training and talking to the mechanic who's actually hooking it up.

But we have a difficulty and it's a conflict of interest, does that plumber go to unplug the ambassador's toilet or does he come over and take a look at the plumbing system in the bathroom that we're hooking up?

Do you install a process when you get a new facility of dedicating, literally, formally saying

these people are going to be associated with the project before it’s completed or do you just kind of do it on ad hoc, hope it works out sort of basis?

GEN. WILLIAMS: You understand the foundation of the question? The existing staff is currently maintaining --

MR. PRIOR: Something that's old and broke.

GEN. WILLIAMS: The old facility may not necessarily be next door and the propensity for the management staff is to hang onto the mechanic and whatever in the old building. And when we’re ready to commission the new building, which may be a block or a mile or two away, that’s where we’re missing Mr. Mechanic or Ms. Mechanic. That’s what I mean by the culture type thing.

And it begins, of course, you know we cannot -- we have to, because of the nature of our business, we're occupying this old until the day we go into the new.

And all of the operation and functions must take place in the old until we go into the new because we have literally turned telephones over overnight, cut them off here, activate here and move everything

in place that quick because we have to have an active telephone here today.

And if we're going to be here tomorrow this one has to work tomorrow. Otherwise we're not doing our job. So that puts it in a little different context for us which makes it very challenging. Yes?

MR. WOLFE: A number of projects in the private sector have the same type of problem. And I think we've seen amongst our members real attempts to -- it goes to one of your other questions -- to educate that maintenance crew well ahead of time that they're taking over something that is really different, that they're gone from a Cessna 370 to a Boeing 747.

And running a building that was built in the 1930s is a lot different than one that has got energy efficiency, water conservation provisions. It's constructed for the new century.

So it really would be wise to back into the new embassy or the new compounds enough time to get the folks that are going to be operating it and maintaining it up to speed because it's going to be a very different experience for them.

GEN. WILLIAMS: Yes. I think all of that is just good reinforcement because what we try to say is the day that we break ground that's the time you need to start thinking about the transition and get out of the mindset of where you are now because what you need to be thinking about, in terms of maintenance, is where you're going to be two years from now.

We've had some real intriguing experiences here. One particular new compound we just turned over two and a half months ago, they zeroed out the whole entire maintenance staff and brought a brand new one in.

They had a skill set problem that was not transitionable and they were -- I thought it was forward thinking, they did everything appropriate and right in terms of for the people but they just felt they needed a more sophisticated staff.

It happened to be a younger, very progressive staff. They were credentialed. They had real electrical engineers, registered kind of folks that they could attach accountability to and that was an approach.

We don't suggest things that radical. We

sort of leave this up to the individual post to get there but we do point out that it's a tall hill to climb from a Chevrolet with black wall tires to a Mercedes like Derish drives. (Laughter.) That's a tall order.

So that's the real issue and having everybody sort of understand that is important. Well, this has been very -- yes, George.

MR. PAPADOPOULOS: One very quick issue that I wanted to bring up. Being a mechanical engineer I always found that maintenance performance is highly related with space availability around the equipment.

And it's a very simple concept but the idea of cramming things just to get the job done, which happens and the contractor will do it also the way it has been laid out, if it's not thought out, maintenancewise, it can result in very costly, prohibitive repairs. Either it is correctable or preventive maintenance done in the future.

I hope OBO, during the early stage of design, does invite your maintenance and operations group to review the plans and it's a very good recipe to resolve a lot of future problems. Space, as I

said, is it seems like a ballroom but it's not when you need it.

MR. SMYTH: I'm glad you mentioned that and I do want to say the design people do make a real effort to get our maintenance people in. You're all familiar with the standard embassy design. It's not fixed. There continue to be modifications as we find problems in this, many of them as a result of maintenance.

And I'm very grateful for that. The architects and the engineers have been listening to us on some maintenance issues. You're a mechanical engineer. We found some problems with the location, say, of the condenser units, that they have real maintenance concerns but not the ones that would normally face, I think, a commercial development was the location of some of these condenser units vis a vis what the space on the other side of the wall was being used for. Yes, we could maintain them as long as we flew people from the United States with top-secret clearance. Thank you, George, for that.

GEN. WILLIAMS: Yes, Terry.

MR. WILMER: If I could just add to that,

sir, on the program development side. We're very sensitive to this issue so when we program the overall space that's required we're very sensitive to electrical mechanical. We have a factor that goes into that. I think, frankly, it's proven to be a pretty good one.

So it starts on the planning side, goes to the design side, the operation and maintenance. So we're working very hard, I think. We take your point. We're working very hard to get it right. We've all seen examples of where things have been designed that don't work properly.

GEN. WILLIAMS: Yes, Robin.

MS. OLSEN: I was going to say then you're doing something that also wasn't done in the past. You're documenting so that when you go to do a new project you're taking all the old considerations and all the stuff that you'd looked into in account when you're doing the new job as opposed to many years ago when many government, you know, they would not -- you'd have claims and everything else going on because no one took all those changes that were done into account, including maintenance and using equal instead

of, you know, making sure that one manufacturer produced something.

And then, also, I would think accessibility to the records, be it by computer or whatever means, or people that come in that don't know anything about the old building but have to get up to snuff. They know the new one; they don't know the old one but they need to know the old one. So I would think that's all relevant.

GEN. WILLIAMS: Right. Well, that's important and the whole purpose of the question, once again, was to just help us fine tune it. We got the problem. We recognized it three years ago. In fact, we have an ongoing lesson learned kind of arrangement but we want to make certain that we reach the ideal state with this. And that's the reason for asking you to participate. Joel.

MR. ZINGESER: Just a quick question. You mentioned the color of money before. I'm assuming that any of the training and anything that's in the commissioning part of the project, even where you're bringing on existing O and M staff in to be trained the cost of all that is not out of the O and M budget

it’s out of the project budget, correct?

GEN. WILLIAMS: No, it’s out of the nonconstruction budget.

MR. ZINGESER: It’s not in the construction budget.

GEN. WILLIAMS: O and M staff, any enhancements to that, any increases to that, anything that would impact staff cost is out of a different budget. That’s why the owner or the occupier of the building or the post, as we call it, will have to concurrently plan for that staff enhancement as we begin to do the work.

The training that is conducted for these individuals is in the contract and the documentation that’s left, the how-to manuals, et cetera, et cetera.

MR. ZINGESER: It would be an area to be creative.

GEN. WILLIAMS: Right. That's correct.

MR. TOUSSAINT: If I could just add to what the general said, we also include, I think it’s a first year of parts and filters and that sort of stuff. So we jump start it.

In the past it was, here it is and you’ve

got to get the batteries now, type of thing. Terry makes a good point, too. This feedback that goes on you've heard three of us talk, planning, execution and O and M talk.

The feedback occurs really at the staff level because of the boxes, the structures that we have in place. So we have, at the planning stage we have the programming elements that indicate the size of mechanical equipment rooms, the cost factors that are applied to that.

Those things can then allow at the early stages if there are problems during O and M to be fed back at the staff level to get it right for the next time.

And we've modified the standard embassy design, and Nick Rutherford's in charge of that, to incorporate the changes that may come up in terms of mechanical equipment rooms, location size and so forth. Those are captured in the estimate as well.

So this is, I think, one of the big improvements that we've seen is that instead of relying upon a formal lessons learned procedure the structure requires that, just by staff.

We have planning, execution and operation and maintenance. And those people take their responsibilities very seriously and make sure that if they have a problem in O and M it started in planning. It started in the scope so let's get the scope fixed for the next time and then we pick that up in the engineering and construction phase. I think that's one of the improvements we've seen in the reorganization, in the definition of roles.

GEN. WILLIAMS: Very good. Are there other comments from any member of the panel or staff on this matter? Yes.

MR. WILMER: If I could, just one other -- one member of the panel, maybe two, brought up the point it's good to know significantly in advance what your manpower requirements are going to be on the O and M side.

And what we're really talking about here to a large extent is dealing with a client base. As those of you who have been on the panel for a long time know we've have in some cases 30 to 40 agencies and partners in our larger missions.

They all become part of what's called an

ICAS (phonetic) panel and they have to agree to fund the cost to go with these new missions for operation and maintenance and for the persons, the individuals that Rich needs to provide that service, correct?

And that can be a contentious issue. So we have to deal with that as well. So if you're very late in the process of identifying what the requirements are, the skill sets and the costs, that can cause you real problems with your, quote, unquote, tenants at post.

So we collectively have all that to to deal with. And that really relates to how we, OBO, are seen in terms of delivering a product that works for our clients. So we're trying to focus on all aspects of this.

As Gen. Williams has said correctly when we came in and we used to construct. Now we construct and commission. Now we look at the O and M piece of commissioning and it takes us into lots of different areas as you see. And we appreciate your observations that help us in that direction.

GEN. WILLIAMS: As Joe pointed out our structure, our organizational structure is designed,

quite frankly, to ensure that that integration takes place.

And we didn’t say this up front because no system is perfect, but we are light years from where we were and nothing is broken, nothing is out of bounds but we want to get it as tight as we can and that’s the purpose of the discussion.

Technically, on paper, when we run this through the process, if it’s planned and developed correctly, it should be easy for Joe to execute without confusion and there should be clarity around operating and maintaining it because the decision about a concept that the gentleman raised in the back, design-build-operate and maintain, we have dealt with this in spades.

But there’s a wherewithal piece that goes with the maintaining and that has to be brought in by the entity that is funding the maintaining. So we just cannot automatically adopt that concept without having others involved.

But we have used this. We’re going to use it in the early stages of China. I think we're using it to some degree in Kabul, aren’t we, Afghanistan and

Astana in Kazakhstan. So we're using the concept where we can.

In fact, we have been very flexible about not getting rigidly tracked in any one particular lane. We're just trying to do the very best we can to get from Point A to B in good order. So this has been very helpful for that process.

Okay let's look at Number 10. Help us with this whole notion of as-builts. And the staff person that put this on the table, you have some further info about it?

MS. MATZEN: I'm concerned because I'm an interior designer and we find that we have to maintain the buildings after we build them. And the first problem is to get correct as-builts when the project is brand new and then subsequently when we turn the building over to our client, our client doesn't let us know what they're doing to the building. And I'm hoping that maybe you can tell us how you assure that you can maintain a constant correct set of documents.

You can imagine that it's important to us not only to be able to respond to the clients when they say we need to make changes in space planning but

also if we go in for some emergency and all of a sudden we have some troops going through a door and it turns out that it's been blocked on the other side because someone has cut off emergency egress to a secured area.

GEN. WILLIAMS: Okay. That's Mattie's version. Bill, now yours.

MR. PRIOR: You mentioned some things earlier about the computerized cut sheets and things like that. And we have a commissioning process that we struggle with during construction and struggle with after construction.

I'm just wondering what sort of processes you all have in place using off-the-shelf software and things like that that would be easy to put in place that would carry through beyond construction into the occupancy of the building.

GEN. WILLIAMS: Okay. Yes, Tom.

MR. RITTENHOUSE: There's two kinds of, two pieces of information. There's the construction documents. We're going to assume for the argument that they're final construction documents. And there's the engineer-oriented or the AE team oriented

changes. And then there's from the construction side that only the contractor may know about or a few people.

And we're seeing many times, especially with CAD being so widely used and many of our engineers, they're all levels, have used CAD. And so we find, we really appreciate it when it's requested in part of the contract and it's two parts.

