UNITED STATES OF AMERICA

DEPARTMENT OF STATE

INDUSTRY ADVISORY PANEL MEETING

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U.S. DEPARTMENT OF STATE

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Reported and transcribed by Deborah Turner, CVR

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Craig Unger, President

Design-Build Institute of America

Representing the Design-Build Institute of America

Robin Olsen (absent)

President

Associated Owners and Developers (AOD)

Representing Associated Owners and Developers

Ida Brooker, Manager, Construction and Environmental

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The Boeing Company

Representing Women Construction Owners and

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Jams R. Thomas (substituting for S.G. Papadopoulos), Principal and President, CEO

George, Miles and Buhr, LLC

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Thomas J. Rittenhouse, III, Principal

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Steve Urman, Deputy Director, Operations and Maintenance Office

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PROCEEDINGS

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GEN. WILLIAMS: Good morning. I just want to -- well, you don't act like you want to be here.

(Laughter.) We can always go back to the smaller room and cut the list down.

Let me give you greetings from the State

Department. I just left the Secretary this morning,

and I was commenting to Joel earlier when we got

started, I guess about 28 months ago, we had the

panel and 12 people who were interested individuals.

Today, we're scheduled to 90 plus. I know the

security is still working, getting some people in.

So whatever that means that's what it means.

The room that you are in is the largest of the assembly rooms in your State Department. The Secretary was kidding this morning on how we had graduated from the smaller to the large, et cetera.

So we hope that there will be plenty of room today for all of those who may be coming later

but it's time now to get started because we're going to start and end on time.

I, first of all, would like to introduce our panel because for those of you who may not know them, have not met them, I think it's appropriate that you meet them.

I will introduce then not necessarily where they are sitting, I mean, as far as left, right, et cetera, but how they appear and they will just raise their hands as I call their names.

Harold Adams is one of our members. Craig
Unger is a member. Robin Olson representing the
Associated Builders and Developers, taken ill this
morning and will not be able to join us unless her
doctor releases her after her appointment today.

Ida Brooker, and also representing Mr.

Papadopoulos is Jim Thomas. He will be here

shortly. Todd Rittenhouse, Derish Wolff and Joel
Zingeser.

Okay. Those are our panel members. They will be doing the interaction today and just a little bit about rules. This is an open and public

meeting meaning that you can attend and you can listen. The panel members are the ones who will be interacting with the OBO team, just to make certain that everyone understands the rules of the panel.

We have a very hefty schedule today that we'll be proceeding with and we will have an opportunity to cover a lot of subjects. Now, just in case someone may not know my senior staff, they're sitting around the oval table in the center, and I'll just start from left to right and go around the table.

Joe Toussaint who heads our project execution office. With him is his deputy, Will Colston who works as Joe's deputy. Jurg Hochuli is resource management office. Sitting over on the left is Terry Wilmer who is our chief planner and project developer, and sitting to his left is Vickie Hutchinson, his deputy.

Sitting in for our real estate office director, Pat McNamara is serving as the deputy because Jay Hicks is in Karachi finishing up a very key job. Rich Smyth is here. He heads the

operations and maintenance office and his deputy is Steve Urman. And of course there's an array of staff sitting behind them who will be supporting.

Now, you've met the panel. You've met my senior people. And now it's time to proceed ahead with some admin notes. Gina will be coming first. I know that all of you have interacted with her. She will have some administrative matters to be followed by Joyce Henderson on a couple of security matters.

I do want to say a word about Gina before she arrives. No one works any harder at this and no one gets pushed around any more than she does on trying to make this go. It's a big operation.

She's trying to carry the load for the organization and she has done an absolute incredible job.

And so I'm very, very pleased with what she has done. It's not easy setting this up, working through all of this, dealing with all the strictures related to security and other matters. But she is making the grade of A. So Gina, would you come forward and give us some administrative

points.

MS. PINZINO: Good morning, everyone. Thank you very much, Gen. Williams. I have to say that I do enjoy this job and I do enjoy working with absolutely everyone. This is tough for everyone and most importantly, with the times that we live in, with our security counterparts and Joyce Henderson who will be coming up here to speak with you The reason why we do have such a shortly. tight set-up here is due to the security requirements, and we all have to be sensitive to that. I have to say that everyone has been absolutely outstanding, being understanding at times when we cannot accommodate those folks who perhaps would have liked to have joined us today. But in the future we will continue to expedite matters as much as we can possibly do so.

In the meantime, for today's meeting, I just wanted to mention that we have staff located outside the doors and they will be able to escort you should you need to use the facilities.

They will also be escorting you to the

lunch room at the break that we have during the lunch hour. And they will be escorting you back to the room. And at no time are you allowed to simply exit the room without anyone from the State Department escorting you.

Again, let's have a great meeting and if you have any questions or I can be of help to you in any way, please see me. Thank you. Joyce.

MS. HENDERSON: Good morning, ladies and gentlemen. Again, I'm Joyce Henderson. Just a few items to share with you so that we'll all be safe and secure today. Please ensure that you wear your badges throughout the conference because we do have three conferences ongoing today in this particular area.

And at the end of the day, if you depart early, please make sure an OBO security staff member at the front desk receives the State Department visitors badge. It's very important that we receive those and they're returned.

As Gina mentioned, we ask that you are escorted at all times with an OBO staff member

outside of the areas, if you're going to the restrooms or down to the cafeteria area.

All electronic devices, we ask that they be silenced or if you have them you may check them across the hall with Ms. Julia Roberts. She will give you a ticket and it will remain in the lounge area.

Also the technician staff ask that the microphones be turned off and at the time when you speak you may turn your microphone on at that time.

To get you oriented as far as emergency exits since we're in a new location directly out of the doors if you go to the right you follow the green arrows. That will take you back to the front of the diplomatic entrance. You're on the D Street side.

If you go out of the doors, turn to the left, follow the green signs, the green arrows, that will take you upstairs towards the C Street side.

Thank you.

GEN. WILLIAMS: Okay. To kick the conference off, the panel session off today, we're

going to do several things up front before we start dealing with the issues at hand.

As I do at most of these sessions I will give you an update for the members between and the public who is interested on what has transpired between the last meetings. If you recall last time I gave a fairly comprehensive end-of-the-year report that is captured in our stewardship report which there are copies available.

Also, I should point out that this report goes first to our Secretary, goes to all interested members of the Congress who have anything to do with our business. It goes to OMB. It goes to all other interested parties.

It's a way of saying everything in OBO is transparent and you can read and see what the taxpayers' dollars bought because we are results-based and that's the purpose of doing it.

To my knowledge we are the only element in the Department that publishes an annual stewardship report. Nothing to toot about that other than the fact that we are results-based and it's a

requirement that we set forth early on for that purpose.

Since we last met we have also published the third edition of our long-range overseas building plan which outlines the next six years of work. And that document itself has been presented to our Secretary, to the OMB, to the Hill, as appropriate, and to each ambassador in the field, which lets the world know exactly what we are planning to do.

In that document will not be Baghdad,
Tripoli or some of the other emerging matters. And
at the very end of my presentation I will give you
the OBO path forward on where we're headed with
Baghdad so everyone will get it at the same time.

I do want to specially recognize the fact that we have a collection of industries, assorted industry from everything that OBO would be involved in. It's not necessarily design and building but it's the assorted industry.

We have academic representation here today. We have representation from our Inspector

General. We have representation from our White House liaison who works with me on any number of issues and we include personnel and matters that relate to White House business.

Our General Accounting Office is represented as well. If they are not in just now they will be coming in. So that represents pretty much those who are not in a participating mode but here as observers.

As you know, an Industry Advisory Panel is chartered and sanctioned by a regulation and we are in full compliance with that. Our meetings are open. We have a reporter/recorder that records all the deliberations of meeting. This nice lady has been here, this is her seventh time already that she has taken these wonderful notes and will be doing it again today. And, of course, these are available for the record.

Now, to begin the update I'm going to show you a series of slides. The first one is before you now. It shows the wonderful presentation, next slide, of our consulate in Istanbul, Turkey.

And I just need to say something about this because this particular facility, together with the participating contractor, Cadell Construction, won the International Award, that's the Marvin M. Black series awards for construction excellence. In fact, it was a clean sweep across the bows of every way the project could be recognized.

Me were very appreciative that our project made this significant cut. We are happy that our contractor, one of our contractors, was center stage about that. But it answers several things for the public. First of all, we're not building bunkers. We're building facilities that are aesthetically pleasing. These are people who know how to build and what building is about who made this judgment. So I just wanted to point that out.

This next slide, still at Istanbul,

Turkey, will give you some idea of what we're doing
on the inside. This shows the balcony as you would
look down and see the cafeteria inside of that
wonderful building. This next slide shows the
waiting room outside of the consular general's

office. You can see the beautiful paneling and the situation there.

Moving next to Zagreb, Zagreb is in

Croatia. Both of these buildings were commissioned about six, eight months ago and they are up and running. Zagreb, this was built on a cornfield and sometime when I have more time I can tell you that story. I like to make that point. But now it's where everything is because we built and they came.

Inside of this, where the wonderful ceremony took place, we were there for the commissioning, you're looking up at the staircase and, of course, the presentation was made from there. The President of Croatia was in attendance and hundreds of people. This next slide shows some of the interior hallway picture, that half moon coming around on the outside of the building.

This is in Nairobi, Kenya. This building was opened 13 months ago. We were very sensitive about getting this open because it and Dar were the two where the horrific incidents occurred.

A wonderful building. In fact, the

project director is now our chief of construction division here with us. So when you do a good job you elevate and you do a bad one you go in the other direction. So Bill went in the right direction.

This shows the cafeteria, and I want to say something about the mural that's on the wall.

This was done by a local artist, talking about what you do inside a building, it's taking local products, this is broken glass, scrap glass, discarded glass, that this person took and worked it into a mural on the wall. And there's probably nothing in Nairobi that would come any closer to natural art than this. So a wonderful location.

This shows the grand entrance coming into the building, and you can see the effect. It's a little dark here but it's a wonderful effect with the bamboo hardwood.

This next one shows Dar es Salaam. The bombings occurred a few minutes between each other.

We opened these buildings one day after the other.

And the only reason that kept us from reopening them one hour or a few minutes after each other was the

pure logistics of transporting from Nairobi down to Dar. But it was our way of saying we put them back in place.

As you can see, it has maturity around its lawn. And the growth and the coverage and trees are taking shape. This shows one of our senior interior offices and how that is laid out. Again, another shot in the building interior.

Moving next to the Emirates, we just opened a month ago in Abu Dhabi. This building is up and functioning. It has a lot of environmental work in. It has a constructed wetland as a part of the building together with some other matters that are unusual for this type of construction.

This particular slide, the next one, shows the interior office, I believe this is the ambassador's office. In fact, I know it is. And other than having a small desk, which was put in because hers was on order, the room is in good shape. In fact, she likes that. The staff is the one who wanted her to have a larger one.

This is the cafeteria, which is a nice

rest area built in the building which makes it very conducive for the employees.

Moving now to Tunisia in northern Africa, we opened this one about 14 months ago. All of these are situated on ten-acre sites. I didn't say that, ten-acre plus sites. This just showing the chancery. It doesn't show any of the other ancillary buildings. And I failed to say that.

Because on each one of these campuses you have three to five buildings or structures.

This is in Tunis. You can see the wonderful waterfall. In fact, this has a park theme to it, wonderfully laid out. This is the interior with a nice piece of art displayed there. This is the interior looking at the two floors. This shows one of the interior shots here of the office space.

And moving next to Doha, also in the Emirates, but Qatar this is one of the first we opened. It's been open now about a year and a half. It's now being fleshed out with this marine security guard quarters. This was a remake of an existing structure that had some portion of the structural

work done. We reinforced it and made an embassy from it.

This shows the interior of that building and also what is probably one of the most beautiful sights. It's kind of in the rotunda here. You can see the eagle and the wonderful reflections from the ceiling.

Moving to Lima, Peru down in the Western

Hemisphere, this is an annex. It's one of the

largest and most progressed annexes we have built to

date. Giving you some idea, this is for our USAID

partner. A large conference room. You can see the

artwork on the wall.

This next one shows another interior shot.

And likewise, here, these are nice conversational corners, small meetings, et cetera. And lastly, an interior office of a typical office and the last one shows another shot of the furniture.

And then we're ending with our web site so that if you do not know how to get in contact with us please write this down because it is important that -- we want you to be in touch with us on any of

these matters.

Now let me just while the -- I think you have that; the lights are coming back up now -- I'm going to tell you a little bit about the path forward for Baghdad so that we all are on the same page there.

We have worked over the last six to eight months thinking about what our responsibility would be. We have worked intensely for the last three months and we have presented this path forward that I will articulate to our Secretary and the senior members of the staff and also the appropriate members on the Hill. It's been presented on the ground at Baghdad by me personally. We are all on the same page.

We are going to employ a two-pronged approach for our facilitization in Baghdad. The first prong will be an interim approach where we will utilize a collection of a few structures that are already in place.

We will set up our chancery in an existing facility that will need some work, and that work is

ongoing as we speak, to include a perimeter defense system and some work inside so that this facility can accommodate our ambassador who has just been named, John Negroponte, who's a former ambassador to the U.N. and a small staff in the interim.

The flag, the Great Seal, will be in this facility. This facility, this structure is contiguously situated with our USAID complex so it serves as an ideal co-location arrangement because the perimeter defense system will include the total operation of the USAID.

We'll have some shared arrangements with utilities and cafeteria-type facilities. Also included with this facility is a recreational area. It was something the former regime had in mind of doing and we were able to encircle this recreational facility into this complex. That's one.

The next complex is an annex as we have defined it. It is currently a very large structure that was in place by the previous regime. And it is being currently utilized by Ambassador Bremer and all of the activity, including the military, that

you read about in Baghdad.

We will take this facility over, the State Department will, on 1 July and it will become the annex to the small chancery that I just described earlier. Contiguous with that building are other tenants who need to be protected in a perimeter system, and we will have that perimeter system and some work done to that structure.

The final structure is a residence where Administrator Bremer is currently residing with some minor work on the exterior. We will situate that building for our ambassador's residence.

arrangement I just talked about, that's the interim package, period. We are not attempting to remake an old building. We are not going to do what we did when stood up the new independent states in other places or where we tried to go in and take an existing structure and make it into something that we wanted it to be. We're going to take it as it is, secure it and do the minimum amount of work and stay in it the least time possible.

Now, this leads us into the big dance, which is the NEC. We have laid claim, we have pointed out, we have selected a very large site, many acres, which is situated along the river. In my professional opinion it's one of the best buildable locations in Baghdad.

It is perfect for what we want to do. It is flat. It will be a contractor's dream. It has mature trees, palm trees, that is, that apparently have been imported. We can protect most of those, as many as we would like. We've acquired or laid claim to enough space to allow appropriate lay-down for our contractors, and it should be very nice to operate.

We will be employing our design-build concept because part of the exercise to the Congress is that we had to build this very quickly. We have to get our people out of the facilities I just spoke to you about. So we will be employing our standard embassy design format but we will be building a community.

If any of you, contractors in particular,

know how Fort Drum was put together back in the mid-80s where we had to build a facility very quickly to stand up our 10th Mountain Division, we're going to use the same concept there.

Most people in defense and some external to defense understand that mantra and are very comfortable with it. So we'll be building fast.

Telegraph to the industry at large: we will be building simultaneously.

And I don't want anyone to challenge me on whether or not it can be done because it was done at Fort Drum and you're looking at the same guy who did Fort Drum.

So we will be building simultaneously, employing primes, design-build teams, probably at least three at a time to do the work. The site is big enough, i.e., we have a package of housing that lends itself to a part of industry. Prime one.

We have a package of diplomatic buildings, what we normally use in our embassies. These are chanceries. These are annexes. These are the hardened facilities, et cetera. Prime two,

hypothetically.

And then, of course, we have a package of miscellaneous buildings, post office, chapels, rec facilities, et cetera, et cetera, et cetera.

This will be a diplomatic community. In addition to this, there will be an infrastructure and a wall, perimeter wall around this huge site.

Obviously, it will be a package in itself.

So that's the approach. You've heard it. It's in place; not going to alter it. That's the way we're going to do it. As soon as we have funding available, we expect within forty-five days after that we will be engaged heavily with industry and within a 90-day period we will be breaking ground. It's not going to be a long, drawn-out exercise.

So you're hearing it and we're telling you the way we are going to proceed because we have to move very quickly. Everybody that we have talked with were very comfortable about this. Our deputy has just visited this weekend. He has walked the grounds and we have briefed all the appropriate

authorities.

So stay tuned for this. You will know as well as I do when funds have been provided for the construction. And as soon as that's done just think about the time lines, about 45 days and you, the industry, will be engaged. And then, of course, shortly after that we will be looking to be making some selections of primes to do this work. Okay. That's Baghdad.

Tripoli is a whole separate issue but around the corner and you need to be tuned up about that as well. We don't know what it is going to take in terms of the size, the type and the facilities but we do know very quickly we're going to have to figure out something. And the only issue we have at the moment is the money and a little bit of clarity around the program.

We do know what the program, what the planning parameters are for Baghdad. We're starting with 3,000. That's the number of seats we will have to put in place and about a thousand beds for housing, apartments, if you will, or living areas.

If that's not approved then we can step that down to any level that is approved but at the end of the day it will be a diplomatic community with a lot of structures in that community.

Okay. Any quick questions on anything

I've covered before we -- now is a good shot,

because we can get them all cleared up here among

friends and neighbors. So are there any questions

about any of that? Okay.

Now, everyone knows that we employ, and I want this to be clear, a firm-fix contract arrangements throughout OBO. We've only made one minor exception and that was done with some special circumstance. So I'm letting everyone know up front how we are going to approach this. That's the way OBO does all of its work. It's hard bid and so I think everybody understands that. Any questions?

Okay. It's time to begin our panel deliberation and we're going to start off and I'll ask the staff area that was responsible for this concern to illuminate, but it reads as follows: in light of the increasing demands for labor for the

Iraq and other projects around the world, will industry be prepared to support OBO's expanding program?