We will go back and put ours in there but what you need is for the contractor to document what changes they make because sometimes there's changes made in the field. You get a contractor who changed something or moved it because of some site consideration.

Just say it's the location of a door, okay? We've got to move it three inches to the right. Well, you know, the engineer doesn't care if the door is three inches to the right. The architect may or may not care if it's three inches to the right on a long corridor but someone's got to communicate that back.

And so I think with a lot more sophisticated contracts, and Joel and others can speak up in a second, getting that to one central place, usually the

AE team because they usually have meshed documents, will take and incorporate the Weidlinger changes into the drawing and will take Joel’s changes and put those in the drawings for him.

And it’s a very important element. And I think as people use the CAD and the FTP sites and stuff like that more that it can be done quite easily, actually. It's not like yesteryear where we’ve got 75 hand sketches from our side and 130 from some other side and we’re all trying to figure out what’s done when to whom and by whom, et cetera.

It's not what it used to be. It should be done and it should be as part of your contract to -- your contract to the contractor to supply these changes, even the small ones.

Because if Mattie can’t -- you know, if Mattie’s door is three inches to the right and she’s got a bureau that she wants to place in there, who knows if it’s going to fit until you try and get it in there.

Also one of the things that we have seen on some other contracts that we’ve looked at is how to handle a facility after an event has occurred, be it a

fire or a bombing or something. And also, a big proponent of this was the Pentagon, the guy who ran the Pentagon, I can't remember his name right now, but anyway the issue is where that corridor is, where is this corridor going?

And if someone's moving it in constant restoration and undocumented changes, so many times I've seen in federal buildings where the door is just closed, there's a big bureau behind it because it's not needed to be a door any longer. And so these are very important changes that need to be documented. I've been to so many embassies where who knows what's there.

So as you have the opportunity with 28 to date and 39 will be under some kind of commissioning through next year, get that documentation, get it redundant, get it in several places so that people can use that and it's helpful down the road.

GEN. WILLIAMS: Well, I can assure you to some degree of confidence that the 28 and the 11 you're going to know where the door and --

MR. RITTENHOUSE: Absolutely.

GEN. WILLIAMS: Those type things are. And

we have put some disciplined features in where we -- and I use my words -- where we're not going to allow the building to be chopped up or reconfigured or whatever for the purpose that Mattie is talking about.

So that's not our worry. Our worry is, you know, we've got 200 plus out there so I've got a lot of existing things. So we have to kind of deal with those as well and that's where some of the headaches come from. But we do not want to make the mistakes that you just articulated on any of the new work that we are doing now, that will cause dysfunctionality for any number of reasons going forward.

And that's the reason we are putting a lot of emphasis on documented as-builts because that's the takeoff. When you have to go in and deal with any one of the functions, any one of the systems in the building the first call is for documented as-builts.

And you would expect to look at the drawings and then go look at the building and see the same thing. And that's what we're trying to do.

MR. RITTENHOUSE: As good follow up, George and Joel talked a little -- but ten or 15 years ago I know you had a contract to digitize a lot of drawings.

Now you have a certain number of embassies that are important and they're just going to remain forever and ever.

Is there a program to keep those up to date and make sure, I mean, ten or 15 years ago under an IQC contract have they maintained or have you gone out and found, you know, we have these 25 embassies that are just, you know, we are never, ever going to move out of these because they are, for one reason or another, are those well-documented?

MR. TOUSSAINT: Yes and no. I'm told that they're current, that DE has brought it up to current status so we don't have the backlog that we had several years back. And that gap's been closed. And there are also other things that and done not just with us but some of our colleagues in other parts of the government to new buildings to help take care of Mattie's concern.

But what I'm hearing also as we talk is that we may need to look at how we can tie this into the O and M program so that really it's one thing to turn over -- it goes to Bill's point of what's kind of the off-the-shelf kind of a program that could be then

turned over as as-built, provided at the end of construction, that would then be maintained so Mattie doesn't find a door that's moved.

We were asked by one post to come out and do a space planning exercise. We say let's do this as a videoconference. We know the building. We built it, five years, six years ago. So tell us what the condition is and that should be able to be something very easily answered. Here it is. Here's where we want to move people and we can do that online back here, save a trip, save the effort.

But we don't really have, I think, yet the system in place to assure that somebody is responsible for maintaining as-built conditions on all changes throughout its life.

GEN. WILLIAMS: Yes, we'll take George and then Joel.

MR. PAPADOPOULOS: Thank you. There are a couple of fallacies with as-built concepts. I'll be a little controversial if you don't mind. They say there's a tendency in our industry to have the as-builts as an offspring of the construction documents.

In other words, we take the CDs that are

prepared by the A and E and we sort of modify them to present as-built conditions.

There’s a fallacy here because the CDs that are prepared, the construction documents that the A and E’s prepared are so-called performance documents do not scale type of concept. In other words, they’re general documents. And we take that and we force them to become accurate as-built conditions. That's one issue.

The second issue is that whenever we have minor changes to a building, like a small tenant change, we look at it from a static point of view, the door, the ceiling, the wall but we do not look at the systemic portion of it, the electrical panel that feeds it or the air-conditioning or the exhaust system or the water systems that are serving that area, and that goes by the wayside.

So we start with not having accurate as-built documents. We call them as-builts. Then we go; we start modifying and we forget the things that we do not see, the concealed systems. And we end up with a mess. Nothing new about it.

I think the idea what we would like to see

is not to saddle the contractor with the responsibility of producing as-builts. I think we need to have an entity in the process that is totally responsible of producing a set of documents that are really as-builts, whether it's a combination of input by the A and E and input by the construction contractor, the documentation during the construction process, whatever it is, but we need something better than an offspring of the construction documents that we're going to call CDs. That's number one.

Secondly, what you mentioned earlier, saying somebody being responsible in updating these thing on a continuous, and not only on a static basis but also on a systemic basis for the building.

All the discipline of the building need to be represented in that particular situation. So the process of documenting as-builts is a very good question, I think, that needs a lot of work. It's in infancy, I think, in our industry today as far as what we call as-builts.

GEN. WILLIAMS: Excellent. Joel.

MR. ZINGESER: That was a great lead in, George. We are working on a project now that, for us,

is very different in terms of how this issue is addressed. And the jury is out. We'll see if it actually happens and if it does, how well it works.

We're doing the renovation of the U.S. Supreme Court building. The documents for that job cannot leave the site. All the documents, every document. It's a requirement of the contract that we have a full-time CAD administrator on site handling all of the coordination of all the drawings with the subcontractors and keeping the documents up to date.

As-builts will likewise be done in the CAD system on site. And the hope for the Supreme Court is when we get through that they will have a set of documents that reflects the building as it is completed at that time for them to go forward for another 50 or 80 years before they do something else to the building of some significance.

As I say, we're just starting so I'm not sure how well this will work. The traditional approach is, as I'm sure you all know, the most important set of documents to a contractor on the site is the conforming set because that's the contract.

So he will spend a lot of time making sure

that that set of documents is red marked and clouded and covered to cover everything that is going on. And then the as-builts get done, for better or worse, as part of the quality control program. I mean, a full blown three-phase quality inspection, quality management program requires that every day the as-builts are marked up. But that's again pretty much a paper and pen kind of operation.

I don't think as an industry we have used CAD very effectively at all in this role. There are some AE firms who have worked in the private sector for a corporation, say a Boeing, where they will -- and maybe Mr. Wolfe can talk about this -- but they will as part of their contract maintain the documents.

I mean, they own them and they see that as a very strategic business approach because now for company XYZ that's making widgets in this new plant they just designed they have all the data. So it's prudent for them to keep that data up to date and be there and know exactly what's going on with the building.

So there's a lot of very important strategic planning in what we do with this data and how we use

it. And again, I think it’s an area that’s ripe for some creative thinking and some creative contracting.

Design-build, again, is a little bit different because design-build, you know, you’ve got everybody together and at the end of the day they ought to end up in the same place.

So I think it's a great opportunity to do a better job. It costs money again to keep everything running like that but I think it's a tremendous opportunity and certainly you owe it to yourself to end up with documents that show what you’ve bought.

GEN. WILLIAMS: You know, Joel, you and I’ll cover Terry, you just touched on and we’ve talked about some of these things before but a lot of variables led us to go down the road we went.

We recognize, number one, the big problem. The big problem is that we had a lot of work to do and we had to do it right and we had to do it as quickly as possible. Therefore, we had to look for a path that would give us the least amount of concerns. And that's what drove the standard design package.

That was the premise behind the design-build connect to that because the elimination of who done

it, whose responsibility it is and getting away from the problem that George talked about, we thought as Joel has just explained, having everybody integrated as a team, that would give us a better opportunity to end up with a product that would make sense, not only having the physical thing built but at the same time having a set of documents that would be the real deal.

But even with that, we know today and I think industry will support this that this whole issue of documentation of as-builts still needs some tidying up. And we put it down because our whole effort here is to try to get it as right as we can. So this has been very helpful. Terry?

MR. WILMER: Yes, sir. I would just like to share with the panel, I think one of the other kind of systemic problems we have, and that is let’s assume for a moment that you do get accurate as-builts. You have a baseline.

The question then becomes, well, who’s the landlord? Who owns the building? Who’s authorized to make the changes and who is therefore responsible for updating those as-builts?

And that's the problem, frankly, that we

have because on the one hand, OBO, you Gen. Williams, you're responsible for all those things, 15-, 16,000 properties out there. But in many ways, you're not the landlord.

And money goes to the post because we work in a very decentralized way, and the post makes these changes and then comes to us for help and wondering why their HVAC system isn't working because OBO obviously didn't design this properly, which goes back to Mr. Papadopoulos's point.

So we have that other systemic issue that we're trying to struggle with and work through as well in terms of how do you provide the flexibility for the post to do what they need to do yet at the same time make sure they don't make the kinds of changes that result in a work environment that is not what they want.

That's a very real problem and an ongoing challenge for us and I've been with OBO for 12 years now and it's a continuing problem.

MS. CONRAD: The problem that Terry is just referencing, I just remember the first trip that the general and I ever took, and we went to a post. We

happened to drop in, and we were taken to the building. And they were complaining terribly about the fact that the HVAC system didn't work, and things were awful.

And it turns out that the whole building was planned as open space and they went ahead and made offices out of it. And they just couldn't understand why the systems didn't work. And all of this was done without any knowledge, you know, to -- back at the main office.

And we run into this, I think, very often we'll be walking through a building and they will bring a problem to the director. And usually, it turns out that they had made a change that nobody knew about. Mattie runs into this all the time with furnishings.

And so there's not a way at this point that it's really disciplined because, as Terry says, the general is, you know, he's not the landlord. He's not there. And there's nothing in place so you run into these things on a very regular basis once a building has been opened.

GEN. WILLIAMS: Go ahead, Derish.

MR. WOLFF: The panel is working today like they were getting ready for the Olympics the way they're handing the baton around. (Laughter.) I hope I don't drop it.

GEN. WILLIAMS: They're fired up today.

MR. WOLFF: Maybe it might be useful to look at another field and you think of the pharmaceutical field where it's a hundred times more dangerous and important to them to have the equivalent as-builts because plants get closed down with huge mark-ups. So there's not a cost problem as we have.

Plants get closed down. Worse than that, companies get taken over. Even worse than that, CEOs sometimes get sent to jail or something. So it's very serious and yet -- and it turns out, I thought it was some sinister plan.

Most of the problems these huge companies have -- I don't want to name any of them -- are documentation. They don't document, it doesn't sound possible when you think of a pharmaceutical industry they don't -- over the years they don't document their processes.

And even though it's a life or death issue

for them they just have trouble because the old pros start developing a process like Chernobyl and they don't document it.

So it’s very difficult, and what they’re trying to do and it's not easy is actually forcing themselves to go back and audit, in effect, a user audit, to find out what some of these plants are actually doing because the FDA or someone comes in and the first question they ask is where’s your documentation?

They give them beautiful documentation and they see -- Terry’s laughing. Just like you’re talking about -- they see a manufacturing line going by and they look and the process is not on the drawings. So it’s a very big issue for them.

GEN. WILLIAMS: It's a big area, and we recognize it. And we are trying to make certain that going forward because we just have to do the best we can with what’s in the existing pool but going forward we don't want to have people 20 years from now sitting around trying to figure out what we did and what we meant.

It does require a lot of discipline and

those of you who have been involved with the government, worked there, you know that it requires a lot of discipline.

And I think the Secretary had some foresight about this whole management issue early on. That was the reason of sort of retitling, if you will, the responsibility here as property manager, meaning that you got to worry about a lot of pieces of this.

Design it, build it, maintain it and really deal with these other matters as well. That was always there but probably was not illuminated as much as it should have. So we're trying to get a fix on a holistic picture of property management. And it’s not enough to just, as Joe pointed out, to build a building or to use George’s analogy, that is here’s the new car. Go drive it.

We’re going to have to care and feed that driver. Do you have a license? Do you know where you’re going? Do you know how to turn the thing on? How do you open the hood, those type of things.

It’s what we’re trying to deal with as we move ahead, because as Terry said, I'm not the person on site making the day-to-day decisions about the

building.

So it will be sort of easy just to walk away and look, I built it, now you've got it. But we're trying to go after this holistic picture so that what we build can be maintained. And we have to leave somewhat of a structure in place that we know that the capability is there to maintain. So that's what we're trying to get at. Yes, Robin.

MS. OLSEN: I was just going to say that it sounds like before you had the big concern was the before and the during but now you're into the after, and so, with the maintenance and everything.

But now it sounds like you're going to have to change the culture. And when you hand the building over they have to understand what they're going to have to do in updating and keeping up with that or they can't be helped. If something can be tied to that, some kind of, you know, we can't do this if you don't do this, some type of documentation process that otherwise you're not going to be able to do it.

GEN. WILLIAMS: Right. Yes.

MR. SAMUEL CONDIT: It seems that if you can put the whole issue of as-builts into the category of

a service, if you take the adversarial position that's historically been as-builts were at least in the past, either it wasn't designed right or it wasn't built right.

And it's always a place that falls through the cracks, the negotiation of fees on the design side for as-builts are always minimal. Sometimes there's all kinds of extenuating circumstances why those thing could change, particularly the whole issue of performance specs.

If it's put on the same plane of all the other services that you're dealing with and it's a professional basis, it takes all of the mystery, all of past confrontational issues that revolve around as-builts away. It may well be able to serve you entirely differently.

GEN. WILLIAMS: That's a good point. I don't want the panel or anyone in the audience to -- I know the panel does not -- but to come away with the notion that we have a big problem with this. We don't. We have got a pretty good grip on it.

We're just trying, particularly with the design-build concept that we use in most of our new

work, but we know that this is not completely fixed.

And we want a complete -- we will continue to dialogue about it and we pick up points and directions and ways that we can fine tune.

And when we run into situational types of things because we are all over the world, and when someone sort of comes in and asks how do you do this and how do you do that we will give sort of the basic mantra about the way we deliver our facilities but there's always that unique situation where we have to do as Joel and others have said. We have to be creative; we have to look for the best way to deliver because we get involved in some very unusual situations in terms of having to deliver.

We're sitting here thinking now how we're going to go back in and facilitize Libya. We've been out for awhile. We have properties there. We know for sure the properties won't work. We know the acreage that our property is on, notwithstanding the fact that we own them won't work.

So we just zero out a bunch of things up front. So it leads us right into I have to buy a green site and to fit what we want to do now it's

going to have to be ten acres. And that becomes a tall mission.

So until we get through that rites of passage, that is the acquisition of the property, it's really not useful to be engaging about anything else until we do that. So the whole way we have to do our business kind of dictates how we go after it.

And as close as we can stay to what is our sort of standard way of doing things, it’s very helpful for us to manage and discipline at the end game because we’re discovering that not only will our processes have to be constantly massaged and disciplined but we have to ensure that those we serve, our customers, and that’s the 260 posts out there or so, have to be on the same wavelength and help us out.

Let me touch -- well, it’s 12:00. This has been very useful this morning, very, very helpful. We will try to get a little bit more on the table after lunch. I think it’s time now. We’ve only got about seven, eight minutes to allow all of us to get ready and move to lunch. I’m going to ask Gina to explain the lunch arrangements and we’ll go to lunch.

MS. PINZINO: Thank you, sir. If the panel

members would just join the managing directors and Gen. Williams to the executive dining room, Phyllis is here and she will be delighted to take you there.

And our OBO staff could escort the distinguished visitors here today to the fine cafeteria facilities at the State Department. And we will resume at 1:30. Thank you.

GEN. WILLIAMS: Thank you. We'll see you then.

(Whereupon, a lunch recess was taken.)

AFTERNOON SESSION

(1:32 p.m.)

GEN. WILLIAMS: Let me have your attention. I trust that everyone had some lunch and you had an opportunity to stretch your legs a bit. We're going to sort of go into a nonstop here until about 3:00 p.m. and at that time we will start summarizing so that we can be out timely.

For those of you who have been here for the first time we do get out on time. That's my agreement with the panel for them to take the time out and come and help us with this function, that we get them out on time.

And for the public who are here for the first time, obviously, those of you who have been here before you understand this but this panel serves in a pro bono status. Obviously, no one is paid and we're just very pleased and delighted that they have devoted their time to their government and specifically to the State Department.

The Secretary, who is so busy always says to me when I announce in the mornings that on these days that we're going to have our panel he always asks that we pass his personal thanks for this.

He may not be here but he knows exactly what you're doing because we try to keep him informed on what is taking place.

We are going to continue now with Number 8 and this whole issue of modular construction. Just looking at all aspects of the industry and capability now and looking at what we have to put together.

I don't want anyone to come away with reading the fact that we have this on our discussion table as being something that we have subscribed to or that we are looking to go in that direction or anything.

And obviously, if there is something that is ongoing in our industry we want to explore it and hear your thoughts about it. So I am going to ask staff that brought this one to our attention to further expand on it so the panel can get some traction.

MR. PRIOR: We've done modular buildings as you're aware of in a number of places, three or four at least in varying sizes. We've done small buildings. We've done little outbuildings and we have a very substantial building going on right now.

And we have found some pros and cons to some of the things that go on with this process of modular construction and would like to know if the industry as a whole uses it regularly and, if so, why and where, under what circumstances just to get some feedback to kind of bulk up our minimal experience with it.

But I'd ask you, do you regularly do modular construction and in what sense, what circumstances do you do it? All the time, never, for little buildings, for special buildings that are in remote places? I mean, that's kind of where we are coming from to get some feedback.

GEN. WILLIAMS: Joe.

MR. TOUSSAINT: Maybe we can clarify what we use as modular. What we mean is we build it off site. We build it in the United States and we build

it in variations.

Bill, I think you've done complete units that go together or partially complete units that then get put together in the field. But the intent is to reduce the time on the site. And that's one of the major components. But it's basically built here and shipped there in total or in part.

GEN. WILLIAMS: Yes, Ida, then I'll take one in the back.

MS. BROOKER: The intent of the project, the intent of the occupancy and the length of time for the occupancy is a very major consideration when you do that kind of thing.

The experience I've had is that we've done modular units but not for long-term. When it's a short-term or, I mean, everything's relative, short-term being less than ten years, but if it's going to be a short-term need there is a lot of logic, a lot of sense in doing that, especially if you have a short time span that you have to do something on an emergent basis.

But for the long-term, over the long-haul,

we have not utilized that but I don't know that I want to say it’s because they’re not in for the long-haul. I don't think I want to say that part.

But we just felt that something on a more permanent basis in the location makes a better statement if we’re going to be there.

Our reputation is that we are generally not the throw-it-up-and-get-out-of-town kind of reputation. It’s something long and it’s the built-in-place says something about the organization that is going there.

So when we go into a locale that's what we want. That’s the impression that we want to leave is that we are there. We’re there and we’re here to be part of your community.

So generally, there is a perception that modular building is not permanent but it’s quick. So you have to balance the criteria, balance the need and balance the time line before you can figure out what is the best use of that.

There are pluses and minuses on both sides of that with the availability of materials and being

able to compartmentalize it and modularize the construction and take it in complete that you don't have to worry about losing pieces of it before you get it on the site or once it's on the site it's all there in a piece.

We as a company are going to modular construction of nonbuilding things, such as the new 77 is that we are having the pieces all come in totally assembled. So that is certainly a method of construction that you could use.

But I think that the impression of how you want to be perceived in the locale that you are occupying or becoming a part of in that community is a very important issue as well.

GEN. WILLIAMS: I think that's helpful. May I take your comments similar to that?

MR. GREG MYER: Not exactly. We use modular construction in three main areas. We do a lot of very large modules in the oil and gas business. We construct the modules, for example, in Seattle and barge them to Alaska for large pipeline projects, refinery projects. We've done the same in

the Middle East.

We have used modules in the pharmaceutical industry for specialized manufacturing areas. We don't actually do the building walls and ceiling but we would have a specialized manufacturing area with complicated equipment, piping, electrical loaded on a skid and that would go into a building somewhere.

Frankly, I think that has the best application for what the State Department is trying to do for some of your mechanical generator sets, for example, some of your switch gear and some of the other things. That could easily be modularized.

The third area, and I think it ties back to what you were talking about, the double-wide trailer or it could be prefabbed housing or something like that, you could use that, I agree, on a short-term basis, construction sites or for temporary housing camps and those sorts of things.

Probably doesn't fit well with the sort of specifications the State Department has and the types of buildings you're trying to construct. But I think the middle area that I was talking about, our

experience with the pharmaceutical industry, where we bring in modules, whether it's a generator set or some of the sophisticated mechanical equipment that you might have in a plan could work effectively.

GEN. WILLIAMS: Okay. Well, we wanted to air this because as we have done since we have had the panel we expose our full plate, and as I preferenced the discussion before we got started, clearly, this is not any directional shift or anything like this.

We just know that industry is wholesome and we look at every piece of it and there are situations that we get into, interim situations, as Ida pointed out, isolated situations for one of its kind, and what Bill Prior spoke to those circumstances were clearly unique sort of arrangements.

But I think you have given us what we needed, not that it is inconsistent with what you said and our thinking. And the notion of looking at some component or something of our compound might be some opportunity or something. But we just have to, staff will just have to continue to look at that with

the knowledge. Yes, Robin.

MS. OLSEN: I was just going to say if you had the builder and the manufacturer get together and the builder lays the foundation and makes sure, the manufacturer makes sure everything fits and then you put a different facade on it, I would think you could use it for a lot of things.

GEN. WILLIAMS: That's right. And that's what we do when we do use it. Hopefully, it turns out other than the people who do this everyday to look like everything else.

Let's move ahead now to another area. Let’s look at Number 11. And we're talking about the suitability of product specifications and sort of ask a question there how do you establish and evaluate submittals and then who ultimately takes the risk for performance specification? May I ask the staff that had advanced this one to speak to it?