And we'd like to know what steps are being taken, if any, and a little bit about whether or not you can see your way clear on cleared workers and just how you're getting postured for that.

I think this is very important that we talk about this now. I gave a presentation to the Association of General Contractors about a month ago at a wonderful roundtable with their representatives.

And I asked this question point-blank to those senior people. And they felt that they were gearing up for this. But we need to have some dialogue about it and we would like for anyone who would like to start, any staff member who wants to elaborate, please begin. Joe?

MR. TOUSSAINT: General, I think the question is extremely clear and it's going to fall really in my area of having to get a workforce out there. The key issues being technically qualified

and cleared. As you explained the program we're going to have an opportunity to break these packages up into areas which would require cleared workers, such as chanceries, and areas which wouldn't necessarily require a U.S.-citizen cleared worker, such as the housing, such as all of the support buildings in those other areas.

So it is a different mix from what our traditional project has been. And I would be interested in knowing what steps the panel members have taken or they know that their association membership are taking to line up, A, the workforce; B, the technically qualified workforce; and C, any clearance issues that they have detected for consideration.

With that would come also support requirements because we all know what's going on out in that part of the world where you are really responsible for bringing, feeding, taking care of your workforce out there and also providing the equipment. So that's the elaboration I would add to the question. I think it's perfectly clear what's

happening out there.

GEN. WILLIAMS: Go ahead.

MR. ZINGESER: I know you're looking at me

GEN. WILLIAMS: That's right. And Derish might as well get ready.

MR. ZINGESER: As the General said, the AGC was quite pleased to host the General at its national convention for a roundtable discussion with the International Committee of the AGC and its members.

And it was a very, very open, honest giveand-take from the General, as a customer, and from the AGC as an organization of general contractors interested in serving that needs of OBO.

The issues in this one question,
obviously, we could have a meeting for several days
to talk about. I don't think there's any silver
bullet. The answer will come with hard work.

As far as the general contractors go, the follow-up meeting that the international committee had had a full agenda which involved various other

market forces in international construction.

I can tell you, General, there is no other prime customer other than this customer and it's because, A, we are who we are. We are the Associated General Contractors of America, and also because there is so much work that must be done.

So some of the other areas of international construction are definitely taking a lesser light in terms of looking at doing work internationally. The organization is also looking at increasing the numbers of contractors that will be available, interested and capable to support your program.

The specifics, I would look at Joe and say the way to do this is very much in a planning mode, in a project mode, with industry, not in such an overarching discussion as we'll have today but in a more detailed discussion.

Issues of cleared workers where they're needed, where they're not. The local labor markets in different countries vary quite a bit. There are programs other than Iraq, obviously, that are going

forward. Iraq is a question mark that if any of us knew exactly what the answers were we'd probably not be in this room.

But again, AGC is ready to work with you very, very closely on planning for the levels of activity and answering these questions. I don't think there's a simple answer.

GEN. WILLIAMS: Thank you. Any other panel members have anything to add? Todd?

MR. RITTENHOUSE: One of the things that we discussed previously was that the first series of design-build projects were, a lot of them were J.

Jones and that was an issue. And the last two go rounds was better because you didn't go straight back to them. You gave it to a lot of other firms.

There's a much broader playing field now and more skilled workers and cleared workers have been brought to the program because of that diversification.

I know you did that on best value which is mostly best cost but there is something to be said for diversifying the workforce that you've brought

out. And now going the next seven that are coming out there are many, many more firms and construction companies going after these projects because of that diversification of what we saw last year.

So that's a good sign that people -- the word on the street was they were concerned that it was going to the same people over and over. That's not a concern any more. We've discussed it in two previous meetings and I think that really is going to help you in the long run.

GEN. WILLIAMS: Well, Todd, I appreciate that. That was my concern when the Secretary asked me to take it up. So that's one of the reasons we expanded and we continue to do that.

We have close to 20 or so active participants now and we would love to have that at 40. But it's up to industry to come our way and we try to be as open and transparent with what we're doing as possible. That's the whole reason of this panel and that's the whole reason of all of the other open lists that we are doing.

There's nothing secret about this. If

you're interested in building we can even tell you what it will cost. The money comes from the Congress to us and at a level and that's what we have to work with. So everything is very open from start to finish. Derish?

MR. WOLFF: Thank you, Chuck. General, as you know better than I, there's a chicken-and-egg problem always with security clearance. The government didn't want to process people unless someone really, specifically needed them and yet we wanted a reservoir.

I think what's happened with Afghanistan and Iraq is there's a large reservoir now, a larger reservoir than there has been in recent years.

Also, you've seen a turnover in some of the contractors, in other words, people have finished their contracts, new contractors and engineers have come in. So there's a larger pool and we're seeing no shortage of people right now. We're just starting mobilizing Iraq.

On top of that the U.S. market has been relatively flat except for housing so there's a lot

more interest, especially among younger people, for going overseas.

And I think all of this is going to bode well in the future because we're going through a period again where we're going to have a -- when Chuck and I were younger there were people who thought international was exciting.

So I think two things are happening: one, we have already more cleared people and second, we're going to have more people who are interested in the kinds of things OBO does. So I don't see a shortage at all.

GEN. WILLIAMS: That's encouraging.

Naturally, it's one of the things that I have had in my worry box. I talked to the AGC about it as Joel pointed out. You've heard the response from Todd and others, so we will continue to be sensitive to this but I do appreciate the panel's sense about that. Are there any other comments on that? Yes.

MR. THOMAS: General Williams, my name is James Thomas. I'm substituting for George on the panel. I apologize for being late. But I did want

to mention on behalf of the American Council of Engineering Companies, we have a large group of small firms, a very large group of small firms.

Our organization covers approximately
5,000 firms and 300,000 engineers nationwide. About
75 percent of our membership are small firms. As
past chairman of the International Committee we just
launched an endeavor, probably two months ago, to
actually interest them more in international work.
Something in the neighborhood of 60 percent say
they're interested. I would say 10 to 15 actually
accomplish anything.

But they are relatively small firms. They have very discrete expertise, which is very interesting, to bring to the table. And some of our larger firms who also are members are taking that into consideration. We're having a large seminar in September to try to interest them, make them a part of our team, so that they can provide some of the manpower that the key team people really need. I just wanted to mention that. That's all.

GEN. WILLIAMS: I think that's excellent

and I'm pleased to hear that you mention small firms because you know we have -- sounds almost like a broken record -- we've said at each one of sessions and everywhere else we can, we look at the full spectrum of the participating industry and sure, small firms, you know, it's international.

And at our Industry Days and everything else we've tried to encourage participation and to do some of the things that Jim talked about which would allow you to participate. So we are open to any firm that comes in and qualifies and can do some work. Is there any other discussion on this topic? Yes, Bill.

MR. MINER: General, as you know, you've recommended that in order for us to maintain or continue or increase our own workforce that we look at job fairs, that the government has used very well. I'm wondering if in the private sector if there's anything comparable to the job fairs that the federal government has and could that help us keep up the labor supply?

GEN. WILLIAMS: Yes, Harold.

MR. ADAMS: Certainly, at the American Institute of Architects convention, which is coming up early in June, June the 9th, 10th and 11th, many federal agencies come, have a booth, and talk to our members about opportunities. This would be a very good opportunity for the State Department to show your face and to explain to our members the opportunities that you have.

GEN. WILLIAMS: Yes, Joel.

MR. ZINGESER: So that we don't have a problem with the stock market today, the construction industry is booming and at least it's been my perception that as I talk with people, not only in the greater Washington area but around the country, that with all due respect to my friend Derish, I think we do have a labor problem in general.

We have an aging population of construction workers, superintendents and supervisors are retiring. It's been an industry problem for a long time. Fortunately, we have some good programs to bring young people into

construction and architecture and engineering. The Ace mentoring program, AGC's program, ADC has programs and so forth.

But I think it's not a simple problem. I think the numbers are tough. And the only reason I mention it is I think it's part of the problem that does need to be looked at in detail and as part of the planning and will vary, especially in your mix of cleared workers, uncleared workers, and local labor markets.

One of the members of the panel reported at one of our prior meetings, I think, that in Zimbabwe (sic), I think, the average age is something like 30 or 33 or something like that. It's very hard to find workers when that's your average age at this point because of AIDS. So anyway, enough said. I just think that it is a serious problem we want to keep looking at.

GEN. WILLIAMS: Well, you know, that leads us into the graying workforce, which is another concern we had down as well, which is tied to but a little dissected from the first one.

What's your views on the graying workforce or the lack of skilled managers? Is there's something that needs to said from the academic side. What are you seeing on both those fronts: the graying force and the quantity of good talent? Yes, Harold.

MR. ADAMS: As a member of that graying workforce -- (Laughter.)

GEN. WILLIAMS: You notice I looked that way.

MR. ADAMS: I don't think the professions are feeling it. We certainly agree that business publications, the effect of the graying workforce. From my experience I'm finding that the greater crisis exists with the government, with facing a large number of the demographics of the workforce within the federal government that there is a problem coming.

I think that at the same time many of the graying workforce members are realizing that maybe they need to do some other jobs and go into a different role. And there's going to be, I think, a

unique opportunity to still have those individuals available through contract relationships and special project relationships.

But if you go around to the universities - I've been very active in a number of universities
-- there are a lot of very bright young people
coming up. And I think they're getting a very wellrounded education and are enthusiastic and moving
into areas of greater responsibility.

So I'm very optimistic that this is not a long-term problem. I think that with technologies that we have, then we will be in great shape to meet the demands. When it comes to the labor and construction projects, certainly, we are seeing in our construction projects the shortage of really experienced superintendents and individuals that know how to put buildings together.

GEN. WILLIAMS: Yes, Joel.

MR. ZINGESER: Not to hog this mic, because I will be quiet at some point, again, I think that the model is changing. Traditionally, the super in construction, the superintendents

worked their way up from the trades generally into positions of being supervisors in the field.

What we're trying to do as a company, and I think others are doing the same thing, is to help at the colleges and universities those that are in the construction management and engineering programs understand that the action is in construction not pushing paper.

Most people go to college, they get their degree, they want to come out, they want to be a project manager. And it's a nice clean job and all of that. But the reality is if you're really interested in building buildings you want to be out in the field.

Technology is helpful because we are able to use computers so much more effectively and with the use of computers they're sort of again a chicken and egg thing that's occurring because those that are most comfortable with computers are younger people.

The interesting thing that I think is likely to happen is a shift in pay. I think you're

going to start seeing, because of the need for experienced construction people, you're going to see the pay shift more towards superintendents as opposed to project managers, which is where there seems to be a higher paying task. That's my own personal opinion anyway from what I'm observing.

And I think it's going to take some time.

But I agree with Harold that we have a tremendous system of education in this country. We have tremendous corporations, companies that train people. I think we have all learned that training doesn't stop when you get your college degree. In fact, it's just the beginning.

Continuing education programs, every company in America has the university of whatever its company is. So I think this is the way we'll be going. But those are long poles in the tent. Right now, today, we have a problem.

GEN. WILLIAMS: Thank you. Ida, how does this look from Boeing's perspective?

MS. BROOKER: The issue, we don't see, in the universities. What we're seeing is the issue of

making certain careers, using the term loosely here, as the chosen field for the future. The concern is, in this case, what is it going to take to make the worker want to be, in our case, an airplane assembler, in your case a laborer, a carpenter?

It's that arena that we believe is going to be the problem for the future.

You talk about the graying of the population and there is one, especially in the aerospace industry, because of the fact that there has been a flat market for quite a while and it's not a chosen profession.

So one of the interests that Women

Construction Owners and Executives have is
introducing construction as a career path in the
junior highs and high schools, saying, you know, to
the gals, I want to go into construction not as an
engineer and not as a project manager but as a
carpenter or a cement mixer, making it not a career
by default because they can't do anything else but a
career by choice because that's an exciting choice
for a career for their future.

And so that, what we're trying to do is today is take your daughter to work day or another industry's take your child to work day, and we're trying to start there because that's at the junior high level, to interest them in careers not as the flashy degree-kind of a situation because we see enough right now in the colleges and universities producing that, the future engineers of the world.

But we don't see the manual laborer as being a career choice and there is where we see the problem. And that's what we're trying to do is introduce these careers as a chosen profession.

And that's the difficulties that we see because so many people feel it's, I can't get anything else so I'll go work on a construction site, isn't what we want. We want to see people design their careers to do that because there's pride in that as a career.

GEN. WILLIAMS: That's very good. That is akin to what Joel was speaking about as well, getting that practical, that field employee and I sense that. Craig?

MR. UNGER: The only problem with, going back to Bill's original thought on seeking talent through job fairs, job searches, what have you, it's been my experience both in government and now out with associations and also some of our member firms is that the economic downturn, sort of the shakeout which forced people to do somewhat of a selfevaluation and see what functions are truly vital to our core mission and some of the jobs that we had full-time FTEs or still do, particularly through attrition, of rethinking is this something, lending to what you were saying earlier, growing, looking as a competitive sourcing sort of saying, okay, this is somewhat of a support service. We can help grow the contracting and consulting arm of it to better realign with the resources we have. And I'm seeing that again both in the private and public sectors.

GEN. WILLIAMS: Yes, Derish.

MR. WOLFF: Bill, by coincidence, last weekend I was up at Harvard and Boston at a job fair and one of the things the job fair was really focusing on was international opportunities. And

there were loads of people who would just love to work for OBO there. I was surprised.

And one of the things you might look at, which I hadn't realized, is there's these whole NGO communities that have been building up. And it's a great thing to do, I'll be in trouble, but it's a great thing to do for say, five, eight years you have a tremendous experience and then you get older. You want to draw a higher salary or something.

And those people, architects, engineers who work for NGOs, might be an interesting -- because you might get the kinds of things you want, you want people who take risks and everything. So I was surprised, just last weekend, how many people there were.

Secondly, let me put my BFC hat on, the question about jobs, I was just talking to Paul Testa (phonetic) who's here. BFC is very worried that there are no accurate statistics, believe it or not, on productivity in the construction business, construction field.

For a number of reasons the government

hasn't been keeping accurate statistics of the sector, even though it's a large sector, and we're trying to reinsert and encourage some research. We don't really know what's happening. We talk a lot about the construction industry. We really don't know what's happening to wages and career opportunities.

And so until we get some handle on it we're not sure whether wages are going down or up. For years it was a big item you've got to bring minorities into the labor force, begging minorities to come in. They won't come in now. Things are happening that we may not know about. And it's partly because we don't know the statistics. So these things have got us concerned.

GEN. WILLIAMS: Good. Are there other questions? Yes.

MS. LEWIS: Several things that I've been thinking of as you were talking to Bill about the job fairs, we'll go back to small business versus large business. Coming from a small business ourselves we find it very difficult to go into the

Harvards and the Lehighs or whatever and compete with Louis Berger or Grunley. Are they going to come to a small business?

There's always a real hard try to get students who are graduating as engineers or architects or construction management professionals to come into a small firm when they've got these guys or you to face. So it's a real crisis for smaller businesses.

One of the other things I do is act as a director for a small foundation where we try and our main focus for the last few years is to try to get some value engineering courses into the engineering and architecture curriculum within the colleges and universities.

So we've had a lot of relationships with professors and discussing with them what drives their thinking. And so many colleges and universities have formal strategic relationships with large international corporations: the Ingersoll-Rands, the Phillips, Conoco-Phillips types of organizations that many of the paths of these

kids coming through college are kind of well-defined.

The industry is telling the colleges and universities what they want, what they're looking for in graduates and what they're going to hire.

And it's something that I'm not sure the architectural and engineering or construction community has done as well as private industry in developing those strategic relationships with the colleges and universities.

GEN. WILLIAMS: Excellent. Are there other comments on -- we're really talking about the future workforce, the status of the workforce and the capability of having sufficient staff.

Naturally, with the size of our program, as we have said before, it's a concern. I think our center is about where the panel is. We know that it's a lot there. We are working -- Bill, you might want to talk about our intern program where we try to reach out there.

MR. MINER: Well, because of shrinking budgets we haven't been able to have as robust a

program as we had, say, ten years ago. At that time we had many, many applicants and I think some of the panel members have hit on some very key issues where just the cost of going to college now is very, very different than it was ten years ago.

So having spoke to a lot of interns and their parents, who have made a pretty hefty investment to get them through at least a baccalaureate program, their thinking about careers is often driven by the dollar, not necessarily by even skill or desire. And it's unfortunate.

And I would say the building industry, again, is kind of in the middle of the low end in terms of payback on that investment in the short term. So I think we have to address that issue and as an industry we need to heighten awareness of what we do and why it's exciting and why it's challenging.

And there aren't things in the media that young people hear and see and respond to about what we do. They know about Trump Tower today, but they don't know about the building industry. And I think

that's a challenge for the associations and certainly for those of us in federal government involved in building programs.

GEN. WILLIAMS: Are there other comments on that? Yes, Joe.

MR. TOUSSAINT: General, I would just add by coincidence -- this discussion is very interesting, the other day, as you know, I was up at Paulport (phonetic) a Construction Industry Institute board of advisers meeting and this very issue came up about the construction industry, something like eight, ten percent depending on how you measure it of the gross domestic product. Yet there's this problem.

And you look at what's on television; you look what's out there. And there's nothing about the interest or the excitement of this business.

There's everything else out there about police careers, careers as lawyers, careers -- you name it, doctors. But the construction industry is silent in this regard.

And that was one of the sort of

breakthrough ideas of how do we make it an interesting field to go into? There's as much excitement, challenge and what have you in this business as there is in any other business. And there's as much value to society in this business as you find in other fields of work.

So I think that Bill has hit upon this how do we start to look upon linking up with other ongoing -- because we're all facing this -- private industry, government, you name it -- how we hook onto those initiatives so that we can all benefit from the encouragement of these fields.

Because it's only going to make our jobs better. It's only going to let us assure that we'll be able to deliver what we have to deliver. Make it fun. That was the thing that came out of that.

GEN. WILLIAMS: Thanks, Joe. Are there other comments from the panel or the senior staff on this question? Yes.

MR. THOMAS: Just add one minor thing,

General. I come from a relatively small firm, fewer
than 100 people and yet I was president of our

national association.

GEN. WILLIAMS: That's not bad.

MR. THOMAS: No, it's not bad at all. I'm proud of it. But we have trouble like everybody else finding people and we're trying to do some things as basic as to ask our engineers and architects coming out of college who have been out two or three years to go back to their professors, the people that they really cared about and see who the prime candidates are coming up in the next graduating classes and try and invite them in to see what we're about.

That's very basic. It's really one-on-one but it's been effective. So I just thought I'd pass that along. You might work and spread it to a larger base.

MR. CASTRO: General Williams, I just wanted to point out that since the Secretary has testified many times in Congress recently about the diplomatic readiness initiative and the number of people that are applying for foreign service positions and taking the exam and looking toward

public service that perhaps we can find a way to channel those that aren't appropriate or getting turned away and make the construction industry one of those areas that you encourage the State Department to channel those people who are interested.

GEN. WILLIAMS: Thanks, Bob. Excellent lift there because the Secretary has been out front pushing this for the last three years. And it's very, very hard to improve the personnel situation in the Department. So I think this is a very healthy discussion. Are there other comments? Yes, Todd.

MR. RITTENHOUSE: Just one observation or comment. Bill mentioned before the ACE program for going into the younger students. I'm on a board for the Salvadori Center. Mario Salvadori, who was one of Joe's teachers, I believe, from Columbia a long time ago started a program for teaching very young kids about engineering, arts and science.

And so this issue of the purpose there is more to get them interested in the building

environment. And one of the things that came out of it is they do do construction projects at a very young age to try and get them interested.

It's not going to divert anybody from wanting to become The Apprentice but it is trying to educate younger children in this environment, kind of how I became an engineer because my grandfather was one and he used to take me to job sites.

And so what we're trying to do is really start at a very low level as opposed to trying to step in and convince the college grad or the high school grad that this is a good thing, you know, it is a good thing to be in construction but to get people interested at a much younger age.

And so there are programs out there between ACE and Salvadori Center and stuff that are trying to start this at a very young, grade school, high school, middle school age.

And it's important because the other comments that were made are very valid and we see it in the engineering field as well as the construction field. I can't compete with the construction firms

either for people coming out of school. I can't afford the wages that some of these guys are paying but it's important to get a lot of people involved at a very young age.

GEN. WILLIAMS: I think this is very healthy and we really appreciate all of the comments. Part of our effort here is to try to get it as close to right as possible. That's the whole purpose of the panel in exploring a whole host of concerns we have. And these comments today have been very helpful and we will factor them into our thinking.

Moving into another area where we have put a lot of effort over the last three years in planning because if you do not plan I'm convinced, through my years of experience, that things are not going to work well when it's time for execution.

And we did a lot of structural changes internally, putting in place a dedicated office for planning and put one of our seniormost persons in charge of that. And as you know, we've been talking about this at every panel because it's important

that we put some emphasis on it.

I'll asked Terry to get ready to illuminate this even further, we're talking about what process do organizations in industry use for long-range planning, that is, you know the construction industry is booming and its opportunities, their international opportunities. We're presenting that in our work and it's coming from other sides as well.

What do you do? How do you access these future environments? Which way do you go? Should a small business -- I see several representatives around here and I know you are from small businesses -- what are you thinking about this future environment internationally? The risk, the opportunities, market technologies, all of that.

Let us hear from you on this whole question of planning ahead. What's your construct? Terry, you want to -- the whole panel is getting ready to respond, so you just go ahead.

MR. WILMER: I'll jump right in. Thank

you, General Williams, and good morning. Let me just take a minute to explain how our planning process works so you have a frame of reference for that.

We have a five-year rolling plan that looks at our capital projects, rehab projects, real estate investments, build-to-lease projects. We look at all the key components of our programs, project them five years out and then present this, after consultation with all of the players, if you will, certainly within the State Department and outsiders.

We present this to OMB for their approval.

It goes to the Hill. It has wide dissemination

throughout the Department of State. As a matter of

fact, there's a copy of that sits on the Secretary's

night stand.

So we have a very good strong process in place. I think the issue is how do you do it? And what thoughts can you share with us so that we can improve a process that, as General Williams has already said, is very strategic to getting the

resources that we need to meet our mission?

I'd like add a follow-on question that relates to this. I'd like to tie the whole issue of planning to the issue we just talked about, which is how do you ensure that the industry, that this is attractive to the industry and OBO remains attractive to the industry, to recruitment and to making sure that we have that labor force to take care of our projects? That's a follow-up question. So that's the context. How do you do it? If I can clarify further how we do it, I'd be glad to do so.

GEN. WILLIAMS: Okay. You've heard it.

MR. ZINGESER: You start with the Zs. You have a niche market company. You have some customers. They are different but they're aligned and you have a demand that you're trying to meet. That's the way I look at what you're doing.

You had a demand a few years ago; it was

X. You have a demand now that's some multiple of X.

And so from my perception of your organization is

really trying to measure resources and time as it

relates to that demand and what you're trying to do.

And then basically you're a service business.

You're trying to provide a service to meet that demand.

That's not unlike our company, speaking personally not for AGC, but our company is a niche market company. It's a service business. We're a general contractor. We happen to serve the federal government for the most part and most of our work is renovation and reconstruction.

We have to understand the demand, first of all, what's ahead of us and who might be looking for our services. And that's always going to be our line of focus. But the difference, I think, for a company like ours versus an organization like yours is that we're always looking for the ancillary market. In other words, we have a niche but we need to be ready to move slightly in some direction if that niche is changing in some ways, the demand's falling, we're not going to have that requirement.

So it could be, in our case it could be providing similar services for a different customer or it could be providing the same customer with some

different services or it could be moving to a different geographic location, but some kind of direction that moves tangentially, I'll say.

The problem that I think you have in your planning is when all the parameters change. And they can because of world events, because of circumstances that cause you to have to jump in orders of magnitude that were unexpected.

And I think, in my mind, to me, how you would apply traditional strategic planning and business planning models to those kinds of circumstances would be very, very interesting. I don't have the answer to that but to me, that's the thing that's most unique about your business.

GEN. WILLIAMS: Thank you. Joel has brought up the notion of niche markets, and I guess that's -- we never looked at it that way but that's true. We are building an office building and some support structures that is designed to do a specific type of business.

So our planning is one focus. But what we are trying to do in this session and, of course,

what we're trying to extract from the panel is ideas because we are trying to get it right.

As Terry pointed out, we think we have a good strategic document in place. We've improved upon it three years in a row. It's doing the job for us but we know that we don't want to rest with that. We want to try to improve the process. So we are looking for ideas.

MS. LEWIS: Here I go again speaking about value engineering. One of the best applications in the planning process that we were seeing, and I'm not sure quite how this works, but talking to the process itself, a facilitative approach with the stakeholders involved is one of the best ways to plan for the future.

So that you have not just the planning component but operations and maintenance, the user groups, all of the people who become the stakeholders of the next five years or 30 years, whatever it might be, are involved in the discussion because there are those risks, those unknowns that one part of the organization will not know about.

So having this multidisciplinary approach to the planning process we have found works very well. And the best applications we have seen on it have been on more of a regional level where not just an organization but several municipalities, for instance, need to come together and understand what their next 30 years will look like as a region.

So we've seen a lot of very good applications in that area, a lot of facilitators who have participated and helped them come to conclusions, understand what constraints they are dealing with, what risks they are dealing with, define what the criteria are for a good plan.

GEN. WILLIAMS: Yes.

UNKNOWN SPEAKER: One of the interesting things that came out of the -- I'm (inaudible) and I've had an opportunity to work with GSA on their workplace productivity study which was done a few years ago, one of the interesting things that came out of that is that GSA is a developer for the government, is in the business of building buildings.

And they are building buildings that are based on the program that comes to them from their tenants. And it became very clear in the study that the biggest change that can influence the building of buildings is actually the programming of those building.

And Mary Ann, this is kind of a follow on to what you were saying is if you look at the business process that the buildings are supporting before the program is put together, you're in a much better place to build a building that's responsive to the needs.

And I think that certainly as OBO has found their role changing in the world that it may be a wonderful opportunity as programming is taking place to take a look at what business processes are being supported instead of just looking at creating buildings that sort of respond to, perhaps, earlier missions, backing it up one step to the business process model.

GEN. WILLIAMS: Thank you. Yes, Harold.

MR. ADAMS: General, I think that the

private sector does not enjoy as much of a luxury of time and planning as perhaps you do in the government. I have always been a great believer in long-term planning, having a strategy, but you've always had to have it put on the brakes.

So I think that any good planning these days will anticipate change. You've got to anticipate change at all times in your planning. And it's a much more sophisticated, more complex way. Being a good leader is great; it's easy when you're planning but when you have to put the brakes on or change course if you've done -- when the real burden of leadership is placed on you to allow everyone else to understand the necessity of that change of course.

It's easy to get people marching in one direction. It's when you need to change course it's a real challenge. And I think that, therefore, in the planning process you really need to incorporate that ability to change course very rapidly.

The private sector, though, lives with the same constraints that you have but more so. We're

responding to markets. We're responding to opportunities that you have and with many different client types that we're focusing on and so we've got to be quick in many, many directions.

GEN. WILLIAMS: Harold, I really appreciate that comment because you know quite well that the panel worked with us about a year ago when we were dealing with standards and just in terms of whether or not to adopt the industry-type standards or stay with what had been in place for the 50 to 70 years here in the Department.

And we moved out very quickly and our

Secretary supported this by adopting industrylike

standards for our space. That was a complete right

turn for us but I think your idea of being flexible

to change and recognizing that as the world turns

and as our program stretches and grows as it's doing

we need to be doing that. So I take that very

seriously. Are there any other comments? Yes, Ida.

MS. BROOKER: I find this question very interesting for the panel but I think if you put their workload on a chart it would approach what my

-- when I was in construction working for a contractor we talked about the great debt curve because all of our projects were nine months or less.

So you put it out, you put the projects on a chart showing the workload, and we always were out of business in nine months. And I kept telling the president, please don't produce that chart because it's not how you make your planning for tomorrow. If you're planning to go out of business in nine months, that's a great chart. If you're planning to go forward you cannot concentrate on the detail.

And echoing what Mary said is that it's the processes that you have to have. And I think that looking at the process that the State

Department and the OBO has put in place of looking at standardizing and looking at the processes as a repeat of a cycle that you are then able to do those changes of course in a very simple manner because you've got the processes in place that you can just engage that process.

Now, the world is a unique place. Changes

in the chief executive of the government is an interesting process. But if the processes that you've got are defined and established then changes in course become much easier.

So I think you have to assume the work is going to go on. In your case you have long range commitment to diplomacy in the world but the fact is that the details are only going to bog you down if that's what you concentrate on. It's the process that gets you down that road.

And I think that streamlining that, taking the lag out of it, looking at how you get there in a shorter period of time or with less work in the middle, like the concept that some of the things that you put in place is what's going to get you there.

and it's always good to hear the feedback. The process question came up and that's what our long-range plan is, it's a process. We try to fine tune it. It works well for us but once again, it allows the flexibility to change and to do things because

we update it annually. But we just wanted to get another sense, once again, that we're generally on the right track.

Let's switch now to design and construction and let's look at Number 8. And Bill, you can get prepared to illuminate as appropriate. Despite substantial oversight during project execution, that's during the time that Joe and his staff are working, the A/E performers are sometimes unacceptable. And we want to strengthen our A/E liability program. And you can see the rest of the words there.

So I know this may not be the most popular topic but as we have done here we've got one for everybody. And we try to put those things on the table that bother us. And as you know, we've done this consistently and we don't leave anything off. And you've handled it quite well even when it pinches a toe. Joe or Bill, whomever.

MR. TOUSSAINT: General, we have two Bills that can answer that.

GEN. WILLIAMS: Okay.

MR. TOUSSAINT: We have Bill Miner in design, and one would say, well, that's where the A/E liability rests. Then we have Bill Prior in construction who, with our design-build approach, actually takes on at the time of contract award the management side of that design-build contract. So I'd like to suggest we -

GEN. WILLIAMS: I'm just looking for Bills.

MR. TOUSSAINT: Let's start it off at the back end with Bill Prior because he's inherited that.

MR. PRIOR: These are difficult issues for us as well and that's one of the reasons why it's on this agenda. We have a lot of work going on. In the typical design-bid-build world it's very clear when we have a design problem. In the design-build world it's not quite so clear and it's a little bit harder to pull together the documentation to make it clear. It's something that we struggle with.

We'd love to have some feedback, especially in the design-build arena as to just how

we should be heading down this road because we do a lot of work and the vast majority of it is exceptional but we do have mistakes and how we go about clarifying where the responsibilities lie and addressing the correction. These are things that I see in this question. I think they're similar to what Bill Miner will address.

MR. MINER: Well, as an architect I'm surprised I wrote this question. (Laughter.) But it's something that we, of course, have to work with. We have to be accountable. We hold our physician accountable. We hold our lawyer accountable. Nobody's perfect.

And as Bill Prior pointed out the design-build delivery method changes the designer's role as he's shifting from the owner's representative, really much a part of your team to being a part of the other team. It's still a partnership but it's a little bit different. He's a sub to a prime.

And our work is very complex and when there are errors and omissions it's very costly because it has to be corrected and cannot be

accepted.

The issue of liability insurance is sort of nested in there. To what extent should we be willing to pay for or contribute to insurance for errors and omissions from our designers and even our builders. And we're struggling. I don't think we can ignore it. I think we have to address it and it's here to find out what do other owners, which are representatives of the panel, do when their representatives drop the ball? How hard can they come down? How comfortable are they in trying to claim damages?

GEN. WILLIAMS: Craig.

MR. UNGER: Interesting set of questions. First, separating the hard bid, design-bid-build from design-build because we all know the infamous Sparin doctrine, if there's an ambiguity in the old way in those specification, which there always are errors and omissions in any project regardless of the budget delivery method, you as an owner are going to be charged with that change.

And I had certainly experienced that as a

previous owner. And we had tons of them. And when we went to design-build we still had a lot of changes on our own nickel that the owner, whether it be technology or just the end user desiring to make changes, which was bad enough to handle but those errors and omissions from the design-build, again, in my world went away.

We went from tons and tons of claims, disputes, litigation days to literally none although they were still going on but now at least monitoring that process of RFIs between the design-builder was important to us because we had this concern we would get the cheap fix, quality would suffer and it just didn't occur.

And I think a couple of reasons why. And one of the most important ones that I would recommend is your evaluation criteria. Look at it. You have enormous amount of power and influence in your evaluation criteria and selection on what you're looking for.

And I would submit to you it ought to be high-performance teams. It ought to be these folks

that have worked together before and you can control a lot of things in that process to include how some people are thinking and, at least in my experience, rarely did we get a designer-led design-build team. It was about 90 percent contractor-led and an occasional joint venture.

So we had this concern that the architect of record would be subordinated and we would have a quality issue. We probably overprotected in that area in requiring the architect's involvement and sign-off on the errors, omissions and changes that came about.

Secondly, the performance base, and this may be where the heart of the issue is going to, is the performance-based specs, and I know there's a question coming up here you're going to talk about, defining what you want as opposed to how.

And being ever so conscious that the further you go out that continuum of 20, 35, 40 percent performance-based venture you're looking at bridging or draw build.

And I know when you have a prototype in

the footprint you're going to get there to a certain extent but not necessarily on systems and some of the other areas for creative and innovative design.

But that, in our eyes again, I know my experience, we were too prescriptive. It took a couple of, probably a dozen projects until we started to pull back and prescribe less in those performance specs knowing that we were going to get a proposal and requiring the contractor to detail down.

If we were concerned about equipment, security, electronics, some of the issues that were very, very troublesome in past projects requiring the contractor to tell us systems, commissioning plans, and all those areas we had stumbled on before. So I know I covered a lot of area there but some of those I know we're going to hit on in follow-up questions.

GEN. WILLIAMS: Well, we appreciate Craig for opening the discussion up. Are there other comments concerning this topic? It's not a new one. It's been around for awhile and we have to talk it

out because we're trying to do the very best as an owner about this matter.

And we had it touched on at a previous meeting and we thought we would recycle it again.

Let's try to tie it to this performance-based specs which is another question that we have. Yes.

MR. ZINGESER: The thing that strikes me is the point that was made about the owner's role in this. I think with the advent of design-build there's been a thought, at least, that the owner, especially if it's a federal agency and especially if it's an agency that has a lot of work to do and is using its own in-house capabilities in terms of numbers of bodies and people who have experience to shift the risk and go design-build by just simply shifting the risk, dump it out there, let the A/E construction community take it and run with it and be done with it.

And then there's contract people who are happy they met the goal. The money's out the door and some poor implementer in the government is left having to deal with this.

But the real answer has to be in partnership because as was said, this is a process. The service is being delivered. You have to work together to make sure you get it right, to make sure that the owners's getting what they need, what they want, what they're paying for.

In the general contracting world we're all moving into design-build. The cultural change that's first and foremost is the need for the general contractor to look in the mirror when they want to know who the designer is because as was said before, they own it. And it's not pointing a finger at somebody else.

So the first thing is to build a relationship with the design part of the team, but the key, the real key is the criteria that the owner puts forth, the effort that the owner puts forth in working and making the right selection and then working with that design-builder to make sure that everybody understands what it is we're trying to do.

And the more we do that, the more often we do it, the better we do it, the less the problem

exists. In terms of who's going to pay for the insurance, you're going to pay for the insurance one way or another.

GEN. WILLIAMS: And we know that. Yes, Todd.

MR. RITTENHOUSE: From the design side there's a couple of issues that I've seen over the last couple of years. One that Joel just hit on is partnering, true partnering.

Partnering is not supposed to be two-day session where we get together and go out for drinks after and the next day say, well, that was a fun two days out of the office. Now, I know the faces I can point at at litigation.

So we really need to get a true partnering for projects and understand that. And some of these projects, I know we've discussed it before, some of these projects we go into with a very short bid phase and we, for instance, don't always get -- I know we discussed this last time -- good soil information, especially on a foreign post.

And so some shared responsibility is going

to have to come out for it to be true partnering either by giving out, getting information so every bidder has uniform information and bid properly.