MS. MATZEN: I’m sorry. It was me again.

GEN. WILLIAMS: That’s Mattie, one of the best space planners in this region.

MS. MATZEN: I'm sorry. I feel like a

space cadet right now. I feel like we have our feet in, one foot in performance sort of and one foot in design.

And earlier today Craig was saying that, you know, you have to balance innovation and technology in doing performance specifications. And I had mentioned to people today at lunch that I worry that the only innovation that we get is how inexpensive can we make it when we're doing performance specifications.

And the technical offices and OBO review the submittals that come in so we get to see them all. Sometimes I'm not sure how to evaluate a performance spec against the submittal that I see. And sometimes all I see is that the thing is a lot cheaper than what my vision was when we had a specification.

So I was just wondering if we could hear from you how you define your specs, whether you prefer performance or design. I also make the comment that how do you do performance spec for a design itself because that's a very subjective kind

of thing?

The other thing in sitting next to one of the project directors at dinner the other night he said, he was going on about performance specs and he said, but if you get the water off the roof and it brings it down the side of the building and it destroys the sidewalk because you didn't take it through all those things.

I said, well, that sounds sort of like Rube Goldberg trying to figuring out how far do you have to go in defining your performance. So if you can think about things in that light and give us some feedback. I'm just not sure who wins with the performance spec and whether you whether it performs until after you accepted it.

GEN. WILLIAMS: Excellent. Yes, Joel.

MR. ZINGESER: This is, for me, reminiscent of days gone by. I was very much involved 30 years ago in the advent of the performance approach to design and construction in the early days of the California school building systems program, the Montreal school systems program.

The Social Security Administration actually procured buildings using performance specifications, the famous Peach Book that was produced by the then Bureau of Standards.

And a lot of that stuff is academic in a way but the basic premise of that approach still holds true and it's really this: if you want to buy something on a performance basis you must state the requirement very clearly and succinctly and in a way that is understood as to what it is you are requiring.

You then absolutely must state the criteria that you will use to evaluate the performance or what is being proposed and then ultimately there is a test, if you will, or an evaluation to see that you are getting the performance that you want.

The simplest example, of course, we do all the time and that is we state that we need to buy some piece of equipment. The criteria is an ASTM standard or some other criteria, and then the test is that you measure and see that, in fact, it's turning out whatever it is that you want or you assess it in

the form of a design, a piece of paper or whatever. You do an evaluation, you do calculations, you do analyses. That's the process.

But those three pieces are paramount to any performance procurement and the truth of the matter is all too often we don't do all three pieces. We will put out the requirement and we're not clear enough about how we're going to evaluate it.

And the end result is it's unfair. It's unfair to the proposers because you're going to get apples and oranges and peaches and bananas. And it's unfair to you as the procurer because you're not sure what you're going to get.

And this is why you've heard me say this before, performance-based procurement the onus is on the procurer to be smart and to really understand what it is you want and be able to say very clearly how you are going to evaluate what you are getting. If you do that, you can buy anything.

GEN. WILLIAMS: Excellent. Yes, Craig.

MR. UNGER: This is obviously one of my favorite topics so I'll jump in here. I think added

to that, not only the owner, the agency knowing what they want and being able to articulate that in terms but how that contract is administered after award.

I mean, design-build is not tweaking design-bid-build. They are totally two separate delivery systems. And again, the most common I boil it down to to simplify it is in a hard-bid environment the government has the solution and bids it and already the solution is there and you are supposed to, the bidders come up with an expected outcome.

Under design-build that is just flipped over. You're stating the expected outcome. They have to discover and develop the solution. Again, hopefully in an environment that gives you, meets your minimum and they are competing on exceeding that minimum instead of just up to the -- if you have detailed specifications in there anybody would be a fool to give you more than what you asked for whether it's a generator or any other equipment or building material when it's all laid out in prescriptive specs.

When you flip it to performance, and it goes back to how you administer that contract, and one that comes to mind is back to the Pentagon renovation. The wedge one was done hard-bid and something like 3500 pages of specifications with 1500 drawings and done well. In fact, a lot of lives were saved. That happened to be the wedge that was slammed into. So a lot of good things happened there.

Wedges two through five under design-build were done with, and some of you already know this, you worked there, 16 pages of performance specs. How can that be and not get this concern that we're going to get how cheap can they do it?

And again, it's how do you administer the contract? How do you reward exceeding minimum requirements? And so I think if you just look at it from our previous biases of most of us have come through again, the linear design-bid-build environment.

In fact, we have one foot on the dock with design-bid-build and the other one on the boat trying

to administer, I still think you'll get better than the old low-bid environment but you won't get the opportunities that truly a design-build situation can afford you.

And again, that goes back into not turning it into a technically acceptable best price because then you will. If the bidders after two or three knowing that, okay, I'm on the short list. I've got a competitive bid. And you're going to award to the one that's low, you are going to be vulnerable to that.

GEN. WILLIAMS: Excellent. Let me get George and back to Joel.

MR. PAPADOPOULOS: In today's environment things are very complicated for us. The new products that are coming out on a continuous basis, we as engineers, we do not have the time really to study every new product that comes out. That's the reality.

So there's a tendency from the design-engineering point of view to stay with something that we know it works because of past experiences. And

that's a fallacy from our part because we know the product that we know was working 30 years ago might be the same thing.

In actuality, it is not. It has been redesigned. It has been repackaged. It might have the same color but it’s a completely different chiller, for example, or a different motor control center.

So what we're having is this, we’re having a lot of ignorance from the point of the design as far as the product specifications are concerned and at the same time, we’re forming into a conflict with any institutional client, any institutional client, as the OBO, you would have so-called guide specifications or mass specifications.

We have found, not specifically OBO but large organization, for example, Marriott Corporation, I’ve done quite a bit of work for, the specification is a product of the marketability skill of the manufacturer’s rep, to put it very bluntly. (Laughter.)

So the skill of the manufacturer’s rep is

the person who really goes in there without any knowledge of the product but presents it in such a way that you think it's the best thing since they discovered forks or whatever.

And a spec is written after it that is given to the design people to follow yet the design people when they see this conflict they have to invest a lot of time and perhaps sometimes cross over to the trust of their client to tell them this is not what you really want.

And there is a balance that we risk. What I'm trying to say is this: it's very difficult to decide the suitability of a product specification. We all have a tendency of falling into the performance portion of the specification. In other words, I want this thing to do this. How it does it, what its sustainability will be or its life expectancy we sort of leave those behind.

I feel we short change the built environment industry. We short change it from all aspects, from the owner's aspect because they have not really invested time to understand what they want

and tell us what they want and why they want it.

And from the design point of view for us failing to do our homework properly and identify the common elements between the client's needs and what they should have to put them together.

In the meantime, the manufacturing portion of our industry has been moving ahead extremely fast. With the globalization of our products we do not know what we have. When we're buying a packaged chiller today or if the Department of State decides that this manufacturer is an acceptable manufacturer, I know for a fact they do not go to the trouble of evaluating how many failures should be really had on that particular chiller. Everything works perfect.

But talk to an engineer who has finished the job five years ago and he still gets calls because that stupid chiller fell down or it didn't work on the Fourth of July or I cannot maintain conditions. And you keep going back and you keep going back and you find components within that piece of machinery, that modular piece of equipment that is deficient.

So we need, I think that’s another -- it looks like our built industry needs to grow more sophisticated and we need to invest more good time in defining performance specifications.

I think it’s a need from all aspects. It will help the constructor. It will help the owner. It will help the designer in putting this together. But we need to do our homework. Right now, we’re not doing it and it’s an area that, how can I say, it comes back and haunts us.

To carry it a little bit further, theoretically, the shop drawing and review enables the engineer to confirm that that’s what we’re buying and it comes back and if it doesn’t work the contractor will come back and say, look, you approved the shop drawing.

And you say well, that’s not what governs. What governs is my specifications. Whether I overlooked the shop drawing review or did not do my homework that doesn't count. We have built all this conflict issues in there and it boils down to what we said earlier which is knowledge of the product.

And nobody is willing to commit the money and the effort because of our tight industry in many respects timing and moneywise to understand a particular product.

It is one, I would say, it's one of the largest cost components in the building, particularly products, and with all respect, I don't mean concrete and steel and things like that are, perhaps, from my point of view more simplistic, but the complicated portion would be the motor control centers, the chillers, the boilers, the pumping systems, the automatic temperature controls, the energy management systems, the built-in automation systems. There is a lot of lack of understanding and knowledge from all parts.

I do not know how OBO addresses that. You do have guideline specs. How often are they being updated and on what basis they're being updated I would guess you will be the same as every other institutional client. It's sort of if we have time we will do it type of a thing. So I just want to share those thoughts.

GEN. WILLIAMS: I appreciate that, George. Joel.

MR. ZINGESER: Well, I just wanted to underscore again the points that Craig was making is correct, but at the end of the day, as a customer who is going out and making a procurement on a performance basis, I the customer have the most difficult job if I'm the customer because I must tell you all the attributes that I want and that I am going to evaluate your submission on.

And a piece of mechanical equipment I'm buying on a performance basis it's more than just the BTUs or how it performs and its main thing, it has to be maintainable. It has to have durability. It has to have ease of replacement. It has to have acoustic criteria.

There are a whole bunch of attributes that you don't normally think of when you are buying it prescriptively. Prescriptively, you're buying a piece of equipment. So as the procurer you really have a hard job going out and procuring on a performance basis.

Now, is it worth the effort? Sometimes yes because if you really want to push the envelope in terms of new ideas or new approach or if there's some part of your mission sometimes to get someting different, if you can do it in a performance basis you will get the tried and true product but you might get something different. If there is a value to that then you may want to do it.

I guess I'll stop preaching but I think the problem all too often in the use of performance-based procurement as jargon is that those who use it don't realize that to do it right they really have to do a lot of work as the customer.

GEN. WILLIAMS: That's excellent. Yes, Ida.

MS. BROOKER: Same thing. It equates to two different scenarios in my experience. One is the story of the swing that the kid wants and there's the architectural view and the mechanical view and they have all these different, you know, structures and ropes and boards and everything. And all the kid wanted was a tire off the cherry tree in the

backyard.

And one of my favorite all time sayings and the reason why performance specs are very dangerous is that in my company -- I should say in my experience so I won't limit it to my company -- I know you understand what you thought I said but what you heard isn't what I meant. And that runs rampant.

It's like a performance spec is not visual usually, so if you don't like it green or you didn't like blue or you didn't like it three feet from the wall or whatever is immaterial because that wasn't defined by the user.

And that's the issue is it is the final owner of the product has to be so exact about how they are going to measure success that it makes a very, very difficult specification or scenario to be so everyone's happy at the end, at the final analysis. And it has got to be something that really is based on performance.

My favorite saying is what is the right way to do the procurement on this? It depends. It depends on what your final criteria is for success.

If it's function then performance spec is a great ruler to use but if it's got to look good and it's got to be acceptable to the public and it's got to be environmentally friendly and it's got to have all these other things to it then you better be very careful about using that kind of a specification. So it just depends. My favorite word.

GEN. WILLIAMS: This is terrific. Are there other points from the panel? Yes, Derish.

MR. WOLFF: Interestingly, I focused on the last sentence you put on which was who ultimately takes risk for performance specifications.

We're spending a lot of time and a lot of worry about this because what's happened in this age of computer software and everything, people are used to getting electronic information that the program has changed, we've modified it, be aware alerts.

So we think in many cases we have a spec, a performance spec, and we are using it. And they're sending us information that it was only good, we said 120 degrees. We've modified it to 110 or something.

And either we're not picking it up or we

think we have an agreement and then when you start holding people responsible if something happens to the material once you've laid it or the process they start bringing in all these warnings they issued to you. And it's not clear.

Fortunately, I'm not in court yet over it but we're very worried of whether these aren't legal. So even if you sign an agreement they're going to water down the agreement saying that it will be -- because they're used to Microsoft or someone who improves -- you know, we're used to the telephone in one generation and another generation is used to a software program that you change every week or something.

So we're very worried about the implications and what you've signed even when you sign a performance spec. It's not a problem that ties into your earlier comment about these major projects.

It's not a problem on major projects but what we're doing now, partly because of this concern, is we're taking commissioning further back and we

tying warranties and guarantees into commissioning or making that an operation so that we know when the warranties go in the question about Joel, who writes it, the warranties go into someone who has to live with them or the guarantees. And they read them and they monitor them. And they also monitor these warnings.

But on a smaller project we're very worried about what we're signing and whether it's going to hold up in court, whether we can say, because then the question is, did you take action before -- you know, we sent you this -- it sounds easy. You sign a contract.

But what we're learning about is that they send you out on Wednesday a warning and if you didn't read it on Wednesday, even though you have a contract, and you started to pour cement or God knows what you did on Friday, you should have known that they alerted you. So we're getting very concerned about this. Again, it's not an issue on big projects but it's got us really scared on small ones.

GEN. WILLIAMS: This is quite interesting

and while you, those of you may be still pondering, one of the reasons this is sort of center to one of our concerns is that we know that the buck is here.

We know where the responsibility is so the idea of knowing that the owner, the customer has the performance responsibility is very critical. The procuring organization obviously has a big role as well because what we are doing is not just, as you know, a building.

And things do have to work. Elevators have to work. HVAC systems have to work. They have to perform. CACs, compound access control apparatuses have to work. Personnel access control, they have to work. And the other things that we do, the special tenants, all of that, they have to work. So there is a heavy dose where the bottom line is clearly performance.

We have kind of not deemphasized but we have put a lot of emphasis of late on the integrity of the systems to do what they are supposed to do, not at the expense of aesthetics and all the rest but aesthetics take their rightful place and they are

applied in areas about the building that makes presentation.

I was talking with someone the other day in a different forum and I said, well, based on my 30 plus years of looking at buildings and you've just got to trust me I've looked at an awful lot of them, and a lot of people in the room know that, what presents a building?

You see it, you are driving by it. It is what it looks like on the outside. I don't see the mechanical system. I don't see the elevator. I don't see any of that. It could have a lousy -- the HVAC could be unbalanced throughout. I don't see that.

I don't have a clue as to whether Otis or Westinghouse or any of the elevators are working but what I see is a building sitting in some location that looks great. That's an American embassy. It has good presentation.

That's about facade and exterior treatment and the configuration of the building and how it is laid out. And the landscape package, quite frankly,

in particularly overseas where we are paying a lot of attention to that.

So to me that's presentation. That’s presentation. And when you get past the grand entrance to our building you are then inside of the apparatus and your focus then is not on what the building looks like but who you want to go sit and talk to.

So at that point it puts a big onus on us now to make certain that things work because part of the hit that was on the Department in previous years is that, you know, things didn’t work. So that's the reason we are paying some attention to performance, the performance dimension of what we do.

So we have to be here whether we want to be here or not. We’re going to have to deal with the performance aspect of it not to the extent that we make the whole thing wholesomely that way but there are certain aspects of the building where the only thing that counts is performance. So that's the reason we are here.

And what you have provided to us is very

helpful because I think the point of realizing that it's the owner, it’s the procurer’s responsibility and ultimately that becomes us even if we have someone else doing it for us we have to ensure that the service that is being provided is a function of what we tell the service provider what we want. So are there any further questions on this important topic?

UNIDENTIFIED SPEAKER: Yes. I have a comment. Rather than a one-shot in a building where you put a -- you have a specification, you put, for example, a public address system, one time about two years ago OBO specified a new version of the public address and as a contractor installing it we realized that it had faults to it both in the installation and in its operation.

We had no mechanism to tell anybody that this was a bad product. You’ve switched now to the old reliable one I understand which works better and it’s simpler and it’s easier to maintain but we had no -- there was no mechanism for us to say something to somebody. And you are building multiple

buildings.

If you were dealing with a single client and it didn't work, I mean, client, you know, you're installing say you're going to have problems with us. But we had no vehicle, no mechanism to tell OBO.

GEN. WILLIAMS: We understand that and that's one of the reasons we're back to where we are and we're having this discussion right because we do have to communicate. We have to talk about these things.

Because of the unfinished business that George talked about in this whole arena of specs and performance it is so easy not to bring it to a forum like this but we know that this is critical and important and that's the reason we are airing it out because we have to pay attention to this to avoid the kind of things you talked about. So that's why we have it on the plate.

MR. UNGER: General, can I --

GEN. WILLIAMS: Yes.

MR. UNGER: I certainly didn't want to imply or oversimplify but again back to that risk

allocation and the acquisition process. Under the, again, the more traditional way as the buyer, the owner you had to think of, you had to sit with an architect from programming to conceptual preliminary design, how far you wanted to take it or the full construction documents under the hard bid you had to think of every single item and then bid it, which took a long time, and certainly for me in my agency.

So trying, again, to find that balance between innovation and proven technology, certain things like our perimeter detection and in our control center we had been -- read all this literature about the latest, greatest from touch tone screens and quite frankly they did not work for us. They were not reliable or we didn't have proper training or whatever.

But there were certain areas we said we're going to provide a hundred percent specification on these particular items and go be innovative in other areas. So I think first I wanted to mention that mix.

But then secondly, using that Pentagon,

back to 16 pages, I don't think I came back with a point on that, how can you do that?

Well, one of the ways, and again, instead of you thinking of everything and then you get a price this under the negotiation clarification and deficiencies sometimes we took this two and three rounds building hundred million dollar prisons and occasionally we would be accused of auctioning, which wasn't the case.

What we're trying to do is say, we don't understand. We do not understand what you're providing in this particular equipment or how this is going to interface with this over here and forcing the bidder to make us understand that because we did not have the time and the energy in house.

We wanted, and again, if you feel comfortable, if you've dealt with some repetitive buying, which we were. We were building pretty much the same footprint facilities at just different parts of the U.S. at different security levels.

But when you put it back onto the prospective bidder to force you, it's a lot of work

for them. That's one of the reasons why we shortlisted three firms instead of five because it takes a lot of time and effort to go evaluate all that that you are being told.

So that took a lot of resources but again, it seems to be, and again, back in design-build you do have to have that investment up front and make that time. You're going to go slow so you can go fast in the field because under the other way we thought we were going fast but when you're administering a contract it would be request for information, change order, so it would be stop, start, stop, start, and it took a lot.

So I' not, certainly don't want to say performance specs are the answer and design-build's wonderful in every project. It's just compared to my previous experience it's a lot better than where we were. So thank you.

GEN. WILLIAMS: Very good. This has been very helpful. Very helpful. Obviously, it's a notion that we have -- that we are noodling and we are thinking about it and don't be surprised if we

have had several issues that may come back again in a few months to have you look at again.

Let's look at Number 16, and we will ask Terry or one of his people to speak to this. But what steps do you think -- oh, yeah, we ought to be taking to –

MR. ZINGESER: Do we have this one every time?

GEN. WILLIAMS: As long as I'm probably here you're going to have that one (laughter) because we've just got to keep this in the forefront because this was sure a problem 42 months ago. And that is asked periodically now. And I would maintain if anything gets this organization out of its good lane it's going to be one of these things.

So I just want to keep talking about it. Planned scopes, schedules and budgets which you know is the representation that I make to ensure that stakeholders are protected.

When our oversight apparatuses, the government, GAO or the Office of the Inspector General or anyone else who happens to be looking at

what we do. And they will tell you that we are very open and we welcome their visits and to come in and look at us because we are very interested and focus on trying to get things right.

But we are constantly looking for new approaches. We have done an awful lot with this, the whole purpose of having a full office now versus a nothing that is devoted solely with almost 75 people who are looking at planning and developing and getting scope right. I will stop here and sort of give the staff an opportunity to kind of tell you what some of the issues we are concerned about now.

MR. WILMER: Thank you, General. As you know, we are a performance-based organization, and I have to smile a little bit because if there's a mantra that we have, and General Williams have given us is watch your scope, watch your schedule, watch your budget.

And his other mantra if it doesn't start right on the planning side it goes wrong throughout the execution and operation and maintenance. So he puts a lot of pressure on us, very frankly, good

pressure, to develop realistic scopes, to stay on schedule, to stay on budget.

We have some, I think, in place some very good mechanisms to do that. Each Monday we go over a list of 40 some odd each of the managing directors, planning, real estate, the execution side, the operational, go over our projects in detail. And the focus is always on scope, schedule and budget.

Then as some of the senior panel members know we also have our monthly PPRs, our reviews where we do a top to bottom review essentially of every project that we have out there. And the focus is always what's your scope, what's your schedule, what's your budget? What are the challenges that you have and how are you going to fix them?

So that's the process that we have and to use another one of Gen. Williams's terms it's a very orderly, holistic process. And frankly, I don't think we would be able to manage the volume of projects that he mentions in his opening comments, $4 billion worth of work, and gain the Congress and OMB and other, essentially our clients' confidence

without that sort of attention to scope, schedule and budget.

Having said that, we are also an organization that looks for continuous improvement. That’s why we have this panel. That's why we appreciate your input so much. So with all of that by way of background that is what we are doing. What could we do? What do you do that you could share with us that may be of some benefit? Thank you.

GEN. WILLIAMS: It's clearly not a new question. Derish.

MR. WOLFF: We have just gone through an exercise as you know on this subject. What we’re trying to do is two things. One, we get the senior management to talk about lessons learned, these kind of generic lessons from this type of project. We’re talking about if it’s modular, so what kind of lesson, where do we get burden a pass.

We also ask the project manager and the line offices to point out what they’re afraid of because in their heart they look at a project, if they’re good managers they know where the risks are.

We list those.

We then go to standard scheduling but on the projects either the lessons learned, the concerns of the old gray-haired guys or women or the project manager or the line officers concerned, we get them to report every week. And we start talking about this all the time, you know, what is it going to be? Is it going to be the wrong generator and then we watch it.

We find that 90 percent of the problems we had are problems that if there is good dialogue you can solve them very quickly. But they just need to go away. People don't have time to look at them. They worry they didn't-- once the project manager has told you what he's afraid of then there's no risk for him to come out and say this isn't going as well as I hoped for because he warned us to begin with. Or once we warned him we have every right to ask him about it. We find that these problems disappear.

Many of them are ten percent the size of a classic scheduling problem, and I know you have done very well on this. I know we're talking about old

hat but it turns out many of them go away.

The other thing of course is when you're all to get new lessons learned to start the process again. But we find that it's only 5, 4 percent of a project that is really in trouble. And if you just put in all these sophisticated risk management you start worrying about everything that never goes wrong.

And that's the advantage. You're building 11 embassies. You have a good idea what's going to go wrong, just look at those. So there is no magic but you're talking about huge leaps in both the project manager's time. He's not reporting to you on everything you don't want to know about that he's got on schedule.