The other side is with the quality-based and best service to you it's money and it's scheduled. And you talked about people saying 30 months, then it was 24 months, and then recently people said it was 21 months. Those months don't typically come out of the construction side. They come out of the design side.

So assumptions are made and people have to make sometimes best guess on either design issues like the foundation work or equipment being purchased and that's being purchased so far ahead of the design phase.

And I actually feel that as the sort of little guy in this whole picture of owner-contractor-A/E team, and we're, of course, engineers so we're below the architects. So half our clients are in the room here -- but it's an issue that you can't keep squeezing and squeezing and then say, oh, by the way, you're also liable for it at the end of

the day.

So I guess it comes back and we all, you know, at the end of the day we do have to write some checks from time to time. But it needs to be a true partnering and take some role and some responsibility shared across, both at the owner level and at the contractor level.

The contractor says I want a piece of the unit, tell me which piece of air-conditioning equipment or whatever I'm going to install three months from now. Of course, I'm not an HVAC guy, but I don't know what's the -- I can't tell you exactly today. He says, well, I've got to order it by Friday so give me your best guess. So then he comes back and says, it doesn't fit.

So there's a lot of shared responsibility across the board and yeah, ours is going to go up.

Every project done we are more and more liable as industry but you can't keep squeezing and then say who can I point at? So it's across the board.

Everyone has to take their fair share.

GEN. WILLIAMS: Very fair. Yes.

MR. ADAMS: Since everyone's pointing to the architect, we all make mistakes. And I think what Todd just said is really the crux of the problem and it is speed. And where I find that there's often problems is we design the building a certain way for the client who specifies it a certain way.

And unless the construction company is selected at the same time and is just as involved in the ways and means of construction and the specific products that are going in, and that's hard to do when you need to have a specification that will be open to competition.

This is where the so-called errors occur is in the change that happens after the drawings are made, change in ways and means of construction, change in the products that are purchased. And I think that your program is one where perhaps a performance specification method, and it's a whole new approach, and it's not going to be easy because it's going to require a great deal of education for all of the players.

But you have, I think, an ability to perhaps write the book on how to do it a different way. And it's not placing blame but it's getting everyone to work together, every member of the team.

I've become more and more of an advocate of the great benefits of design-build whether you call it design-build or you call it some other form but of getting all the players in the room from the very beginning and truly working together.

I think one of the problems that happens in your process right now, if it's with a prototype, often the contractors have put together the price so quickly that they really, the A and E role is played down and totally relying on your prototype design with a few minor modifications.

And it's all of those unknowns, the real site conditions, the real means and methods of construction in that country that change things and potentially cause the problem. So there's where I think that, perhaps, having some flexibility built in would be beneficial.

On the other side, the insurance side, the

government's going to insure itself, self-insure, but it may be beneficial for you to talk to some large owners. We often work with large owners that have a blanket insurance policy that covers all the players, the designers and the constructors.

And it might be worthwhile to speak to some of those organizations to see, to find the pitfalls that they go through in writing that insurance and in purchasing that insurance.

GEN. WILLIAMS: Okay.

MR. THOMAS: I'd just like to echo what the other panelists have said in a way, but I think it would come down to the issue being speed. We're trying to do things faster. We're trying to maintain the quality all the time. And when it changes and there's such a paradigm of change that seems like to me related to speed you need to make sure that everybody who's invested in the project, a stakeholder in the project, is present almost from the beginning.

Bill mentioned accountability and I think it's got to begin right down at the base of the

project team even when you have design project team meetings, if you will, and at the close of that meeting make everybody accountable for something that's coming up.

At the following meeting make that the first order of business so that you have it right at the beginning as opposed to the owner arguing with an A/E or arguing with the CM or the design builder or whoever it is at a much higher level after the fact. It isn't going to work.

It's got to be first down, I think, to the base of the design team and make those team members accountable. And the only way you can really make them accountable is if in your selection process you really are getting the type of team that will work together, that you know, that you have confidence in, and you have trust.

Trust is the other big item. You've got to trust the whole team. You can't just say I'm going to talk to the boss, with the design-build leader and not talk to the A/E member and not talk to the subs. You've got to be there together or

it's not going to work.

GEN. WILLIAMS: I think this is excellent. I know that there are others who might want to speak to this. We have put this on the agenda because we want everything to be discussed. Obviously, we are dealing with this.

We had some vision about this three years ago when we started looking at how could we do business a little bit different, that is turning, making that vector change for our ship.

And we know the allocation of risk is always an issue. It's going to always be an issue working in an international environment and particularly the places where we have to work.

So our part of trying to be a partner and it's by no means perfect was to give a sort of a standard construct to deal with so that we take the mystery out of what we are talking about.

That's the whole reason of going to the standard design, the generic one, that only required site adaptation so you would have to worry about the issues that Todd spoke about, that's the

geotechnical part, but not exactly what are you building. So we tried to take the mystery out of that.

The other one which we'll talk about a little bit later on and we've moved the standardization even further where we're now actively looking at standard products, windows, doors, et cetera. So we're kind of getting the mystery out of that as well.

And then, of course, hopeful that these teams would start coming together and have a learning curve in certain parts of the country, i.e., Western Africa. It's not much different between a Conakry or Bandico (phonetic) or Lome or Cameroon. You count on the same side of Africa, for example. And that will start coming together with some intelligence.

So we know it's a tough problem. Most of you know I've worked in New York, well, working in New York, you know what the deal is. But when you work around the world then it's a whole different construct. So we try to help with that by creating

a little different start point.

Now, speed there's not anything we're going to be able to do about that. We have folks in harm's way. We have 150 new compounds to build and we have to build them as fast as we can. We would like to take the five or six years that it took before but most of us wouldn't have jobs under this current arrangement, not working for this team.

So we have to do it fast. And we have to do it more quickly. And I know that might bother some people but that's just the way it goes. We don't have much of a choice. Is there another burning comment on this subject? Okay. Yes.

MS. BROOKER: Being from more of a medium-sized company there is a similar view on the dilemma, on liability and responsibility that comes with the process.

And as a corporation, Boeing Company has chosen to be responsible for the work in place. We have all of our insurance for the work itself that becomes in place. We carry all that insurance.

However, we do not ensure the actions of the

companies that we hire. The liability and both in personal and professional is up to the companies that we hire.

So looking at the responsibility and the accountability of the product that's being put in place, especially in the near term, is, you know, the several comments that were made that no one's perfect but we believe that we're hiring companies to take that responsibility. Otherwise, there's no reason to go hire someone externally.

We have our own design firm. We design internally but we go out to hire an A/E firm. We expect them to have liability insurance. In order to get far enough to implement the liability insurance it has to be a pretty grave situation with limited culpability by outside forces other than the A/E firm.

So consequently, there is a lot of gray area, especially with a company like mine that like to help everyone do their job. But we had a situation where we had a roof that would not stand more than three inches of snow and it was in a snow-

prone winter area. So consequently, it became a serious, serious problem that there was -- we expected the structure to be designed for the locale. It was not.

The liability insurance had to come forward because it was a serious violation of the requirement of building to that locale. So there is a situation where it becomes necessary if you get to that point you've got a failure.

And that's the worst part of the industry is that you don't want to get there. You want to get the true meaning of a partnership arrangement where you are partnering to make the end product, that you're working together, that hopefully you don't have a discovery after the project is over. You're working together.

And I think the solution, as Craig was saying, is you work together so that there aren't claims and there aren't those kinds of efforts. But you work together as a team. And you become integrally involved together to get the project done.

It is not throwing the project over the fence to a design-build company and expecting it to come back nine months later to a completed product because if you do that you get what you deserve.

The fact is that when you're giving that responsibility to an outside agency such as a design-build firm there is a lot of interpretation of where you're going. And the only way to get there is to get there together.

And you've got to be available. You've got to be able to answer the questions in a matter of hours, not days, weeks or months. And it has to be part of the plan to get together and understand on a daily, hourly or even minute-by-minute basis that you're going in the same direction and that you're going to get there.

And I think the biggest thing you can do is not to hold anyone to the limit of their liability because if you have to do that you're far down the wrong path. And it's avoiding that kind of a situation and getting there -- every project stands of its own and it works to have a

relationship that's strong to get you there project by project.

But if you're going to make -- if you're going to have to consider making you're a and E responsible for their liability of the design then you've got a disaster.

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

MS. SORG: Good morning, General Williams. I just have a very rubber meets the road comment here. I think the design-build process is really coming down to (inaudible) very good result and you have already shown us. There's some tendency out here, and this happened in our firm twice already, where you selected the designer and the builder and the team for a particular project.

Hopefully your evaluation has been because this team, in terms of design and build, as you said is (inaudible) people in the region or in the building type, like housing either for a particular site.

What's happening is that similar to the builders that you are selecting are thinking that

they can put in the qualifications and then switch the team around based on pricing. Because before when we had design-bid-build the regulations helped select the architect or an engineer based on qualifications only. And the quality assurance that you got was that the qualifications and (inaudible).

So I'm just curious as how committed, and the next (inaudible) is if I'm the contractor, yes, this is a permissible thing that you can just go with another partner. And I'm just curious when you are evaluating you're really looking closely at the designer and the builder specific to that project.

GEN. WILLIAMS: You raise a very good question and that question is a part of discipline, the process. You know we launched the design-build direction right on the heels of our introduction of our new standard design.

It is now a path forward for us and all that good discussion that we just talked about here where a team is formed, the team comes to the table as a team. The team is evaluated and that's the team in the future we will be expecting to do the

work.

It was sort of a hybrid as we moved into it. I know exactly the issue you're talking about. But going forward it will be the team. And that will be the representation we would expect to build the relationship with. Are there other -- yes, Craig.

MR. UNGER: Again, to underscore a couple of points that were made, back to your comment.

That team, I think, is to be, again, a seamless, high-performance includes more than the designer and the constructor.

our contracts that the general contractor perform 20 percent of the work with their own forces so we didn't get into a brokering situation because the fact of the matter is most of the work is done by someone other than -- some agencies are just looking at, whether it's the past performance of the firm and then maybe even in phase two, now, we want to see the past performance experience of those key management and professionals who are going to be on

this project.

I would include at a minimum, structural, mechanical, electrical. Those functions of the projects that we had that went south had claims that involved those specialty subcontractors. And I have heard some of the same situations also where having best value selection we're using qualifications to select a design-builder and then simply going open book. And they were bid-shopping some of those critical trades which may not be good team members.

The constructability review that is so critical to what Harold was saying of those contractors familiar with means and methods and their crews are experienced, you're losing that synergy by going back in that direction. So I would caution that.

The other is the comment was made, to go back to Bill's, is that one of all the presentations I get a chance to go out and see I saw a young lady from Cal Poly doing a presentation on high-performance, seamless teams. And one of her slides has a boat. And it has the typical design-bid-

build, the architect, instead of sitting by the owner, he's sitting on the other end of the boat with the contractor.

The fact of the matter is the boat is listing and there's a hole in it and it's going down. And the owner is sitting on one end saying, wiping his brow, saying, phew, I'm sure glad the hole's not on our side of the boat.

Because you are, the team is the allinclusive as has been suggested here today
regardless of what project delivery. But I would
certainly agree, that it seemed to me we always had
time to give depositions and go through all the
claims and hire consultants to do analysis and
spend, but boy, it is -- you're so busy. You have
so many projects going on.

It is difficult to get the owner's rep involved in that program whether we call it design criteria, preliminary design or conceptual design, whatever, how far you're going down that curve, it's just so important as has been suggested that you as owners, OBO, are intricately involved in that

interpretation.

GEN. WILLIAMS: I think that's just right on target. And it's even more of an issue for us because we do have the element of having to move out quickly. That's why the process should be disciplined. That's why the team that is represented is, in fact, the team and that team is vetted on its performance and it stays intact.

So all of the things that you have raised are helpful to us because it just undergirds the direction that we are headed and we like to get the sensing and to know that we stand on solid footing.

So just to make certain that there's no misunderstanding about anything that we have discussed around this topic, we are very much interested in building strong teams, teams, and working as a team. And that includes OBO is a big part of that team.

And we are strong believers, I've been discussing this with my senior staff, the allocation of risk. We are realists. We know that has to be addressed and the earliest, and the earlier in the

process that this matter is addressed the better it is because the team can handle it.

We have three or four excellent projects ongoing now where it's just been terrific teamwork. We could, to use Harold's comment, we could begin to write the first chapter in a book about it. It's working exceedingly well.

But, you know, this has been -- everyone knows where we have grown from. And we've been trying to get there. But going forward we'll be putting emphasis on the tight team, a proven team, a team that knows how to do what we are doing and we are meeting them halfway with some standard products and helping with them.

We also are very, very wedded to the whole notion of value engineering, looking for smart ways, tapping industry for helping us think through some of the methods and means. And it's not always necessary to get cost.

Obviously, we have been able to make reductions but we want to make certain that the end game gets us where we want to get. So we're putting

a lot of emphasis now on value engineering, even advances in the planning stage of projects as well.

So I think we're together based on everything that's been said here. Clearly, nothing has been disturbing to us from any of the comments. You've been very up front and honest about it and that's what we're looking for.

Let's move to one more controversial. Are there any smart-building techniques beyond -- you know we got 22 best practices or something. We've introduced them all to you and they're also in our stewardship report.

Is there anything else that you think we might need to look at from a smart technology point of view? We want to stay open. We're not saying we want to jump and adopt them but we want to be engaged about them and you know we listen. So this is open now. It's Number 14 listed in the book. What are your comments on smart technology?

MR. ZINGESER: Just a question. Can somebody define what you mean by smart buildings?

GEN. WILLIAMS: Yes. I'm going to ask the

scribe of this to stand to stand up real quickly and do that for you and give a five-minute explanation of it.

MR. MINER: Well, Joel, we've been trying to find that scribe. (Laughter.)

MR. TOUSSAINT: That was him.

MR. MINER: We wouldn't want to limit the dialogue so I would say let's keep it open. I can tell you about some technologies that we have seen recently that we thought was pretty smart.

One is a residential deployment solution, a quick housing solution that we looked at intently because we have issues in Baghdad and in Kabul where we would need a quick, temporary housing solution.

And General Electric Corporation came forward and told us about an easily-mobilized, self-contained container that literally pops open. The sides become the floors, trusses shift up and walls open like accordions. And in a day you can erect one of these.

And we're trying to house a thousand people. And we said, boy, this is really unique.

And then a week later a firm called Quick Quarters came in and showed us the exact same product except this one stacked three storeys high and we were wondering, boy, what else is out there?

So that's just an example of the kinds of things that from our perspective we don't see enough of and we're wondering if there are any other smart building ideas, technologies, that we ought to think about to pursue further.

GEN. WILLIAMS: Bill opened it up. Let me just say that we're not only looking for smartness in our new construction but we're looking for a smart technology to deal with when we own two prongs like when we are in Baghdad we have to respond very quickly, put something in place temporarily where we just need the best thing out there to get some people on the ground secure so they can work. So that's technology as well.

And in addition to any smartness that you can suggest for our new built. So it's broad. Or, smart technology and how to maintain it. I know you're thinking and deliberating and getting your

thoughts together.

MR. ZINGESER: Well, the only thing that struck me, the reason I asked the question is -

GEN. WILLIAMS: We'll call on Bernstein after a while. We're going to call on all these old panel members.

MR. ZINGESER: I'm old like some of my friends here and I came to Washington for a one-year appointment to work on Operation Breakthrough, which was George Romney's idea on how to produce industrialized housing which you've seen all over the country now.

Then there was something called the Smart House. Anybody remember that? They went bankrupt. We have a lot of research going on in the construction industry, not as much as we ought to have. The story's been told over and over again about how we spend such a small percentage of our industry's wealth on research and development and new technology and new products.

We certainly have moved forward in the HVAC, security, alarm, fire and life safety areas

with products and technology. I think the example that Bill gave is an interesting one but you probably have a whole different set of rules and regulations for temporary housing versus the codes and standards you'd want to apply for things that were not temporary.

So smart building, if you're talking about just being smart, I think, obviously, we always want to look at that and that would be a project-by-project, problem-by-problem basis.

Wholesale application is something that's a little bit more difficult, a little bit more complicated. As Derish mentioned, we have a representative from FIATECH here. FIATECH is clearly in the forefront in terms of new ways of approaching construction.

We can just keep doing more but I think the answer to your question will come when you look more specifically at a problem. And maybe others can come together in a tiger team approach and say how can we get this done. We've got so much time; we've got such and such priorities, whatever it is; and then

maybe apply some things that are cutting edge, if that makes sense. But otherwise, to me, it's difficult.

GEN. WILLIAMS: Yes.

MR. BERNSTEIN: General Williams, it's interesting to be on this side of the table for a change.

GEN. WILLIAMS: One of our former panel members.

MR. BERNSTEIN: A couple of thoughts.

First of all, on the housing side, the panelized and factory-type construction on housing is showing some real benefits both in quality control and the cost per square foot is running almost one half of the cost of a stick-built or built in place.

And a number of the developers in the housing area are now working out because of developing countries the shipping of a lot of these modules and factory-built units across the ocean to other areas and still showing significant savings with a higher quality. So in some ways, that's smart construction if you will.

The other aspect gets into both automated construction methods that are being used and sensors for dual use. And for embassy construction, of course, you have the advantage of a real need for dual-use sensors, both in terms of looking at security measures as well as monitoring the performance of materials.

And I know when we visited the embassy in Bangkok the cracks in that, the foundation-type of situation where it had deteriorated over a period of time, you see the same thing in bridges.

Well, in a lot of newer materials that are being billed as smart materials they're embedding sensors. And the cost of the sensors is almost negligible versus the cost of material but it provides you with a maintenance and operation system to the facility that allows you to determine if there is a problem.

So the settling and some of the problems that occurred in the Bangkok embassy facility would have been detected a long time ago and perhaps a different type of rehabilitation could have been done

or preventative type of work where then you had to come in at the point you did and take a look at some major reconstruction to deal with those problems.