And sometimes you find that a lot of your concerns weren't concerns so you can erase them. But we get them every week and the senior management becomes very cognizant of this kind of issue simply because it's one paragraph, how we solved it and everything.

And it has been amazingly -- I mean, it

sounds like the simplest thing in the world but I was just yesterday at the office and they were raving about this tremendous tool of discussing problems. (Laughter.)

GEN. WILLIAMS: That's wonderful. Because it is a rather simple process and I think Derish is absolutely right. The senior staff and I talk about this all the time. We know right today where the rough spots are. If we didn't then we really have been asleep. So we can put some management in place to try to minimize when we reach that point. So that we do agree. Are there any other comments on that? Yes, Joel.

MR. ZINGESER: This sort of goes along with what we were talking before about performance procurements again. And Terry says that, rightfully so, you're a performance-based organization and you look for performance-based procurement.

This is going to be some fun because I think Craig and I will probably have a little different view of this but what Craig described before when he was giving his example I think you

were talking about when you were on the government side and you would get a lot of RFIs and now using a design-build approach you're, I think, suggesting that instead of getting a lot of RFIs you are asking the questions of what are we going to get with this, if I have that correct, or something along that line.

MR. UNGER: The RFIs we used to get about 2-, 3,000 on a project. They pretty much went away and we issued notice to proceed to begin the drawings. We would have a subsequent notice to proceed for probably the clearing and grubbing and some site work. But we had packages so, no, we knew prior to what we were getting, that would have been worked out, because, again, you are awarding before you get started. So, no, that wasn't where I was going with that.

MR. ZINGESER: Again, what I thought I heard and whatever Ida said I didn't understand, I guess, more simply. But again, I think in the area of scope and in particular in schedules to make sure you're getting what you want, again for clarity, being able to be as precise as you can, recognizing

that again, you, yourself, are providing a facility for yet someone else that is going to occupy it and use it and making sure that you are getting clarity from them as to what it is their requirements are.

It's again this word, communication, that we use so often but I think given the steps that you have taken to get you where you are already your question is what can you do further.

And the only thing that I think you can do further is to continue to look at the details, continue to work the details and it's back, you know, a meeting a long, long time ago we were talking about something and I said, well, you know, we have daily reports.

And as contractors there's daily reports. If you want to know what's going on on a job read the daily reports. If you don't read them you're not going to know what's going to. But the details is where the devil lies and so I think it's just continuing to hone what you're doing on that.

MR. UNGER: Question for Terry. The weekly meetings you have, where -- I presume there's some

reporting requirement from the field here to you that you go then into the meeting and –

MR. WILMER: Yes. That's exactly how it works.

GEN. WILLIAMS: It’s a very orderly process.

MR. WILMER: It comes in from the field, goes in to the relevant members of the technical staff, my office, and then planning reports, real estate reports, the execution side and the operation and maintenance side on the project.

And as I said, they’re on the order -- any property for instance that's being acquired, Jay and his crew will report on the status on that. I’ll report on where we are in planning and execution of projects, particularly those that are sensitive. That's on a weekly ongoing basis. It's before Gen. Williams who asks very probing questions. Let me just leave it at that.

MR. UNGER: Again, during our sort of heyday we had 16 projects or so going on at the same time. We had a weekly, what we thought was a very

effective reporting, but then we'd go out on a partnering session and everything seemed to be wonderful. And then out of nowhere comes a claim where we have a time and impact announcement and we're behind schedule.

We started something, this weekly report. We had a dozen issues we wanted to check on but the bottom of that report, both the contracting officer on site and the project manager both had to sign it. We didn't use e-mail anymore. We wanted to see signatures.

It was remarkable. Those two guys before saying anything's wonderful was a problem just the fact they had to talk a little more than they normally do, I wasn't implying they weren't communicating but the fact they both signed it was remarkable of some of the problems that worked themselves out. Either they were embarrassed, they didn't want -- I said, I can't believe we can't decide where the sidewalk's going. We're trying to build a prison.

But some of those little problems if

they’re not corrected early on do have an impact on the schedule and budget. So just offer that up. For some reason, signing their name both, two different reporting areas helped us.

GEN. WILLIAMS: Talking about the devil in the details, and you know I’ve done this before and I guess I’ll do it again, and we’ll put Bill Prior on the spot. And while he has about 30 seconds to think about this I’m going to ask him to kind of just describe to you what is own one accountability sheet.

This would be an accountability sheet for one project. If he would just start at the top of the sheet and Bill, work across and work down and tell them what's on one of these sheets that you would be –

MR. PRIOR: Basically all the data, hard data, that we would want to know about a project, where it is, what it is, who’s building it, what’s budgeted, what we spent, how much we have left and the issues we have associated with it.

Money that’s committed but not spent yet. Money that we intend to get reimbursed if we can

accumulate that. Money that's coming back in. So basically the project schedule when it was awarded, when it was scheduled to be completed, when it's projected to be completed, time, money, scope issues, those things on one sheet of paper.

GEN. WILLIAMS: One sheet. So we pull it up and show it on screen. Everyone looks at it at the same time and we talk about it.

MR. PRIOR: And it is color-coded. If it's green, happy project; yellow, questionable project; or a red projects that's in the tank and what are we going to do about it.

MR. UNGER: I'm sure you're checking change orders. Do you distinguish between owner mistake originated or the contractor? And if so, how long they're open until they're finalized?

MR. PRIOR: We discuss every change order. If we make a change order on a job it's put on the table and we talk about why we're doing it and why it was necessary and why it was the right decision to execute.

GEN. WILLIAMS: Individually, discussed in

detail.

MR. PRIOR: It cuts down on the number of change orders. (Laughter.)

MR. UNGER: I'll bet you there's some bartering going on.

MR. TOUSSAINT: If I could add to that, the other thing is as you can imagine depending on where it is in the process there could be different views of the cause of any changes. So Bill carries it at the last step during construction really.

And when the decision will come up if it's asserted that there's a problem in the planning stage that causes that then we make sure that the planning folks clear on the memo.

And if it's a design error then Bill Miner and Nick Rutherford's people clear on the memo or whatever it is. So if you're speaking to it then the person who's responsible get's a chance to frame it and actually take ownership of that problem.

GEN. WILLIAMS: So we're looking for accountability.

MR. UNGER: I was going to say the

general's accountability.

MR. WILMER: Can I add something in that regard, two things if I could. One is Gen. Williams has the ability, as I said, they ask very proving questions. He also has a very good memory.

And he will say on these Monday sessions or PPRs now are you telling me there are no problems with this project? Are you telling me that? And we all look around the room like -- he knows something we don't.

And then sometimes a month later you say, well, you told me there were no problems and there are problems so what happened? So there's a good way of enforcing accountability not just in terms of reports and how do you relate to those reports.

But going back to something that Mr. Wolff said in terms of the communication resolving problems I would like, with your approval, just to tell a little bit about what we put in place to stand up our new embassy in Baghdad.

GEN. WILLIAMS: Yes, go on.

MR. WILMER: Which frankly was a real

challenge. We were told by the first of July we had less than six months to go out and get the properties identified, go for the right scope, award the contract, oversee that, make sure it all worked in what we all recognized was a war zone.

We formed two teams, one on a technical level to oversee the day-to-day operation, and another senior level team with all the managing directors, to sit down and we watched this.

And we got reports from the people -- we had three people on the ground, a superb architect engineer and a great real estate person acting as liaison officer, and a very good facility manager, hand-picked all for their personalities, their ability to work together and their technical skills and their background. They were superb.

Daily reports, and they would come in. Gen. Williams said to me you're Mr. Iraq. You oversee it. You make it happen. He got copies of the daily reports and at 7:30 in the morning when I'd come in I'd have these red notes all over the daily report.

And I realized what he was doing was empowering me so I could take those notes and share with my fellow managing directors and usually what they said was fix it. So if the project director on the ground said my delivery of FEB on windows is two days behind schedule he knew it. We were accountable and we had to fix it.

We were pulling products, literally, from all over the world taking them from manufacturers, figuring out how to get things out there to make it work in a war zone. We had an excellent contractor.

We had one guard killed, three guards -- three of our construction workers kidnapped, two wounded, road stoppages, work stoppages. We were doing this in conjunction with a USAID contractor. Their contractor didn't show up. We had to do their work, et cetera, et cetera. All these workarounds.

We were told we had to have this done by the first of July. We were getting close to that date. And then we were told, I think we were all surprised to find out that in point of fact the handover occurred on the 28th.

The American flag went up at that chancery on schedule. So we all sat back and we were very pleased with this performance, which was a great partnership between all the elements of OBO working with other elements in the Department, with USAID, with the contractors, with people on the ground, with CPA, Department of Defense.

But I tell that story because I think you are right. I think if it's important enough that you must manage it very, very intensively. If we were going to make a mistakes somewhere it wasn't going to be in Baghdad. So it worked. Our mission is there. And when they told us to open it early we opened it early. And on budget.

MS. CONRAD: And I might add when he says on budget it was a firm fixed-price contract.

MR. WILMER: Firm fixed-price.

MS. CONRAD: It was a cost plus.

GEN. WILLIAMS: Okay. Moving right along, we will try to pick up something else. And let's look now at Number 5. And the staff that brought this one forward, would you expand?

MR. SMYTH: Thank you very, very much. This one is getting kind of philosophical and to give a little bit of the context, you've already heard our mantra of scope, schedule, budget and that we are a performance-based organization.

Our funding levels are dependent on our credibility with our stakeholders. And that's part of the reason why we need performance level metrics, how well are we doing with the resources that have been entrusted to us.

Now, when we came into this one on maintenance management, trying to figure out a performance metric, we got a lot of real philosophical challenges on it.

One of the traditional measures that have been used was just our maintenance backlog but in one sense that's something we have absolutely no control over because our maintenance backlog will often depend on how much money has been appropriated from Congress so how much of a backlog could have already been developed.

We also were faced with challenges about

how accurate we could make this measure. For instance, should we draw in essentially depreciation? We know we're going to have maintenance costs coming in. How can we figure these in?

Now, one of the very first proposals that came up and one that makes a great deal of intellectual sense was just to measure how well we were doing at preserving the value of our properties, preserving and improving the value of our properties.

And I think this sounds great except in our State environment with facilities, 260 some facilities in almost 200 different countries, all of which have something a little odd about them.

We own the building but not the land. The land’s on a 99-year lease of which three years are left to go. We have historical properties. We have everything from a 15th century castle. Are we going to value that on its replacement cost or are we going to value it based on what originally purchased?

We have properties that we purchased for $15,000 worth of Manila cordage. That’s one of my favorite properties. Or we talk about replacement

value of our properties.

We mentioned -- I was talking to some of you members about Copenhagen. Do we count the replacement value of Copenhagen or do we count if we were going to build it as is, which we obviously couldn't do, or the new building.

How much would it cost to go out and appraise these buildings again? I could see a lot of problems, and one thing is if you're going to get a management metric you don't want something that costs more to do than is worth the information you're going to get.

So believe me, we gave a lot of thought and this was an agonizing -- I'll quote from someone else -- an agonizing process. We want to get a measure of how well we're managing the money on maintenance. We want to make it independent of how much money we're getting. We can separately report what our backlog is but we want to show what it is we're doing.

So to give you an idea of how we rank our projects or how we decide to use our maintenance money we make a distinction. We have requirements

which are identified maintenance or minor improvements that need to be done to our buildings abroad. And just in round terms that backlog is about $500 million of which we have traditionally have about $70 million to apply.

Now, we do, constantly we're getting requirements whether the annual solicitation for post our whether our teams going out to post on the annual condition index or whether our special teams go out and identify needs, we're always getting new requirements.

These requirements get a priority score based on a number of different factors, the first and foremost being life safety concerns. Also includes doability, also includes the mission criticality and as I say, there's a number of these.

What we finally came up with is a nonparametric statistic, essentially dimensionless, which has the advantage of making it independent. It evaluates how well we are doing our job and basically it's going to track the changes to make sure we're doing the highest priority projects first. I'm not

going to give you the equation but that's what it does. It tracks whether we're doing the highest priority projects first.

But I am still a little concerned about is this really the best way to determine, with all these constraints, how well we are doing on maintaining our building? And if you have any ideas, you know, on the philosophical or on the very concrete level, I'd be very interested in hearing them.

I know NASA has a good program. The Parks Department has a very good program but these are all based on facilities they know the value of and they know the requirements of.

So any of your input would be appreciated because this is an ongoing project. We will always be trying to improve our performance metrics both our performance according to those metrics and what the metrics themselves we're using.

GEN. WILLIAMS: Okay. You have heard Rich's small problem. (Laughter.) So that he doesn't have to come up blank the next time I ask him, help him out with this.

UNIDENTIFIED SPEAKER: Have you looked at how universities do that?

MR. SMYTH: We got some help from outside. We have gotten some outside help from that. We're still agonizing over it. University models were used. Other government agencies were used.

Part of the real problem -- part of the problem as I've suggested is the lack of real control over the resources, the amount of resources that are available. And the other is establishing that base value. And so we're trying to look at something that doesn't require us to use base value. Yes, sir.

UNIDENTIFIED SPEAKER: Base value of the capital plan?

MR. SMYTH: Yes, sir.

MR. ZINGESER: Richard, I would suggest you change your words because what you are asking, I think, was how you're doing in maintaining your facilities. If you have a $500 million backlog and a $70 million budget you're doing poorly. But I think what you're really asking -- (Laughter.)

MR. SMYTH: Yes, yes. That's exactly it.

How to get more money. And that's where the credibility comes so we want to show what we're doing with the money we've got.

MR. ZINGESER: Exactly. And I was kidding you but I think what you're really asking is how well are you doing managing the $70 million in terms of your priorities and needs.

MR. SMYTH: Correct.

MR. ZINGESER: And without knowing the formula specifically it sounds like you're doing the right thing in the sense of saying, okay, we're going to have a set of criteria. We're going to do evaluation. We're going to rank order. We're going to draw a line when we run out of $70 million.

I don't know how much more you can do other than have some of it as a contingency for some issue that you don't know. I know there was this thing that we talked about before of the anklebiting so I assume that's not part of that 70?

GEN. WILLIAMS: That is part of it.

MR. ZINGESER: Okay. So there's those criteria of play. Basically, you're not unlike a lot

of large institutions in this country that have routinely for a long time underfunded maintenance operations, infrastructure, all the things we need to keep this country great. We just don't spend enough money on it.

MR. SMYTH: Well, I mean, I really do have two objectives on this matrix. One of them is my own management objective. Are we -- are our different office managing the money correctly and then there is very much the big objective is how can I give additional information to Gen. Williams in his search for the resources we need. And I really think we need them.

MR. ZINGESER: Being a contractor that does a lot of renovation, restoration, modernization, rehabilitation, those are all construction projects not O and M projects. And somehow buildings get upgraded, so maybe the color of money is something to think about.

MR. SMYTH: That is part of it.

GEN. WILLIAMS: That's right. Yes, Derish.

MR. WOLFF: I don't want to make life more

complicated but I probably will. One thing we do on a large road maintenance program, but they can afford them, is independent -- as Chuck knows -- is independent audit, because one of the problems you may be in some cases be doing too much maintenance or too little.

So the first problem you have with maintenance is to know an independent view of whether the building is properly maintained or not. But that could be very expensive before you start sending teams around the world. This is just the roads in Virginia we drive over.

The second thing, and Joel always steals my best lines, the second thing is that there is not as much distinction as people think between rehabilitation -- and universities are prone to this -- between rehabilitation and maintenance. And you have to understand tradeoffs.

So you may defer maintenance with a plan for rehabilitation and it may be very cost effective or vice versa. You may be able to make an argument to the general that you really have to rehabilitate

these facilities to reduce the maintenance cost. So that's happened. Finally, on a less serious note this contractor –

MR. ZINGESER: That was serious?

(Laughter.)

MR. WOLFF: We wrote a letter to this contractor telling him he owes us money and he writes back that every week he takes all his bills and puts them in a fish bowl and he pulls up enough until he runs out of money. And if we keep on writing him nasty letters we're not going in the fish bowl.

(Laughter.)

MR. SMYTH: I'm sorry, it was a recommendation of the -- (laughter). I'm sorry, the industry advisory board.

GEN. WILLIAMS: Yes, George?

MR. PAPADOPOULOS: I want to clarification question actually. Do you make a very fine distinction in your maintenance philosophy between preventive and corrective?

MR. SMYTH: Okay.

MR. PAPADOPOULOS: Because I think that's a

very important fine distinction that needs to be made. It throws into the rehabilitation if you don't have that distinction.

MR. SMYTH: Clearly, we have a goal and direction of moving toward reliability-centered maintenance programs. This is something that’s being built into the new facilities. It’s done. We have people on our staff who are very knowledgeable on this, in fact, publish regularly publish in the journals dealing on this.

This is what we are moving to and in that sense you talk about I view that as basic preventative maintenance. What we are actually talking about in here is repairs. Most of this maintenance that I’m talking about is the repairs.

This is not the pay putty or the routine operational maintenance. These are repairs. These are things that need to be replaced, whether it's a roof project, whether it's egress, emergency egress, real repair and minor improvement projects that are needed for the habitability or preservability.

MR. PAPADOPOULOS: In order for me to

understand a little further so you don't really make a distinction between condition and repair maintenance. They both relate to the same thing.

MR. SMYTH: Yes, sir.

MR. PAPADOPOULOS: You have a lousy roof, you're going to replace it. If it leaks you have to replace it. But what do you do about preventing, what is your philosophy about preventing maintenance, in other words, how often do you check your roof or do minor repairs before the whole thing fails.

MR. SMYTH: This is where our -- our philosophy is far better to prevent but you can see the example. If you have a routine maintenance program, routine preventative maintenance program that you know that will reduce your chances for major repair, say, by 10 percent per year if you're performing it, and you've got so much money into your preventative maintenance program. But then you have a catastrophic failure which requires repairs, where does the money come from? The money comes from your routine maintenance program.

Yes, it's far better to prevent than to

repair and that is what our emphasis is. That is why we have our facilities managers out at post, not so much for projects but for this preventative maintenance. And yes, sir, my philosophy is in favor of preventative maintenance or the reliability-centered maintenance.

MR. PAPADOPOULOS: Because what I was going to suggest is particularly in the building components that are related with link issues, like rotating equipment, motors, et cetera, life expectancy inversely proportional to the RPM and all that stuff.

The ability exists today to do a certain amount of e monitoring ahead of time. Just take a case of checking the oil on the chiller. How often do people do it? They don't think it's necessary.

It’s a very simple thing. You take a sample, put it back and if you have metal you know you have a problem.

Or as the gentleman mentioned earlier to me things like vibration, excessive vibration, do you have -- these are very cheap preventive or information-collecting type of devices, that machine

that sits in the basement or the roof or whatever, makes a lot of noise but nobody hears it because they are not there. However, a little sensor can really tell somebody something.

GEN. WILLIAMS: I think what George is asking, and I'm with you there, he's trying to make a distinction between the categories of what we describe in the government -- he's trying to see whether or not anything in this half a million dollar portfolio that we have identified we call anklebiters whether any of that is preventive type maintenance. And if it's not then his next question, and if not his mine, where is our preventive?

MR. SMYTH: Could you address that, Greg?

MR. KRISANDA: I'll try to address your question a little more, took because I put it together. When we look at indicators we look at opportunities to find indicators and backlog management is an indicator on many agencies. But the way we look at it is you have to gauge it against other indicators.

For instance, backlog is a number. Backlog

can be whatever number you want it to be. It could mean you have a proactive program where you capture things and you're looking ahead, you're looking at not did my fail but when do I plan to put a new roof on before it fails.

Or it could be a deficiency. Then you say well what's causing this deficiency? Is it maintenance? Well, what's my maintenance management indicator, preventive maintenance, unplanned management, recurring maintenance, repairs.

What is causing that? Am I putting enough money against maintenance and there's tracking, but also then looking at a condition. We can have a brand new building and you have a proactive backlog and so as the indicators start feeding in it gives you an assessment of how well you're doing and where do you need to put your resources.

What you don't want is -- is you want to grab some opportunities and just continuously, as Terry said, improve.

So it's these metrics. It's what type of metrics can you align together that starts telling

you that we are attacking the right spot. Preventive maintenance is one of the keys like you talked about RCM.

In RCM we have preventative, condition monitoring is one aspect of it. Design. Design is an important aspect of maintenance. It's also an important aspect of managing your backlog. As you know, quality of a project if not of high quality it potentially becomes a backlog thing.

Same thing with maintenance. If you're not maintaining your facilities you actually start seeing a backlog item show up. So they all tend to interrelate among each other. And that's where this question was heading. And also, what are the indicators out of those do you see that could be important in that area?

GEN. WILLIAMS: Are you okay, George, or are you still -- you're not okay. I know you're not.

MR. PAPADOPOULOS: Well, I very respectfully would like to suggest that you do make the fine distinction between preventive and corrective maintenance in budget and monies, et

cetera.

You have to do that right there otherwise he has a tendency of going from what should have been done to we need to do it. And I think your question says these three key performance indicators, what do they do? And I'm seeing two of them being the same thing because of over simplification in a way.

So my suggestion is -- and it's money that nobody wants to spend -- psychologically, I mean, the thing works. It's functioning. Why should we -- if it doesn't squeak, why oil it? Thank you.

GEN. WILLIAMS: Okay. Very well. Let me do something for Jay Hicks here before we get ready to depart. So we're going to look at Number 12. And I know that all of the panel members may not have any overseas involvement but clearly you can participate.

So we'll try to look at Number 10 and Jay you want to -- I'm sorry, not Number 10, Number 12 -- and try to figure out what the issue was.

MR. HICKS: Certainly. Thank you, sir. I don't know how many of you will be able to speak to your experience in your current positions to answer

this but maybe your prior experience or that of some of your clients may be helpful but before we buy or sell anything we do two appraisals. And we'll get those appraisals from very credible well-known, third-party contractors.

When the appraisals come in we'll reconcile those two values, come up with a single reconciled value and that's the number we work towards buying or selling.

I'm curious as to what extent you or your experience tells you people out in the marketplace use formal appraisals before they buy or sell something, both in government and out of government.

And then something that's a matter of policy at OBO right now is we won't buy or sell anything. We won't begin negotiating in earnest except in exceptional cases until we have that reconciled value, and then we will go into our negotiations.

And we're very good at managing the process so that that isn't the long pole in the tent, so to speak, securing the appraisal and getting a

reconciled value but at times it can be a little challenge to work through.

So the question comes down to accountability and timing. To what extent are formal appraisals required in the marketplace according to this and when do you get them relative to the negotiations? Ida, I thought you might weigh in on this one.