So looking at smart materials with sensors gives you the ability to use it for operation and maintenance. It also offers opportunity in terms of energy and facility operation, and then you also have the advantage, especially in ventilation systems and that, of detection from a security standpoint in terms of other types of contaminants that may be coming in the ventilation systems.

There is work going on in Japan right now on automated construction of office buildings and both high-rise and low-rise buildings where they're attempting to create much more of a factory type construction atmosphere to allow construction to go on on a 24-hour basis.

And under that type of a system it achieves certain savings in both the time for construction, maintain quality, at the same time allow the process to automate, and in that automated smart-type construction they're adapting a lot of the

construction techniques to be in a control system that ultimately is used as the operation system for the building systems when the building's completed.

So I think smart construction offers a lot of different opportunities. The disadvantage you have is when you're looking at a one-of-a-kind in each embassy on site you then need to look at how can you generalize some of those procedures that you might be able to apply from site to site and achieve some of the automation, achieve some of the modular preconstruction that will allow you some major savings while increasing your ultimate quality.

GEN. WILLIAMS: Thank you, Harvey. Harvey is the president of the Civil Engineering Research Foundation and former panel member, one of our beginning members. We appreciate your comments. Are there any other comments on this subject? Yes.

MS. LEWIS: I guess more of a question. I guess this is kind of the information phase and does OBO wander around to every exhibit hall of every major professional society in order to see what's out there? How do you actually gather the information?

It seems as though vendors are out there telling you every day what you want.

GEN. WILLIAMS: Well, I can answer the question about wandering around. We don't do much wandering. Maybe we should do a little bit more of that. But we're trying to learn as much as we can from this panel in order to set our vector because we don't want to -- we want to pick up the right, and we can't be everything to everybody. We just want to try to find our smart piece every now and then to mix with what we already have. Joe.

MR. TOUSSAINT: General, could I add some focus to this question? This goes to the panel and ask you to look at our standard embassy design and what we're doing with that. And from what you know of it, how can we make that a smarter package? What are we missing in our approach? How can we improve?

GEN. WILLIAMS: Will that be homework?

MR. TOUSSAINT: It may be. That may be for the next time or we may have to get you some more information but some of the discussions here seem to lend that we have the ability to actually improve

that.

any problem at all with tweaking any model that we have. It's working for us now but like everything else we will never say that we have it in an absolute way because we know that we can grow and we can learn. And we're very flexible about that. It is going to be the approach we're going to use. We just want to have the best construct of it.

MR. TOUSSAINT: I think I would add to that, sir, what we just went through in terms of the windows, and we discovered we had an inordinate -

GEN. WILLIAMS: Do you want to talk about that?

MR. TOUSSAINT: Yes. We had an inordinate array of possibilities for windows even though we had standard types of windows and doors. The choices were far too great and we found that we could reduce the numbers of those. And so we've taken steps in that area.

As the General mentioned, we're also going to be providing the FAPR material because that was

the long-haul intent. So we'll actually be buying the product and then the contractor will just have to take delivery of that product at the point of manufacture. So the coordination and we take that burden off your plate. That's one area of smartness that I think when we looked toward improving the product but there may be other areas that we can also do.

GEN. WILLIAMS: And the other thing that we are doing also is just, telegraph this at this moment, is in order to help you with the critical path and to make certain this is for the design-build team, we are also looking at very soon here on how the contractor might be able to assist in some of the work that has not been on the plate of the contractor, that has been done by the owner or some other element.

So we're trying to look at a whole number of things in order to make it easier and more friendly for all of us to work together. So Joe pointed out the standardization move that we have for materials.

We have a design and then we're looking at another method which might be some risk mitigation as well because it will cause the contractor to be virtually in charge of the whole process. As you know we are building a specialized building that requires some different things. Are there any other comments on this?

MR. ADAMS: General, if I might just add, and it picks up on some of what Joe was just saying, for large users that we have worked for, IBM and others of that type, when they have had large building programs we have often worked with prepurchasing where the company has gone out and prepurchased major pieces of the building, mechanical systems, perhaps elevators, other very critical path items in the building.

If you look at -- it never worked for them but if you look at companies like Wal-Mart they do a lot of prepurchase. They have national purchasing agreements for bar joists, for instance, that go into virtually all of their stores so that when the contractor wins the project they're assigned, they

have this prepurchase agreement that they take that out of the risk of the contractor and have the product available to them at certain parts of the country.

So you might seriously look at that part of the smart building process. That's more just in smart practices, I think, than a true definition of what we're trying to explore in smart building. I, too, had experience in the early days with building and with that whole Operation Breakthrough.

We actually designed a steel box system that was built into mid-rise buildings, and we worked with Boise Cascade. So it was interesting to do a steel system for a wood products company.

I think we have really failed in this country at not following through more on exploring and doing more research in our buildings. Working in Japan, I have been a licensed architect in Japan for some 12, 13 years, I'm always impressed with the research that they're doing, their large construction companies, their large A and E firms. The amount of research that they do makes us look like beginners.

So it would certainly be good for you to sometime in your visits to Japan take advantage of an opportunity to see what they're doing in smart building.

GEN. WILLIAMS: You know, I was sitting here looking at the staff smiling because when you started talking about having prepurchases and this type of thing that's a larger issue that we have been looking at. And we're trying to take a bite at a time of some standardization of where we are.

But, yes, the home run is to do what you just said and to look at regional (inaudible), the whole warehousing and all of that. So these are things that will take us some time to grow into but it's clearly in our thinking. So you just reinforced something that we started thinking about a couple of months ago which is very useful. Yes, Joel.

MR. ZINGESER: Just taking that to the next step, though, I think this is what I was thinking of when Joe was suggesting looking at the design because prepurchasing or having large purchasing agreements certainly as a buyer is a leverage that you have.

But starting to tread on areas that maybe
Harold would find uncomfortable, but you can look at
your standard design and start thinking about offsite fabrication of things that we sort of do
traditionally in large projects anyway.

A lot of plumbing systems are built off site and brought in. Electrical systems, one of the things that did occur in Operation Breakthrough was harnesses for housing and bringing in harnesses and dropping them in, things like that.

So there are -- and then, of course, wetcore modules and there's all kinds of components that
you could start to look at. That becomes more and
more prescriptive, less performance as you take it
apart but maybe again there's some median there.

GEN. WILLIAMS: Okay. I'm going to have to break now for lunch because we promised to get everybody out on time because we need to be back in place. Gina, are you coming forward -

MS. PINZINO: Yes.

GEN. WILLIAMS: To explain lunch and tell us what time we need to be back.

MS. PINZINO: Yes. I just wanted to mention that the panel members will now join the director, chief of staff and the managing directors to the executive dining room.

For our guests, our security team is waiting right outside these doors and I would like to ask our OBO staff to please escort the guests to the fine cafeteria facilities here in the State Department.

Also, the rest rooms as you exit are located outside to the right as well as public telephones. If you should leave, please indicate that to our security staff so that they can tell you what you need to do. And we will resume at 1:30, sir.

GEN. WILLIAMS: Okay. And Gina, we can leave material?

MS. PINZINO: You may leave materials here just please check with our security staff. Thank you.

GEN. WILLIAMS: See you at 1:30.

(Whereupon, a lunch recess

was taken.)

AFTERNOON SESSION

1:30 p.m.

GEN. WILLIAMS: We're going to pick up where we left off and continue our good discussion this morning and work out across the board so we will hope to have the same as we proceed this afternoon.

We will continue with a set of inquiries for the purpose of discussion in order to try to get at knotty issues that we have addressed and put on the table.

Looking now at Number 12 in the book is there a move by the A/E community to outsource any or part of your operation to offshore locations? If so, how do you see this impacting a client like us and what are the risks associated with such a move, if you know of any of this taking place? And if you do not know of any of it taking place, just help me with the philosophical discussion about it just in case it does come up. Yes.

MR. RITTENHOUSE: It's an interesting thought because we have looked into it, particularly both in the lighter engineering and in some of the CAD services taking it offshore. And it didn't prove to be -- if you're doing some large civil project, we were looking at -- we were doing a cement plant, something very heavy like that it worked.

But when it got into some of the more intricate designs, such as office buildings and embassies and the like, we decided it was too dangerous because there's so much changes and to communicate those changes on an intricate level such as this type of structure we found it was too much of a risk and too liable to go after it.

On the bigger, heavier, civil or something that's repetitive here's the design, here's a road.

Let's do five miles of a road, just figure it all out, that was better. But I just think our opinion in meeting with both American projects and foreign projects trying to work it out with outsourcing for embassy and that type, the design was too close and the feedback wasn't close enough to do it. And we

felt it was a little too dangerous to jeopardize relationships with that.

And that's after studying it and trying it.

I know people have done it and been successful. But

it's more the heavy civil and that type of project

that it's more successful.

GEN. WILLIAMS: You heard Todd's response to that concern. Any others? Yes, Harold.

MR. ADAMS: There are firms exploring and you hear more talk than, I think, reality. We do know one firm down in North Carolina that has been experimenting with doing working drawings offshore with health-care projects where they're doing a lot of prototype health-care projects, similar projects in many locations.

We have not used it because our projects are all, each one seems to be very different. We're concerned about quality control. We're concerned about security. And as Todd said, evolution of a project is evermoving and changing and we just have not come to the point where we think it can be used.

I think, as a philosophical point we do

have to be concerned about the overall security, especially as building plans become more important to some people that I think it's very important that we maintain security on our buildings.

And the issue of security, even for finances when you think that your American Express information and a lot of other information is already being done offshore. Someday we might wake up and be alarmed to have no control.

So I think it's an interesting debate that should be debated in this country and talked about because I think it has some very long-term implications and not just saving a few bucks on the front end.

GEN. WILLIAMS: Are there other -

MR. WOLFF: Well, we've been spending a lot of time thinking about this because the people talking about it are either outsourcing we might be (inaudible) how to take advantage of it. And we've done a lot of studies about it. You've got to separate them into a number of different areas.

One, is it a green site versus expanding

existing office or is it a subcontract? If it's a green site it means you're going out, you're setting up an office, use a dedicated design for something.

If it's an existing office it's a little easier because you can go in and work with them anyway, start shifting some work there. Are you going to use a subcontract?

We've had a lot of the same experience Todd has. We haven't found it that profitable but the people who have have typically been people involved in industrial design sizing. It's very good when you have computer-driven powerplants or distribution chemical plants where the client gives you a process and you have to size it up and make sure it doesn't blow up or something.

And so a lot of people are really finding they're doing this kind of work for nonrepetitive or nonhighly disciplined work where we typically in America might have 200 engineers working on the size of a plant. Where you don't have that kind of work it's much harder to make a profit but where you see it going is where firms, especially architectural

firms in the private sector, have architects who may have been nationals and go back home. They're comfortable with these people.

They were project leaders or team leaders in the United States. They go back to India. They go back to the Philippines. And they set up a design office. And I've seen work moving that way.

A lot of it, and where it tends to be effective, is when you get the 16/5 mode, where you work 16 hours instead of eight, so you can really work a lot longer on the project overseas not work cheaper but you can work longer. You can get computer programmers all there.

The problem we get into is the same problem you get into in the U.S. And I apologize, for opening this, where you get into virtual design where you have three offices and you think you're having a wonderful time integrating the drawings and then you find suddenly that people are very, very important, somebody who can coordinate three offices at once, not just look at the drawings but do something with them.

Well, this gets a quantum leap when it's 16 hours instead of eight hours and it's different languages. So one of the ways, what we try to do just because of the design of two offices and different time zones is really put the premium on who's coordinating it. You need your best people to coordinate it.

The other thing, if you don't have work in the country that feeds itself, if you don't have a breakeven operation in that office, it's a huge burden because you've got to move expatriates out to that office to ensure quality.

You don't have the advantage Todd was talking about of people floating through an office.

If you look at the great, say, hires a great dam design firm, what they have are some of the great regional design firms (inaudible), will have people just floating through the office looking over people's shoulders, commenting on drawings which you just can't do that in an overseas office. It takes you two weeks to get the guy there or the woman there and back.

So you lose this kind of intuitive feel on complicated projects by just the older pros walking through the office and looking over someone's shoulder. So all of these are costs that you don't realize.

The other thing is if you are in the country and you don't have a right to be there except that you're setting up a dedicated office you're very subject to taxation and a lot of other costs. So your costs start soaring. So there's a lot of hidden costs you're still wrestling with.

But I think we're definitely in the private sector and one of our affiliates, a large private sector house, is moving a lot of work overseas simply because they had people from that country who worked for them went home and are still doing the design.

So it's going to grow, not in the government sector and not in complicated designs but it's going to grow, for example, in drawings for architects, for developers, when you have to grind them out quickly. That's happening already.

GEN. WILLIAMS: Is there any risk for an

organization like ours to have such an arrangement like that? I don't mean for us but I mean to have an A/E arm that's doing that and relying on offshore response.

MR. WOLFF: There's a security issue.

That's a serious issue. The other issue is you have to know because it's the same issue you talked about with design-build earlier. You've got to know you're putting more time into it. You're going to have to spend more time making sure those drawings match up. And if you're blindsided on it you'll just be fooled. That's the issue. It just takes more management, takes more serious management.

MS. BROOKER: We had an opportunity to -we needed assistance to convert all our ancient
building designs that we currently have into CAD
because we wanted everything on CAD. And the
security of the company did not want it done
offshore, not that we have highly confidential or
prescriptive, but we just didn't want the plans for
our buildings and facilities offshore.

So our contracts all say that any

subcontractor or subconsulting has to be preapproved by us before we do anything. We don't necessarily state more than that but that is one of the issues that we do have.

MR. WOLFF: I think just listening to your point and I think you might not know it, it might not be a subcontractor. It maybe the same company you gave it to. The real problem is knowing -- I didn't give -- get an expert (inaudible) and I don't think anyone from the income tax would go outside the country. So it's not -- if it's a Berger subsidiary, it wouldn't be a subcontract. Not that I'm disagreeing with you it's just -

GEN. WILLIAMS: Well, we put this out because naturally we have some concerns and would have some along the lines of exactly what's been said, the security first, quality control, who'll be doing business, whether it's a wholly-owned or some other arrangement, whatever.

All of that will make a big difference at the end of the day when we have to hold somebody accountable for our particular standard. So I

appreciate the dialogue and see where you are. Are there any other comments on that line?

MR. WOLFF: It's a lot like antiques where if you put another, if you take a leg off one Chippendale and put it onto another one, is it still an antique or not?

People, and this is a very serious issue, it's been so seamless in companies that they're not even aware the extent to which they're doing it.

They may not be aware of the extent to which their network may be maintained outside the country. So it's going to be -- I'm just thinking it's going to be very hard to enforce this.

GEN. WILLIAMS: I understand and we're just trying to address it up front. And it if happens we just know, be prepared to try to deal with it. Are there any other comments on that particular subject?

Okay. Let's move to another one that's probably not widely known but it was presented to me and I promised the agency that I would present it to the panel and it has to do with steel prices.

I see everybody going, I'm glad you got to that one. As you know, you all should know by now, that if you tell me or you hear about it we're going to lay it out here in open forum. It serves no purpose for us to know something or you to have some concern about something and we want to try to vet it.

We want to start this off, obviously, this is an issue that caught us all by surprise. Anybody got any prognosis as to where do we go, in what direction? But we wanted to think about it.

MR. UNGER: I'll start it off. Steel prices, again, some of the rumblings and sniveling and whining that I'm getting in our association is that steel prices went up 65 percent or so and then you can't get it. You're in line so you're being delayed and paying a heck of a lot more for it.

But the advice and counsel I would give is that the federal acquisition regulation clause or part 16203 it talks about the economic price adjustment clause. This goes back to the risk assessment.

Steel today could be fuel, kind of is fuel,

beginning to creep up. And again, it's the government's way of saying where uncertainties that we can document and there's two different clauses.

One is for more labor and there is one for materials and manufacturing. That if it's in the contract, even on a firm, fixed-price contract that there can be some type fo relief.

But yeah, we're hearing from some of the design-builders that the steel manufacturers are saying basically default -- I'll go -- I can't do, I can't get it. I can't perform at that price so you're going to have to bankrupt me anyhow.

So it's definitely an issue and I know that

-- I actually tried to go back and pull a little bit

of case law and see if there's any relief that could

be granted. And on a firm, fixed-price contract

there's not a whole lot of wiggle room there that

even if you wished, but that is something you may

want to think about in the future, adding that

particular clause, again, 16203 up front in the

contract.

GEN. WILLIAMS: Okay. You got that, Bill?

Joe?

MR. MINER: Yes, sir.

MR. ADAMS: General, you may find this amazing that an architect sits on the board of directors of a steel company but I do.

GEN. WILLIAMS: I think it's a good thing.

MR. ADAMS: But I'm on the board of a steel company. It's a specialty steel company that manufactures through their mini-mills across the U.S., steel, specialty steel, smaller sections, rebar, bar joists, all that type of steel to go into many, many buildings.

They also have a large recycling business and it's interesting that this all happened to them just about as fast as it's happened to the rest of the market.

And it all starts, came up on the world, beginning, I guess, last fall with a surge in the price of scrap. The Chinese have been buying up, they have such heavy demand, they've been buying up the scrap as well as ore. They have just sucked the world dry of ore and of scrap.

They think, in this company, that it has pretty much peaked, especially in the scrap metal market. You've seen it double or more just in the last three or four months. On the good side for this company, they're certainly showing a lot more profitability than they ever anticipated. But they're finding it difficult because they're having to compete with themselves sometimes to get enough scrap to keep up with their demand in the mills that they own.

They just believe that it can't go on very long but right now in the world with all the economies beginning to pick up rather dramatically and with the strength of the Chinese economy and the amount of building going on in China it's not just steel it's also copper. This company also manufactures copper tubing and they have had the same thing happen in copper.

So if you look at that and then if you look at the cost of wood products and how they've gone up, we may indeed have the beginnings of inflation.

GEN. WILLIAMS: Yes, Mary.

MS. LEWIS: I think the last six weeks in the value engineering community has been very interesting because steel is the number one conversation point in value engineering study and it has become, it's driven the studies to more risk analysis.