MS. BROOKER: I feel like this one was written for me, something gave me that indication. My favorite answer, it depends. You know, everything is relative.

If the property -- let's start with buying. If the property is in a highly dense location with the possibility of escalating prices we do both value appraisals and environmental appraisals because we do not want to inherit someone else's problem.

So consequently, and we have done it before the negotiations. We have done it as a contingency to the negotiations. We have never -- well, I don’t know of a time in recent history that we have done it after the negotiations but it is usually either

before or as a contingency if the property meets this criteria what we then decide on the price and then we go do, especially the environmental appraisal.

We also do it under the names of other companies without being involved. We hire other companies that do this, for our property, our representative for a property purchased for us, such as a property managing company who go out and do it as an anonymous owner, which you don't have that option. So I mean, that's the problem.

We also do joint ventures where we don't buy the property at all. Our participation in the joint venture is that we provide the facility. Their part in the joint venture is they provide the property.

We have then gone and done appraisal on an environmental site in that case just to satisfy ourselves that we're not walking into a problem.

Because of who we are and where we are and some of the relationships on the commitments we have made to other companies and on sharing or utilizing their companies and putting money into those

countries, we are much more prone to do the joint ventures anymore than -- or encouraging them to build the facility and leave it up to them. And then we just buy the product.

On selling, we've much more so in the selling situation where we go and get the appraisals because a lot of the property we own we have owned since oh, maybe -- definitely the turn of this century and probably the turn of last century.

We're 75 years old, going on 100. So a lot of the property we've had we've had for a long time. So consequently, it's not been appraised for maybe several decades. So to the degree that we are going to need that information to get a market value for it so we definitely do that when we want to sell. Hope that --

MR. HICKS: That does. Thank you. I was speaking primarily to the appraisals of value and I appreciate that. It sounds like you have a little latitude we might not have, namely being anonymous about what we're doing. But I've kicked that idea around anyway. (Laughter.) Thank you, very much.

GEN. WILLIAMS: Okay. We sincerely appreciate the panel's interaction and you have been very, very helpful as always. You've been candid with your dialogue and quite frankly the dialogue has been wholesome.

And we brought a dozen or so issues before. We have worked through eight of them which is very, very helpful for us. And in order that we can stay with our time schedule and get you out and through security we are going to terminate the formal portion of the panel.

And at this point, I would like to just recognize all of our public visitors who have come. We accept people as long as we have room to seat you. We appreciate you coming and delighted to have you and hope that you have seen our process and what we are trying to do and how we plan to move ahead with our program and the issues and things that we are dealing with.

And our panel has been most helpful over the last two years in validating and giving us traction about the issues that we are trying to move

ahead with, making certain that the avenues, the vectors that we are choosing are, in fact, in line with good industry practices. So that's the whole purpose of this panel. And we appreciate this.

And I might add that the panel doesn't stop working when they leave here. From time to time members of my staff will engage a particular panel member around an area that they have a particular level of expertise in to help continue to work through some of the issues that we don't have an opportunity to deal with.

I do want to give the opportunity for those who are here to stand up and to be recognized. This is not a requirement but this is the way we do it because we're delighted that you are here.

You are taxpayers and you need to see this transparent operation, so we want to recognize that you are in attendance. Now, my staff doesn't necessarily have to introduce themselves but you're perfectly willing if you would like to. So I will start with the gentleman here.

MR. CONDIT: Sam Condit, managing principal

with McKissack and McKissack. We're an African-American, woman-owned business architecture and engineering program management.

GEN. WILLIAMS: Thank you. Delighted to have you. Yes, ma'am.

MS. MONNETT: Michelle Monnett with DMJM. We're an architecture engineering and construction management firm. And I'm a business development manager for them.

GEN. WILLIAMS: Is this your first time?

MS. MONNETT: Yes.

GEN. WILLIAMS: Good.

MR. MURPHY: I'm Bill Murphy with Schnabel Engineering. We're geotechnical engineers and I'm very pleased and Schnabel is very pleased to be a part of the OBO program.

GEN. WILLIAMS: Thank you.

MS. ANDERSON: Good afternoon. I'm Mary Anderson. I'm also with Schnabel Engineering. And is I may, General, if I could please say thank you again for your presentation to the Society of American Military Engineers in May. It was, as of

yesterday, still receiving very positive feedback and requests for additional information.

GEN. WILLIAMS: Thanks for having me in. I enjoyed it very much. Yes, sir.

MR. MYER: I'm Greg Myer with FLUOR and J. Jones. We're currently working on eight of the MCs design note. I'm very pleased to have the opportunity to participate in these programs.

GEN. WILLIAMS: Good. Thanks for being here. Yes, sir.

MR. FREDERICK: Facilities Development Corporation, Dave Frederick. We specialize in security systems design and installation. I've done some work for you folks of course and information security.

GEN. WILLIAMS: Thank you. Yes, sir.

MR. COLETTI: I'm Dave Coletti with Hill International. We're construction managers and dispute and claims resolution firm in town. And we're on a number of the projects that have been mentioned today, most notably the construction managers for the Supreme Court.

GEN. WILLIAMS: Thank you. Yes.

MR. McCULLEN: I'm John McCullen. I'm also with Hill International.

GEN. WILLIAMS: Thank you.

MR. DINSICK: I'm Gary Dinsick from ABS Consulting. General, good to see you. And we're an international risk management firm.

GEN. WILLIAMS: Thank you.

MR. BARKER: I'm Darrel Barker with ABS Consulting. I'm vice-president for extreme loads engineering and structural risk.

GEN. WILLIAMS: Thank you.

MS. CALWELL: I'm Stella Calwell, my first time here as well. I'm with Mercom Corporation. We provide network infrastructure. I've done some work with IRM and looking forward to working with OBO.

GEN. WILLIAMS: Thank you. Yes, sir.

MR. GILLESPIE: My name is Jim Gillespie. I'm with Hilti Incorporated and we're a manufacturer of construction tools, fasteners and chemical products.

GEN. WILLIAMS: Don't worry. I'll get

everybody. I've got a system.

UNIDENTIFIED SPEAKER: I'm with C and H Associates here in Northern Virginia and I help on proposals for your projects.

GEN. WILLIAMS: Thank you. Yes, ma'am.

MS. PERKOWSKY: I'm Mary Anne Perkowsky and I'm with Hinman Consulting Engineers. We're a force protection engineers and small woman-owned business. GEN.

MR. SWANK: I'm Bob Swank with Bell Architects. We're a small hubzone architecture firm. We specialize in historic preservation among other things.

GEN. WILLIAMS: Good.

MR. HAINES: I'm Tom Haines with GE Polymershapes INSULGARD which is a division of General Electric's plastics division. We produce bullet-resistant, blast-resistant, forced-entry resistant windows and doors.

GEN. WILLIAMS: Let's see. How are we doing here? Yes.

MR. SILVERMAN: Robert Silverman with Booz Allen Hamilton. Thank you for having me.

GEN. WILLIAMS: Yes, sir.

MR. GOLDBERG: Andrew Goldberg with American Institute of Architects. It's my first time here. Thank you.

GEN. WILLIAMS: Okay. Let's see. Yes, sir.

MR. BROWN: I'm Gary Brown with Gale Associates. I'm actually a former FBO employee when it was FBO and we –

GEN. WILLIAMS: Did you say FBO?

MR. BROWN: FBO.

GEN. WILLIAMS: And you're still here? (Laughter.)

MR. BROWN: And we are actually under contract with the State Department, OBO, to be roofing consultants.

GEN. WILLIAMS: Thank you. Yes, sir. Blue shirt.

MR. BOUDREAUX: I'm John Boudreaux. This is my first time here. I'm an architect, Boudreaux Group in Columbia, South Carolina. Thank you for letting us be here.

GEN. WILLIAMS: Sure. Yes.

MR. McGOWAN: I'm Paul McGowan. My firm is John Paul McGowan Associates. Architects, planners. John and I are in association.

GEN. WILLIAMS: Thank you.

MR. STABLES: Hi, I'm Gordon Stables with Ingersoll Rand Company, security safety division. Thank you.

GEN. WILLIAMS: Thank you. Yes.

MR. SHIRVINSKY: Adam Shirvinsky with EMSI. We're a small company and represent a number of other small companies providing end products to --

GEN. WILLIAMS: I don't think you've missed a meeting.

MR. SHIRVINSKY: No, sir.

GEN. WILLIAMS: Yes.

MR. DIAZ: My name is Jose Diaz. I'm with Henselkof (phonetic) Company. First time here. I believe we're doing some work with you folks in South Africa and I believe we bid on Panama today. Good to be here.

GEN. WILLIAMS: Thank you. Yes, sir.

MR. JOHNSON: Steve Johnson. I'm with Black and Veatch. We're an engineering and construction company.

GEN. WILLIAMS: Thank you. Yes, sir.

MR. GIAMBRIGGI: I'm Marco Giambriggi director of Federal Heavy Construction Division for the Associated General Contractors.

GEN. WILLIAMS: Delighted to have you. Yes, sir.

MR. OKA: I am Noato Oka. I manage facilities at the World Bank. We are neighbors.

GEN. WILLIAMS: Let's see how we're doing.

MR. BECKWITH: I'm Paul Beckwith, director of construction services with Alpha Corporation. We provide a full range of CM support services for owners and contractors and I have the pleasure of working with State Department in OBO at present.

GEN. WILLIAMS: Good. Thank you. Yes.

MR. O'CONNOR: Hi. My names's Michael O'Connor. I'm president of AFLG. We're a full range on project management. We're a woman-owned firm. We provide a full range of program and project

maintenance, also do organization on embassies.

GEN. WILLIAMS: Very good. Yes, sir.

MR. WELCH: I'm Fred Welch. I'm with Northrop Grumman information technology and I appreciate the invitation.

GEN. WILLIAMS: Thank you. Well, I do appreciate all of you here and as the schedule and space will allow you're most welcome to return. At this point, Gina, will you advertise pretty much the month that our next meeting will be?

MS. PINZINO: Yes, sir. The next meeting will take place on October 21st and it most likely will take place in this room once again due to the fact that the Loy Henderson room is under renovation. So look forward to seeing everyone again. And Coston Burnes, our security officer, has some comments for everyone.

GEN. WILLIAMS: Just let me finish and I'll let you go. I want to first of all thank the staff who arranged and put this together and those that have been assisting you with and will assist you further today with your security.

It's not easy to assemble all of these people. You know, we're over in Roslyn and we have to get them here, so we especially want to thank the security staff that work for us.

And then, of course, Phyllis Patten who is her, my special assistant who manages me. That's a chore. And you have just heard Gina, who is the link between our organization and you. And Gina shares with me on an ongoing basis all of the dialogue and the goings and comings. So I know you will join me in thanking Gina for what she does. Now, we'll have a security announcement concerning your departure.

MR. BURNES: If you have turned in your cell phones, please pick them up at the coat check. And for all badges for visitors, please return all badges. Thank you.

GEN. WILLIAMS: Okay. Well, I think we've done it for today. Thank you very much and we'll see you next time.

(Whereupon, the meeting was adjourned at 3:12 p.m.)

CERTIFICATE OF REPORTER

I, Deborah Turner, CVR, do hereby certify that the foregoing proceedings were taken down by me by stenomask and audiotape and thereafter reduced to typewriting by me; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were transcribed; that I am not a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome in the action.

DEBORAH TURNER, CVR

My commission expires: 02/01/2006