And it's something that's been very difficult even to account for even when we're doing it at a planning stage or a charrette stage to try to quantify this risk and figure out how to mitigate it. It's just very difficult to do but it is the most important thing that the VE has been dealing with for the last several of week.

Every single project we see is completely focused on this topic and how are we going to be able to design and build this within the original budget.

on this issue or comments on the issue of steel?

Where do you see this going? Is it going to be with us for a while or as Harold says, maybe it's peaking or what?

MR. ADAMS: I think it's going to travel

through all industries. The automobile industry had

-- they thought they were bulletproof because they
had long-term contracts. They're now beginning to
evidently find that it's hard to hold people to, the
suppliers to those long-term contracts.

And I know other manufacturing businesses are finding it difficult just to get the supply and are having to limit some of their customers and allocate their product because they can't get enough steel because it's turned into a shortage.

So I think it's going through, even if we have peaked, that it's going to go through the various industries and we're going to feel it throughout.

GEN. WILLIAMS: Yes, Joel.

MR. ZINGESER: I would just add, I think
Harold said everything pretty much and Mary also.
But the other part of the puzzle is schedules. It's
not just price but schedules. They're getting blown
left and right. Suppliers are basically saying, when
I call you and tell you I've got it you better pick
it up because if you don't pick it up today you're

never going to get it.

And then you've got to deal with holding inventory before you want it or need it. So there's just a lot of issues. And it's nickel and it's copper and it goes right through. It's not just structural steel. It's metal studs, everything.

So the part that concerns me is what Harold said about inflation. I think it's definitely a piece of a bigger puzzle. And I think the government had some rulings within the last week or so on prices and contracts and so forth. So I think we're just going to all have to deal with it.

GEN. WILLIAMS: Yes, Ida.

MS. BROOKER: This also could be a case of the silver run of the early '80s where there were a couple of brothers who wanted to corner the industry on silver and didn't take into consideration that everyone had a stockpile of silver at home. And they started selling their grandmother's silver service and all the other things.

And it ruined the whole idea that they were going to corner the silver market and make the price

of silver go up. And it did go up but it was only a very short-term thing.

There is an entity within the United States that has an absolutely huge stockpile of scrap metal and that's the U.S. government who has all these ships anchored, especially in the Sacramento River.

And if they wanted to find some scrap I think the U.S. government could accommodate them.

But I think it's the supply and demand issue, and I think that if there is -- I mean, we've not -- there are so many things about that industry that have not been cost effective up until now that I think there could be a possibility that scrap is found from sources that were never explored before because it wasn't cost effective.

And with scrap steel doubling I think there could be a lot more sources for that that could help ease that burden of trying to find that resource.

GEN. WILLIAMS: Yes, Derish.

MR. WOLFF: We tend to be U.S.-centric. I know you're not at OBO but I think we also want to look at what's happened to steel prices in the EU, in

European terms. It may be that some of the rise was caused by the declining dollar.

We're going to see more as the Chinese are heating up the world economy and as supplies are in short supply and as we're a smaller player, percentagewise, than we once were -- we think of ourselves as the center of the team but we're not anymore -- you may find that in euros it hasn't gone up that much. I don't know.

But I'm saying I know you've had the problem in bidding. So it's something all of us have to watch that, as Americans, the economy relative to the world starts shrinking we're going to face more and more of these spikes out of our control.

GEN. WILLIAMS: Okay. Good discussion and good feedback. Are there other comments on this subject, rising prices of steel? It's a concern of ours, obviously, and we appreciate the feedback.

Moving to another area that's connected to the 9/11 aftershocks, Homeland Security, we have a small piece of it but it's not -- you know, I always have a question or two of my own so it's not in the

book so don't look in the book for this.

This chem/bio matter, how do you see this?

How it is impacting toward the business on the design, on the build-out, the functionality, operational? How do you see that? Has there been any -- does it fit in any of the existing work that you've run into, Joel? Derish, are you running into it?

MR. ZINGESER: I can tell you that we started a job of some significance. The day we started it, it was a very prominent federal authority having jurisdiction said, oh, I didn't think it was going to be like that. Stop.

So I think everybody, even though there were drawings and there were bids and everything was put out there, I think there's still some questions as to what we're doing and why we're doing it and how we're going to do it. But I have no expertise other than to look at the drawings and try and do what you tell me to do.

GEN. WILLIAMS: Derish, are you running into it?

MR. WOLFF: A little. I think one interesting thing as far as (inaudible) very involved in this (inaudible) and you say we're not making enough progress. (Inaudible) We've done some work (inaudible) and some of the new designs along with the (inaudible) cooperated. And he's worked for Homeland Security. I don't know if, Harold, you've seen it more.

MR. RITTENHOUSE: Three meetings ago we discussed this a little and the issue then was compartmentalization of areas. And I think that there has been a lot of advances by Battelle, specifically, and a lot of mechanical engineering firms are trying to get into it. I think from our analysis on the topic Battelle has been by far the furthest along trying to develop.

And a lot of this is troop-oriented and then adapting it to buildings because on a lot of -the three areas: the front door lobby area, the mailroom and loading dock area are the two or three, depending on how the building's laid out, the primary areas for penetration, if you can separate those out.

And I think that's what we've seen mostly in industry is that compartmentalization and positive pressure of those areas so that it vents outside.

And then you have your work area and that's on a different system. And I'd say, and again this is not my area of expertise, but just in being involved in so many of these type projects that is where industry appears to be.

They're trying to get some more, you know, the filtering, the detection route, but as you filter detect you increase the area of, the gross area of the building and not the net area of the building so that become a huge problem. The size of the equipment, et cetera, and the drop in the efficiency with filters.

And so I think at this point in 2003-2004 because we're just starting to design for it you're going to see still more compartmentalization rather than detection and filtering.

They're making advancements on the scientific lab and on the military soldier level but not on the whole building level as of yet. I'm sure

there's someone, perhaps in the audience out there, who disagrees with me but practically, putting it into a building, I'm not seeing it yet, unfortunately. From development to implementation takes a couple of years to get it signed but they're studying it but it's just not, I have not seen any implementation yet.

MR. ADAMS: Perhaps I can't tell you as much as I know because there's some, with some of these areas, some of these are very sensitive to clients, but we are working on some projects where chem/bio is an issue and it takes a lot of space for the filtration, a lot more space than one would normally plan for in the mechanical area.

It takes often a completely different way of thinking about the sources of fresh air and ways of getting the fresh air where often it's being taken from fairly easy to get to places. So it can add significant dollars to the projects.

There are simpler things, especially as Todd says, the compartmentalization. Often, the facilities just simply don't have the ability to

compartmentalize and to shut off areas. One of the big things is the ability to just shut down systems and not be bringing in and circulating products in case it gets in.

So there's certainly a need to -- some of it can be done with controls, rethinking controls so that you do have more ability to control areas and compartmentalize areas. That's often the fastest fix but when you get seriously into it, then where the art is and the science is now it can take a lot of space and a lot of extra cost for the construction.

GEN. WILLIAMS: Do you have a question?

UNKNOWN SPEAKER: We had a publication from (inaudible) air-conditioning and the doctor committee was appointed and they certified a hundred pages on chem/bio and how to create special breathing systems that starts with water, gas, electricity as well as HVAC systems as they are identified. That's a (inaudible) document to follow and also to identify

GEN. WILLIAMS: I guess where we were coming from, we all got piles of papers. I'm just

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how (inaudible).

trying to figure out how we move ahead with implementation. Some of the issues of cost; some of the issues of moving ahead with it. And I know that because of the nature of this we can only be limited here.

But this is an emerging issue of ours. We have to make certain our standard designs are tweaked. We said it's easier to deal with the new than it is the existing but with 260 embassies and missions around the world we have a big problem.

That's the existing inventory. So to try to address it, partially address it, or whatever, becomes a function of space, the adequacy of the system, and whether or not all the rest of the building that we can support this is in place and right.

So it's an issue that we don't see from this government's point of view any fix overnight.

We're working at it and we know it's just a problem.

And we're working along with it and I think I can appreciate everything that is said but I don't think together we're there yet. Is that pretty much the sense of it?

Okay. Let's go to, and Bill, you can be prepared to speak to this, Bill Miner, the ISO 9000. Is that yours, our standards?

MR. MINER: It's actually related to the what's perceived to be a growing trend of using ISO 9000 certification.

GEN. WILLIAMS: Hang on, Bill, I don't think the reporter -- can you speak a little louder, Bill?

MR. MINER: I think it's really a construction-related question but my understanding is it implies that there's a trend in the construction industry to use ISO 9000 certification as a way of prequalifying or certifying that our contractors have a recognized quality assurance program in place.

And I think the question to the panel was are you seeing that being a measure that's being employed in this country. I understand it's fairly prevalent in Europe but I'm not sure it has caught on much here.

GEN. WILLIAMS: Do we understand the question and the concern? It has to do with quality

assurance.

MR. MINER: Certification.

GEN. WILLIAMS: What's your views?

MR. ZINGESER: I'll just start. ISO 9000 certification is a subject that's been around for awhile. There's no question about what it means. It definitely is a program that does recognize quality organizations and it also is somewhat onerous, shall we say, because it requires a process, procedures that cost money to be maintained, kept in place and so forth.

where it looked like more companies were making investment in becoming ISO 9000 and it sort of waned. My opinion, this is personal, is that for the most part the quality management programs that, quality companies have put in place have sufficed whether they be ISO 9000 or other TQM processes or pure and simple the Corps of Engineers, three-phase quality management program, which is generally what's used in the government, by the Navy, the Corps.

It's our company's program. We have a

quality assurance program. It's at three levels and then we have the three-phase program that we use. There's no magic about it. It works. It works very well if you have good people who know what they're looking at looking at it and documenting it and staying on top of it. That's what it's all about.

The 9000 program goes beyond that into other areas. I don't honestly know what the trend is, shall we say, in this country. Maybe some others might comment on that. I haven't heard much about it of late.

Now, in Europe, of course, ISO is much more prevalent in Europe anyway, having more commonality with the standards that are used there. But there is also part of the regulatory system in many countries in Europe recognize or provide the value to ISO 9000 certification that we don't have here in this country.

And the way that worked was if your company was ISO 9000 certified then the building inspector didn't show up. It's as simple as that. I mean, that's saying it in simple terms. But you were

operating under that system and you had certain authority to self-certify what you were doing.

We have a different system in the United

States and I don't know of any state that would allow
you to self-certify against the building code. So

there's probably less incentive. But I think that's
about it. And if somebody else know something more.

GEN. WILLIAMS: Yes.

MR. THOMAS: Just a brief comment following up on what Joel was saying but BCEC a few years ago had an opportunity, I guess, to take a more aggressive stance on this because we were part of a larger international organization, known as FITEC, Federation of International Consulting Engineers based in Geneva.

And they were pushing, of course, they're European based, and they were pushing quite hard for us to become, us being the community of consulting engineers in this country, to become ISO certified.

We looked at it quite closely, ANSI was the opportunity where we could actually sit on the board of ISO and have some impact but it didn't come from

our members because, as Joel mentioned, they had quality control methods in place that were working well.

There was a formal peer-review process that we were using that works well. The old TTN days, the leftovers from that were working well, whatever reason, the consortium, if you will, of what we're using seems to be working and they didn't see the value in it.

I mentioned earlier that most of firms are relatively small and they really couldn't see the value in a competitive environment because it costs a lot of money to maintain. So you have larger firms that might be doing it and smaller firms are shying away from it.

And as we talked about before the design group is no longer just a prime design or a prime contractor getting the work done. It's a number of organizations. Unless you have everybody on board it's not going to get off anyway.

So long story short, I guess, is we opted not to do this and I don't think it's become

prevalent in this country at all even though there's still substantial pressure internationally to do something about it.

GEN. WILLIAMS: Excellent. Yes, Todd.

MR. RITTENHOUSE: Just one from the design side, we looked at it as well as many others and if you look at certain history, seismic design became prevalent when the insurance industry demanded that you do something.

And that was the big carrot, so to speak, or the stick. I'm not sure how you look at that. If you don't do it you won't get insurance. If you don't have insurance you can't build kind of approach.

And there has to be, as Joel said, that cost/benefit. If you can say I would get more projects if I spent the money to get ISO certified and I looked into this one fairly heavily. If there's a payoff just spent a lot of money for all these (inaudible) processes. If there's a payoff at the end we're only going to give projects whoever, to hospitals or embassies to ISO certified, well, then

you're changing the field.

And until something like that happens you're just not going to see it in America the way you have seen it in Europe. In Europe you have to have it. If you want to do business here, whether it's Boeing or engineering or whatever, if you want to do business here you have to have it.

It's not the rule of the land of the United States and so we're not going to spend the money because we have the quality assurance that Joel spoke of.

MR. THOMAS: I was just going to add I think in many cases the ISO certification means a great deal when you have a repetitive thing that you're either providing as a service or a product. In this case with the professional design industry, if you will, it still is pretty specialized.

You're not -- you're not going to design a widget all the time when you can perfect it. You can perfect a process but that's very hard to get your arms around and that's another reason I think that it's kind of failed at professional service levels as

opposed to the manufacturing level.

GEN. WILLIAMS: Okay. Yes, Harold?

MR. ADAMS: The only place I know that it's really taken hold in this country is with anyone who wants to work with the automobile industry. The automobile industry, I believe, is requiring it. You know, several years ago there were firms like the Smith Group, and other firms in the Detroit area that do a lot of work for the automobile industry. And they were the only A and E firm that I know of that went through the ISO process.

GEN. WILLIAMS: Derish.

MR. WOLFF: All European operations and most of (inaudible) subject to the ISO. In the U.S. I think only one is. It's interesting how it emerges. It emerges in part because with the supply chain once you're in this (inaudible) once you're ISO certified it's easier for you to deal with the ISO purveyor. ISO 14,000 (inaudible) so you almost force it on your vendors and consultants simply because it's easier for you to process. That's one thing.

Secondly, it's very European in the sense

that, and this my own personal criticism, it's much more process oriented than technical. So it's more how you file your papers. They come in and audit whether in fact you had six -- if you guaranteed to have six technical reviews and you had five you would be in violation of ISO.

Funny how an elite design organization in the world at one time, (inaudible) in Sweden had never had one error. They were really on the cutting edge. They were working for contractors using bid prices. And they had never had a claim against their insurance company.

They went ISO and had about three claims in the first year they were ISO certified. And the reason is, it sounds funny, and I was very humorous about it then, but what happened was I believe they substituted their quality, their TQM for the process. They only had so much money to spend on quality control and they began spending it on auditing their paper flows rather than auditing their critical design. So that's a real issue.

But it's common ISO 14,000 or 1400, which

is the environmental one because you get the whole supply chain. You won't buy from someone who's not ISO -- so in that sense, it works. And it doesn't work in America for the reasons you said. But I think it's not a good substitute for quality control.

GEN. WILLIAMS: Are there other questions? Yes, Ida.

MS. BROOKER: The Boeing Company is split on it. The supplier of products going into are the products that we sell, parts going into products we sell are ISO required to be certified.

The other side of the house is the nonproduction side of the house and that's a whole separate division of the Boeing Company and they're not required.

One of the reasons why we don't have ISO requirements for the construction industry is because there aren't enough companies who are ISO qualified.

And if you start demanding that kind of certification then you reduce your availability.

And we did not find that it was as good an aspect than the regular quality standards that the

construction industry has been applying. We're much more concerned about the safety process within the construction industry than we are, that the process by which they measure whether or not they have quality.

And again, Derish is right on the mark about where do you spend your money? Do you spend it on monitoring the process or complying with the contract? And we felt that the ISO in the construction industry wasn't doing what it was needed to do.

GEN. WILLIAMS: Are there any other comments. Bill, do you have anything to ask about? Either Bill?

MR. MINER: No, sir.

GEN. WILLIAMS: Okay. Mattie?

MS. MATZEN: I don't.

GEN. WILLIAMS: Okay. This has been very helpful because obviously we are noodling it and just really needed to know where you stand. And I guess because we're in the international community so that's important.

Let me move to operations and maintenance. Those panel members who own what they build, even if you're not an owner and you might have some follow-on O and M responsibility, particularly in that first year, what are you seeing in the quality -- you won't find this in your book, okay. What are you seeing in the quality of O and M staff in place or available?

Do you have the same problem with quality, O and M folk as we do with building?

MR. ZINGESER: What do you mean by that? (Laughter.)

GEN. WILLIAMS: Well, we talked a little bit earlier about the graying workforce.

MR. ZINGESER: Oh, okay.

GEN. WILLIAMS: The scarcity of resources.

Joel will always make certain he keeps me honest
here. But are we seeing something similar or
different or is there no problem? Do we have an
abundance of good O and M types or whatever?

Derish, you've had some follow-on with your contracts I know, and Ida you've had buildings and things. So where are we?

MR. WOLFF: Are you looking at me?

GEN. WILLIAMS: Yes, I am.

MR. WOLFF: Well, I think one good sign, maybe this seems self-congratulatory, there's more outsourcing going on and even I think you get more professional people who spend -- the problem you get into with O and M everywhere, at least through the hotel chains, it's a dead-end street.

So I like the whole outsourcing only because it's a career for someone. Somebody's got to be head of an O and M company. Big difference from being a chief janitor in a school. So I think that's good.

I think the thing that really frustrates me and I think is that we have this huge body of knowledge about building and we have all these records and we have \$35,000 computer equipment that this seems to me so easy to build up a record.

For example, you take a whole hotel chain like Marriott, they should know which elevators to buy. They should have a perfect record of the repair costs, the lifecycle costs. And I'm not seeing the

progress in that. That's what bothers me.

It seems to me we do -- I think we're doing as good a job as we ever did on that. I think we need to do better. There's so many -- that's where computers and that's -- we're not setting up systems, starting with the architectural cuts. They would be so easy to monitor now. We should have a huge database.

GEN. WILLIAMS: Exactly what we've been talking about in our operational reviews is that it should be fairly simple to maintain things because we have so much knowledge, so much information, I should say. Are there other comments on this subject? Yes, Bill, Bill P.

MR. PRIOR: Along the same lines we go up and build these high-tech buildings in places where it's not the norm. And many of the things that we require to maintain them are high-tech and finding those specialty crafts, did I hear you say basically outsourcing those sorts of specialty works is the answer or is that what you're finding in your own work?

MR. WOLFF: Yes. I hate to be self-serving but it's not a large part of -- yes, I think it's an ideal thing to outsource because there are people who really worry about things, like refrigerators, when you started to outsource maintenance.

The trap you get into in an embassy or hotel, in any large company is it's not a career for people. If you're an outsourcing company it's a career. So I think that's the biggest single plus.

GEN. WILLIAMS: Yes, Mattie.

MS. MATZEN: I'm wondering -- maybe this is this is a harder question. How do you keep track of your space and how it's being used? And I have a homework assignment on that and I was kind of waiting until today to collect some information about how to answer it.

MS. BROOKER: You're supposed to keep track of your states and options?

MS. MATZEN: Well, we do know the buildings and walls are going to be in a certain place and the stairs and doors and so on.

And our facilities managers are so busy

maintaining the building that when we do do some changes, we do relocate people, I'm not sure that we get to keep good records. And our records are very important to us in the long run. Do you have a way that you manage them?

MS. BROOKER: Not yet but we're working on it. We don't have good records to start with. Our buildings, the newer ones, great, no problem. The ones built during the Second World War we have a pretty sketchy background on what is there and what was there, and what is there, that kind of thing.

We're right now building that. As mentioned a little earlier, offshore developing all of our CAD drawings for that purpose. We've initiated a new program to do a maintenance program where you have, you gather the history.

Yes, we have a lot of information but it's not in one place and there's a lot of tribal knowledge that is lost when people leave. They are carrying it in their head. There's no real documented history on the functionality of a particular building. That's just not there.

So what we're having to do now is start from scratch and put all that information into a database and determine the quality of the upkeep that we want and then start tracking -- first of all, we want to do some planning on what needs to be done and then we're going to go through and start gathering that information, understand the functionality and the cost of ownership of just like, say, elevators.

Which elevator is the best one? Well, we have no idea because we don't have any -- we haven't gathered all the information into one place to be able to do the analysis. I know that's a bad thing to have to admit to you but I don't think we're alone in that.

I think there are a few of us that have huge numbers of facilities that we should have been able to do that kind of thing but before the development where we are now with the computer age we haven't been able to gather that information. So we're starting to do it now.

MR. HOCHULI: Is that a commercial package or in-house?

MS. BROOKER: It's commercial. And I, again, am going to welcome anyone who would like to come to Seattle and get a demonstration of it although I might be able to do a demonstration over WebEx. And I haven't gotten a demonstration either.

The last thing, you all were going to come out and see me, I was going to get a crash course and then that didn't -- we had a zig and a zag.

But I think there may be an opportunity to set up a WebEx and they are very happy to do that.

Just to see what they're doing and how it works and how much information is already in there because they've started to manage some of the sites.

We have buildings that are vintage from 1935 through 2004 all on the same site. And they're starting to get all of that together and they're starting to demonstrate how it works. So I think that might be a very useful demonstration for you all.

MR. HOCHULI: Would it include the acquisition of the property or the lease agreement or strictly maintenance?

MS. BROOKER: No, strictly maintenance.

That part is maintenance. There wasn't a question in the packet that asked for tracking of acquisitions and I will tell you that we do not have that on a computer.

Tracking acquisitions for us is a very confidential matter. And we, a lot of times, do it with a third party so that our company name isn't associated with the acquisition because when Boeing walks into a locale the price goes up. And the price of all adjacent property goes up.

So what we do is we don't have any of that on our computer. It's all on need-to-know and a lot of times we use a third party and different third parties so that our name isn't associated so we can do something.

And a lot of times it's a what-if scenario. We don't know that we want to do that but we certainly want to investigate what the options are. So there is no database for that because of the fear of it getting out.

So consequently, I think an Excel

spreadsheet or something like that but there is no -it's once the acquisition is made is when we start
the process.

MR. THOMAS: General, I think there's an opportunity for the A/E industry here that maybe we haven't addressed and that is the geographical information systems being used in many municipalities and governmental agencies around the country, certainly relating this to the infrastructure system.

I don't see why it couldn't be done in the A/E industry with builders as well if we can get past some of the intellectual property considerations, copyrights and what not.

It seems like if you could perfect something like that and have build down features that are going to give you the information on that elevator in that building or if you're a maintenance person, you're a facilities manager and changes evolve or changes in materials or whatever that it could be maintained and carried out.

The GIS systems today are just wonderful in that regard and I think that we could certainly

extend at least that philosophy to the building environment.

GEN. WILLIAMS: Yes, Mary.

MS. LEWIS: General, one of our favorite and most progressive clients is a company in the U.K., Yorkshire Water, who while a completely different business from yours, they own 300 water, wastewater treatment plants.

And they have evolved their maintenance information into a very impressive asset management program that they developed internally and they have identified every piece of sewer line and wastewater treatment plan that they own throughout Yorkshire.

They maintain all information about the status and condition of each facility and they have incorporated real discipline within the company to maintain that so every time there is a pump replaced or some change it goes into the database.

And actually they use it as a planning tool. They are then able to, knowing the condition of their equipment, they are then able to plan for rehab, renovation, new construction. And so it has

become a really powerful planning tool for them.

They have been able to set this up for 20-year periods and they do the same thing that you do is five-year look ahead but they've really been able to structure this out over a 20-year period based on this database that they've created. They're one of the most aggressive we've seen in asset management really.

GEN. WILLIAMS: Okay. Very good. Are there other questions or comments on this subject?

MR. MINER: The thoughts are very good,
Mary Ann's and the prior comment about using GIS
technology to structure the database. One way that
we could try to sort of build up a quality database
would be to take a good look at our as-built
requirements.

I think for many years they have just sort of been redline markups of what we've given people but that's the place where you have to capture the information of what you have, and as for the format that serves you long-term in your operation and maintenance of the facility.

GEN. WILLIAMS: Yes, Joel.

MR. ZINGESER: We're sitting by anxiously waiting to hear the announcement of award of a renovation of the U.S. Supreme Court building. A lot of very strange and unusual things in the procurement process of that job and in ultimately in the execution, most having to do with security.

But one of the requirements in executing the construction and modernization of the building will be to have an on-site CAD coordinator, CAD administrator. All coordinated drawings are going to done on-site. No documents will leave the site for any purpose.

It remains to be seen if that actually is the way they want to do it because there are reasons that things do have to leave the site. But all of the mechanical coordination, electrical coordination and everything will be done on-site with the dedicated CAD system and the as-built drawings will be generated in CAD format on site.

Now, there's a cost. I mean, it doesn't come easy. We'll have a full-time CAD administrator

as part of our security, on-site security system.

But if you want to end up with a legacy instead of legacy documents that is the way to do it. And it makes all the sense in the world.

I can tell you today in the Supreme Court, their standard of care is such that you could eat your lunch off the mechanical room floor. That's how well they maintain that building. But anyway, that's an approach.

GEN. WILLIAMS: Very good. Are there other comments on this subject? This is one that has given us some concern. Yes, Jim.

MR. THOMAS: Just one brief comment based on what Joel just said. I think it's going to be awfully hard to go back and retroactively accomplish something like this. I think it's a great opportunity and I'm glad the Supreme Court is considering something like this.

I think it almost has to be from the Day

One standpoint try and do everything thereafter. On
the GIS side of the house, we were involved in a few
projects, major municipalities and the hold really

was using the as-builts.

As-builts are only as good as the person out in the field changing the drawings. And they spent an awful lot of money working with GIS system. The system worked great except what was on the asbuilts was not what was in the ground. So I think it's a great opportunity to go from Day One. Following retroactively is the problem.

GEN. WILLIAMS: Okay. Rich, I'm going to have you tackle Number 18. I'm sure you've been waiting all day to explain that. So tell the panel what are your concerns.

MR. SMYTH: There is a phrase short dollars for long projects. It's nothing new to anybody in private industry. You don't have enough money for what you need to do.

So what I'd like to get on this is

particularly for those of you that are managing a

number facilities is really another way of saying

what are the priorities? What are the priorities?

How do you determine what are the M and R priorities

that you have when you're facing -- when you've got

extremely limited resources? When you've got far less than what you in fact had budgeted with (inaudible).

GEN WILLIAMS: Can we hear his concern?
Yes, Mary Ann.

MS. LEWIS: Well, value engineering is always an answer but --

MR. SMYTH: Well, I mean, we focused --we alluded to the phrase in there multipliers, force multipliers in there. Is it investing in your workforce? Is it investing in your roof? Is it investing in your tools?

What grabs you? You in the private sector, what grabs you? What do you see as the private sector in trying to get a handle on your M and R situation when you have funding shortfalls?

MS. LEWIS: There are tools to help you make those decisions. The decision will be different for every single project, every single building. And I'm kidding when I say value engineering is the answer but there are tools, scientific decision—making, weighted analysis, et cetera, where you can

sit down and define the criteria and rank those criteria, decide what is most important, put costs to them and determine where are your priorities. And there are just scientific methods to do that and tools that probably owners should be using.

MR. SMYTH: Well, I think we're aware of those analytical tools that are available but it was just like the question came up when we were discussing the ISO 9000, is it worthwhile?

And what we're talking about with the tremendous spread of facilities that Gen. Williams has to fix, the 260 some odd installations, you're trying to balance these items with a budget in some cases of, one element of the M and R budget, for example, is only about \$22 million, one element of it.

Trying to divide that up, going through some scientific analysis, we probably could be finished up with the analysis by August of each year giving one month to spend the \$20 million and in the meantime we've got the continuing deterioration of the facilities.

I'm looking for a gut reaction, something I can say, well, according to our advisory board we should be investing in human resources. We should be investing in preventive maintenance. We should investing in rehabilitation projects. I hate to try to and exploit you so shamelessly on this but -

GEN. WILLIAMS: Yes, please. Go ahead.

MS. BROOKER: Yes.

MR. SMYTH: Thank you. Thank you, very much.

MS. BROOKER: That goes along with my answer, it depends. What the issue here is it depends on the project. What you have to have is you have to have a knowledge of what you need to do and it depends on are you doing it preplanned or are you doing it by fighting fires.

The problem with -- I've got to assume that the problem in the past has been you repair the roof when it leaks. The point here is do you want to repair the roof before it leaks.

In our case, we have one priority. That priority is keeping the production lines running.

That is the number one priority. It's not the only priority but it's the number one priority. So if it is in preventive maintenance that's going to keep that production line running that's what we invest in.

If it's that we need to have a tooled team to be able to implement a lot of preplanned maintenance issues, that's what we -- it depends. It depends on where you are and what you have to do to keep the ball rolling.

You can have like a choice of whether you're going to keep up the landscaping or fix a roof. That's not an easy choice, especially if you've got, in our case, a municipal government that says if you don't keep up your landscaping and make your buildings look nice we're going to shut you down. And they get real feisty about that.

Well, the fact is you have to know what your priorities are and you have to take those priorities and know what it is that you have to do so that you can make a choice.

But we had a leader in our organization.

His name was Mel Stamper and he was quite a character. But he had a philosophy of unks, and unkunks. And what unks are are unknown quantities and unk-unks are unknown unknown quantities. So you have the things you know that you know and the things that you know you don't know.

Those are okay because you can plan for those. It's those ones you don't know that you don't know that are going to get you every time. So as long as you can keep from having those unk-unks the unknown unknowns then you can make the choices that you have to make and some of them aren't easy but you sure would like to have the opportunity to make the choice rather than have the roof come down on your head and you say oh, shoot. If I'd only known it was the 25th year of a 15 year warranty. But you have to know those things.

GEN. WILLIAMS: Yes.

MS. LEWIS: This goes back again to asset management. It goes back to knowing everything about your organization and helping to make those decisions.

MS. BROOKER: In this case, the operative word is management rather than monitoring.

MR. SMYTH: For both of those remarks, thank you very, very much. I'm grossly paraphrasing then your real investment should be in knowing what's going on. Thank you, very much.

GEN. WILLIAMS: One last tack on. Thank you, Rich.

MR. THOMAS: Just one last tack on. I think the problem is as Ida says the unforeseeable site conditions that varies per site. And I would say if you were talking about a generic vulnerability around this country then you're probably talking, and you girls can certainly help me out here, either the roof or HVAC controls most cases it would be the top priorities in terms of fixing and repairing the facilities.

You're in a different ball game. Just like Ida said, when you've got a top-flight facility you better watch out what the landscaping looks like or the presentation or the security or any number of things that are affecting your building.

177

So it seems like to me when you get down to a point where you were trying to rank those and then add some kind of a weighted ranking that you can go from there it might make some sense. But I think you are atypical. You're not like the plain vanilla building.

GEN. WILLIAMS: One of the reasons that our questions are so wide in range and I know, the panel obviously they know this and those who have been attending regular at these panel meetings. And some of you who read our literature will know that our responsibility is probably one of the most comprehensive in government because it's all over the world and not necessarily the nice places of the world.

There's only a few Parises and Romes and Pragues. I can give you some Dushanbes and Kigalis and those kinds of places. Notwithstanding, the fact that we have Baghdad, Tripoli and other places in the wings.

But the 260 locations around the world, this is where we have missions and embassies. We

have in excess of 15,000 properties at these locations and those properties are roughly valued at \$12 million. That's the kind of holding responsibility that we have.

And situated around and sprinkled throughout we have construction ongoing or projects under management that exceeds \$4 billion. So when you combine all of that responsibility numerically and think about the responsibilities to buy all the property we have eight to ten searches for new sites all the time and these are always a million, multiple million-dollar sites.

As Ida pointed out, when Boeing comes they like to shield that because the prices go up. We would like to be able to shield the fact that the U.S. government is there but we can't. So we run into the heavy -- we run into sites that cost a lot of money. And obviously we're looking for sites that work for us. So this is a very difficult side of our business.

So the operations and maintenance is a big piece. We have an aged inventory. That's one of the

reasons that we have to get our people out of these places. Yes, most of them are unsafe but they are also in many cases dysfunctional.

So there are 150 building that we have left yet to do, the combination of these things: too small, overcrowded, things don't work, et cetera, et cetera.

So Rich's problem is he has a tremendous backlog which he was nice enough not to get into. He has almost a billion-dollar backlog. In my old Corps days we used to call it, when I ran the O and M operation for the Army, this was called B-MAR, backlog of maintenance and repair, that we collected all of the installations around the world.

So he has a big B-MAR problem that resurfaced about two years ago. And we're trying to put some illumination on it. But obviously, it's not going to go away overnight. So his problem is what does he attack with the dollars he has.

And our Congress has been forthcoming in trying to help us with it. But the hole is so deep and the amount of it is so high until we can work

through the replacement, that's why we've put a lot of emphasis on the new buildings.

That's why we have gone in the expeditious mode of trying to look at standard designs and everything else. We'd love to take 18 months to have our design world take a long time but we don't have that opportunity to do that.

So we are looking at every possible way to make this go and that's what is expected of us from those who provide resources. So when you combine the big mission of buying and selling or disposing of properties, we're disposing 50 or so projects a year, or at least we're looking at that amount, millions of dollars, buying from eight to ten properties, leasing hundreds of properties, both commercial and residential and then trying to maintain these 15,000 properties.

Can you imagine just putting a smoke detector in all of these? People write me every month and they keep sending out fire extinguishers. I say when is this going to stop? (Laughter.) And we're going to sunset these fire extinguishers and

smoke detectors. I mean, that's enough to send a guy home with a headache.

But we're moving along here. So I just wanted to give everybody a sort of a sense of where we are because you might think, gee, why are we talking about a little peanut like that? I came here to hear about design and construction. Well, it's not a peanut to me. This is a big, big deal and we're trying to work through it. So I know you knew all of that so I just wanted to throw that in once again.

At our first meeting, second meeting this panel had to -- come on back in here Harvey because you have to stand this one up for us. We were toying with the notion of our administration, OMB was looking at the whole issue of cost sharing.

The days of the free ride have been over a long time in the private sector and now it's time in government that if you participate and live and work someplace you need to find a way to try to help participate in the paying for that building.

So we, being the property manager, State

is, and then, of course, OBO having the responsibility for that we moved forward with the notion of cost sharing.

As you know, we had a nice discussion here and you told us to avoid the notion of rent because that would get us into a lot of issues. And Derish kind of led that debate for us. And we were able to successfully sell that.

We constantly referred to those up the way, including the Congress that we had vetted this with our Industry Advisory Panel, which they appreciated. So we have now in place, and everyone has signed up for the notion of the concept, at least the wording of cost sharing.

We still have some hurdles yet through various bodies to deal with but we've gotten support from the Administration and we're moving ahead with that. And we would like to publicly thank the panel for its work a couple of years ago when we were trying to put this in play.

Now, what this will give us when we can get it finally resolved in a couple of corners this will

allow the available -- what we're looking for here is for the organization to have a steady stream or somewhat of a predictable stream of capital wherewithal so that our program could be a little bit more ordered than it is today.

To the extent that we could start 12 to 15 new compounds a year on an average, closer to 15 than 12, and do this for a period of time and then sunset this business and have the 150 new compounds built.

We are in the mix on that. We have to dialogue with various parties periodically on that, and I would like to report that we are all the way there but we are not. We have made a quantum jump.

But the most important thing is we have gotten support out of this building. Our Secretary has spoken to it, and you have probably heard it in all of his testimonies. He's talked about that. OME is supportive and we have a smattering of support, I think, in other places as well.

My personal view is that we will get there.

This is a big, big right turn in the road and our

problem right now is where we want to draw a little

bit more from you today is those of you who have been close to this either on the tenant end or on the owner end what sort of advice could you give us in dealing with the customer who has never paid for nothing and given you some pushback.

You know, it hasn't gone too far with me because most of you know me. It's just this is what it is and this is where we've got to go. But how? What can you arm me with to help deal with reluctant -- that's a good word. I read reluctant somewhere else a few days ago -- reluctant tenant to participate in this wonderful program called cost sharing.

That is, if you have six spaces out there and they all happen to be unclassified, we have a price for one classified space, you pay that amount. If they are classified you pay a certain amount.

If it happens to be someone where you don't need a space but you just need the coverage of our security, et cetera, that's another cost. How would you arm us with some approach to dealing with these reluctant customers?

MS. BROOKER: Approach it with a solution. And a solution is that, number one, it's not a surprise. You lay the foundation by saying that the next time you put your budget together, please be sure that you put a line item in there for the cost-sharing program that we have worldwide where if you're going to occupy, this is going to be the price.

GEN. WILLIAMS: Sam Bleicher is going tell you how well that's working in a few minutes.

MS. BROOKER: Well, you're going to get killed for a while but the whole point is that you've got to be able to give them enough time to put it in their budget so they've got something to pay it out of.

If you're going to tell them, oh, by the way, starting first of the month, and we don't care where you get the money, but you're going to -- they're going to kill you.

But the solution is enough warning that they put it in their budget so it's a line item in their budget that they can use. Because otherwise

they can go get rent somewhere else but they're going to pay. I don't know whether you talked at the very beginning whether it was mandatory or elective --

GEN. WILLIAMS: I didn't get into a lot of that but we have a lot of laws on the books, such as co-location waivers, et cetera, and a lot of the government entities because of what they do, you may not just be able to go down and buy it from somebody else. Sam?

MR. BLEICHER: I agree completely. In fact, we have pursued that effort and we gave them advance notice last year to put money in their fiscal year '05 budget and OMB included items in their budget.

We spent most of last summer trying to determine what the amount would be for each agency based on what kind of positions they have overseas, how many. It's much more difficult to figure out than you might think. A couple of the agencies have lots of people overseas, don't have a single consolidated personnel list, don't really know how many people they have overseas when you actually

scratch the surface. So that was an interesting exercise.

But we did give them all numbers and we gave those numbers to OMB and OMB told them to put those items in their budget for fiscal year '05. Of course (inaudible) budget on its desk now. And presumably we will have the budget maybe in October, maybe in December. Maybe February.

But when it does pass we expect that it will have these items in it. So we have done that and we're already starting on doing calculations for fiscal year '06.

We have found interestingly that at the working level the personnel and agencies are willing to cooperate and we've shared information back and forth to try to figure out exactly how many people there are and where they are, et cetera. At that level we've pretty much reached agreement with them, at least probably within four or five percent wherever the agency lists how many people you have and how much you pay and we really don't have a controversy about that.

The controversy is whether anybody should pay at all. And as you might expect some of the senior people look at and a chunk out of their budget and it really means they'll put fewer people overseas if they don't get an increase in their budget. Their budget looks pretty tight this coming year.

And of course you can make the argument that's exactly what they ought to be thinking about. This is the real cost of putting people overseas. So it is a very painful thing for a lot of the people who are involved in these programs because they see that their programs are going to be forced to make some really difficult choices but we are following that advice and I think it's helpful.

The opposition is not as widespread or as strong as it really seemed. Certainly, the General recognized right from the beginning you can't just tell people start paying more. They've got to plan for it and put it in their budgets.

GEN. WILLIAMS: And the whole purpose of bringing it up once again, number one, is the report I can tell you where we are with it because you did

give us some good traction on staying away from the rent formula.

We have stated per capital and that has stood the course. We had to explain it to a lot of people but it worked quite well. You realize that, I know the panel does, but particularly others who may be listening that this will be an enhancer to our prior program.

This whole concept is not, because there is some degradation but we would like to chart because we feel we have the capability and the lens wide enough now to commence with another five or six new compounds over and above the ten, eleven or so we're doing now per year and get us out of harm's way quicker.

So this would be \$5- to \$700 million that would be over and above what we currently have. So that's the impact of the program. It takes nothing away from what we are doing now. It will just allow us to cure this problem quicker which is the overarching objective. It's to get our people out of harm's way as soon as possible. So that's the

program. Any of the other staff members have anything else to add to that subject?

MR. WILMER: If I could -- again, you've already said, sir, and I'd like to emphasize that it is absolutely critical that this issue is brought before the board. They gave us their best advice and guidance, and I thank Mr. Wolff, in particular, for that.

I may have used that on the Hill with OMB. We've used it before the 30-some odd agencies and departments who will be part of this cost-sharing mechanism. I think it speaks to both the importance and respect that those agencies and departments have as do we.

So these are issues before you that we find important and difficult to deal with and we appreciate your input. It does have an effect. It truly does.

I think that we are -- if someone had said three years ago do you really think you will have legislation up on the Hill to do cost sharing for a \$1.45 billion steady-state program, I think if you'd

said that three years ago and in a former FBO he would have laughed at you. They're not laughing now.

As Sam has described it we do have, sometimes grudging, but we do have the support of the agencies and departments. This program is moving ahead and you were very important to that.

So as one who has to work on that program with Sam he's going (Inaudible) I just want to my personal and professional thanks for your -

GEN. WILLIAMS: And you can tuck that one away in your legacy box because it did get the legislation where it's supposed to be. And I think it's just a matter now of pushing it along.

We got good support across the board and that's helpful but I do want to deal with a truth in lending. It's not completely done yet. But let me tell you it's a quantum jump from zero. And we're very optimistic about that. This will do wonderful for every taxpayer who's out there who is concerned about our people oversees.

And the world is getting more difficult as we move and this is our way of saying we know we're

piling on ourselves but that's what we're serving for and we're willing to take on another five or six new starts a year in order to make that go. And we think over ten to 12 years, I think it's 12 years now, we'll have this job done.

Since, in my opinion, I've gone out for about 15 years, I figure that we'll be able to get all that done. And I don't want anybody to start writing and scratching and trying to figure anything out about that.

MR. TOUSSAINT: That's to let the last building be finished so you can -

MR. WILMER: If I could add one other thing, General, we're already seeing the effects of this program in a very positive way. One of the challenges that we've had on the planning side and therefore on the design and execution side, the cost control side, is that agencies were free to come in with whatever manpower estimate they wanted.

There was no cost or real accountability associated with that. We then had to take and program, design-build, get money for it, and execute

projects that sometimes, quite frankly, were not appropriately sized.

That's not the case now. What's happened because of the discipline the cost sharing brings to this, agencies are saying I really don't have that many people. I'm not going to have that many. So we have a far more focused disciplined process for actually defining the requirement. It's truly a program that's working even before the legislation has been passed. So it's very positive.

GEN. WILLIAMS: And we do want to ask you to continue to, as you interact with whomever you think it's appropriate, to continue to try to support this last piece of this. It is the path forward to an answer.

Just having everybody put a shoulder to the plow for just, not forever but for a few years, and then help us try to get this done. And it's all a matter out of digging out of a hole. And once we get out of the hole if we figure out how to maintain and work smartly then we can go back to one or two buildings a year and be operating a little bit more.

Are there other questions or discussions on that matter? Any comments from any members of the staff? Joe?

MR. TOUSSAINT: General, at our meeting with the facilities, our working group, we also presented the interior furnishings and there's a question I think that we had here that we're probably not going to get to. We have had a form of cost sharing with furniture and furnishings that we put into our buildings and this is by legislation.

We're not allowed to buy the furniture for our tenants other than non-State so we get into an issue of being reimbursed or having them provide the funding for us to buy the furniture that goes with the building that we design. And as you perhaps know, the interior furniture systems, systems furniture, is an integral part of the design and operation of our buildings.

We think that we made it a convincing presentation as to the value of the furniture system but there still is today and in the future this will be solved by the cost sharing but today we still do

have a problem of convincing people, our tenants, that the furniture we are placing in there is of sufficient value that they should not be bringing in the furniture that they could. I don't know if you have any of that sort of problem with any of that at Boeing? Do you have -- can anybody move in whatever they want in the space that you provide, Ida?

MS. BROOKER: There's only one organization within Boeing that can buy it so it all gets narrowed down. No matter who orders it it all has to go through the same procurement process. So therefore there is a way of making sure that whatever is being ordered, in fact, follows the intent of the space or the size of the space or the quality of the space.

It has to go through the furniture process and therefore we don't end up with walnut furniture in an oak office or wall to wall -- a six-foot desk in a five-foot office, those kinds of things.

So therefore, even though they have to come up with a budget, they don't deal with it. So it's a coordination effort but one organization does it all, does whatever, like a facilities organization has to

provide whatever the end-user organization has to provide, it all has to go through one organization that does it all. So if there's coordination or communication or standards or whatever, it gets focused.

MR. TOUSSAINT: As I said, that's today's problem. Tomorrow it will be solved and we wont' have this problem.

MS. BROOKER: Another problem is, too, that if you're moving into a new location and the answer is that you need new furniture to go into that space the chances are that they'll move in their old furniture if they don't have to spend any money on it, and that could be a problem.

GEN. WILLIAMS: What we're going to do now before I give the panel individually any final remarks, I'm just going to recognize all of the attendees who came out today. We are open. We advertise.

We moved to the larger room in order to accommodate you because what is taking place in the Department, particularly on the OBO side today is

open. We have shared everything that we know with you and we're delighted to have you come.

We want you to know what we are doing and so there's no surprises so when we deal with the private sector you know exactly where we're coming from and there's no misunderstanding. We have found this to be exceptionally useful for us. Our panel has done yeoman duty to support us. They work with us they're not in these meetings.

I think all of you know that this is all pro bono. Their associations identified them and they serve, and we are just delighted about that. We've had tremendous attendance at all of these sessions since we got started, and it's been a tremendous help to the organization and to me personally, because as I pointed out the responsibility is an awesome one.

And to know you have nine other partners who kind of see the same thing you do is very helpful. And I can say this about these individuals.

Harvey is a former member who has come back as you can see. He must be cooking something good

because he comes back to visit with us. So that's very important.

So I'd like to go around the room and recognize who you are and your firm and let you say hello as we wind down. Starting with the gentleman over on the left.

MR. STEVENS: My name is Donald Stevens.

I'm from Stucc On Steel Building Systems, Winchester,

Virginia.

GEN. WILLIAMS: Delighted to have you.

MR. STEVENS: Thank you very much.

MR. TATALOVICH: Michael Tatalovich with Einhorn, Yaffee Prescott.

GEN. WILLIAMS: Delighted to have you, sir.

MS. BAKER: Alta Baker, Safe Haven Enterprises.

GEN. WILLIAMS: Delighted to have you.

MS. PINZINO: Could you speak in the microphones, please?

MR. COLLINS: Brian Collins with Safe Haven Enterprises (inaudible) in Boston.

GEN. WILLIAMS: Thank you.

MR. CLEMENS: Eric Clemens, Graebel International.

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

MS. OLSHESKY: Janice Olshesky from Olshesky Design Group. We're a small architecture firm in Alexandria, Virginia.

GEN. WILLIAMS: Delighted to have you.

MS. BUSCEMI: Nancy Buscemi from Hinman Consulting Engineers. We're a small (inaudible).

GEN. WILLIAMS: Delighted to have you.

MR. MACKIN: Tom Mackin, HITT Contracting, general contractors. Anything you can do, General, to (inaudible).

GEN. WILLIAMS: How long have the clearances been in?

MR. MACKIN: Well, right now there's a suspension on clearances. We're not quite sure when that's going to be taken off.

GEN. WILLIAMS: I will raise it as an issue.

MS. LEONARD: Ellen Leonard, ABS

Consulting. We're a risk management consulting firm

and we also specialize in structural engineering and glass.

GEN. WILLIAMS: Nice having you with us.

MR. O'DUNNE: Hamilton O'Dunne with HNTP, architects.

GEN. WILLIAMS: Nice having you with us.

MR. SILVERMAN: Robert Silverman, Booz Allen Hamilton.

GEN. WILLIAMS: Nice having you.

MR. WHITWORTH: Ron Whitworth, STG. We just relocated to Reston, Virginia. We're a systems integrator, do a lot of IT work for the Department. We have about 400 employees in the Department and about 15 (inaudible).

GEN. WILLIAMS: Delighted to have you.

MR. RUOCCO: Joe Ruocco with Skidmore Owings and Merrill, architects and engineers.

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

MS. DIEHL: I'm Arlene Diehl. I'm with an (inaudible) Schneider Electric. Anytime you want to go generic design, just give me a call.

GEN. WILLIAMS: Yes, ma'am.

MS. KLOUSER: Hello. I wanted to say thank you very much for allowing us to participate. My name is Karen Klouser. I'm with Powerware Corporation (inaudible). We manufacture (inaudible) power systems and fire protection solutions.

 $\label{eq:GEN.WILLIAMS:} \text{Delighted to have you.}$ Yes, sir.

MR. BREGMAN: Jim Bregman with Stolitek

Management Incorporated. We're a construction firm

and (inaudible) corporation.

GEN. WILLIAMS: Delighted to have you.

MR. BAKER: Bill Baker, Structure Tone. We're a global general contractor.

GEN. WILLIAMS: Nice to have you.

MR. QUINN: Jim Quinn and I'm with Antiballistic Security and Protection. And we're certainly glad to be here.

GEN. WILLIAMS: Thank you.

GEN. WILLIAMS: Thank you.

MS. ANDERSON: Good afternoon. I'm Mary Anderson and I'm with Schnabel Engineering. And we're a geotechnical engineering firm.

GEN. WILLIAMS: Delighted to have you.

MR. MURPHY: Bill Murphy with Schnabel Engineering, also.

GEN. WILLIAMS: Thank you.

MR. BROWN: Bill Brown with Paige Southerland and Paige, architects and engineers.

GEN. WILLIAMS: Nice to have you.

MR. DUFFY: General, good to see you.

Michael Duffy with Leo Daly.

GEN. WILLIAMS: Thank you. Sir, on the next row.

MR. PITTMAN: Pascal Pittman with DBI Architects. Thank you, very much, for the opportunity.

GEN. WILLIAMS: Thanks for coming.

 $\mbox{MS. LEFFLER: Hi, I'm Jane Leffler. I'm} \\ \mbox{with the University of Maryland.}$

GEN. WILLIAMS: Yes, Jane. How are you?

MS. LEFFLER: Thank you for letting me join

you.

GEN. WILLIAMS: Yes, sir.

MR. SHEPARD: Ben Shepard with Project

Developers. This is my fourth visit. And I would

like to personally thank you for the leadership.

GEN. WILLIAMS: Thank you, sir.

MR. GATES: I'm Dennis Gates with Project Developers, Incorporated. We're a small woman-owned construction company specializing in construction of secure facilities.

GEN. WILLIAMS: Did I get everyone who's a visitor today? Yes, sir.

MR. FLUHART: Good afternoon. I'm Ben Fluhart from Regus Business Centre Corporation. I would like to (inaudible). This is my first visit and it's been very, very interesting.

GEN. WILLIAMS: Thank you.

MR. MORIN: Good afternoon. My name is

Chris Morin with Orion Management. We supply secure

logistics and technical security (inaudible)

Department of State. I've just returned back from

Iraq where we set up headquarters over there. Pretty

excited to be back.

GEN. WILLIAMS: Thank you. Security is a key feature. It's not exactly on my plate but I know whose plate it's on. Yes.

MR. WITKO: Brad Witko with Sorg Architects. It's nice to be here.

GEN. WILLIAMS: Thank you.

MS. SORG: Suman Sorg with my architecture firm in Washington. One question which you didn't get time to (inaudible) There's a lot of information out there on housing security and a surprising reason is because 40 percent of the new home buyers in this country are women and they're insisting on security. And there's a lot of changes in housing design which (inaudible) that we would be glad to share with you.

GEN. WILLIAMS: Okay. Thank you.

UNKNOWN SPEAKER: (Inaudible) Consulting Engineers. Building envelope specialist.

MR. SKELSEY: Last but hopefully not least, I'm Bill Skelsey with Hillier Architecture.

MR. HAINES: Tom Haines. I'm with GE (inaudible), part of General Electric's plastics

division using (inaudible) forced-entry resistant windows, doors and other security products.

MR. SHIRVINSKY: Adam Shirvinsky with EMSI.

This is my third time being part of this. It's been wonderful. Thank you, sir.

GEN. WILLIAMS: Delighted to have you.

Now, has everyone who is visiting with us had an opportunity to introduce him or herself?

We thank you once again for coming and please when Gina makes her request we're open and this is the largest building that State has so I don't know what we'll do if we get any more.

Let me say a couple of things. We do an Industry Advisory Day. That will be coming up. E-mail Gina. She can give you the date for that. We'd love to have you and your friends and neighbors or whomever attend. We had over 300 attend last time. And this is all very new.

Our operating policy is full and open. We make certain that, as a results-based organization, we would be totally open as you know exactly what is taking place, where we're going. It's no secret

about our approaches. And that's the whole purpose of this.

Everything is on performance base, whether you're a small firm, bring it on, minority-owned, however. We still want you to participate and we want you to perform. If you're the largest of the largest we want you to participate and we want you to perform.

And because we are protecting we have immense interest.

Teaming, as we talked about earlier today is very, very critical. And we would clearly encourage teaming from the standpoint of operating as a team for one common purpose and that is to get it done. We want to get it done as quickly as possible. I think you will find that we pay on time. There's no issues about any of that. So we just want a good partner.

As I said, we're full and open. The whole spectrum participating industry, come and participate. The whole spectrum from small to gigantic we want you to participate.

I do want to give now our panel an opportunity individually to say whatever they would like to say about the process, about the organization that they are advising or any other thing, starting with Craig.

MR. UNGER: Thank you, General. It is a pleasure to be here and certainly representing the design builders of the world to see the State

Department serve a very critical and complex sophisticated mission that you have.

Again, the feedback that I get here I also share with a lot of our members. I hope to be more helpful in the future. But this has been, again, I take away from each meeting more than I feel I contribute. So honor and pleasure to be here. Thank you.

GEN. WILLIAMS: Thank you for that. Ida.

MS. BROOKER: Basically, my comments are exactly the same. It is an honor to be here and I always take something home with me as well that I either put to use or investigate and consider and I've done that again this time.

So I can't tell you how much I enjoy being here and associating with such a dynamic group of people. I've got to say I like the venue of being on the same level looking across from you better but we do what we have to do.

GEN. WILLIAMS: Thank you. I understand. I miss that. Joel.

MR. ZINGESER: As always it's a great pleasure to be here and I am honored to represent AGC on the panel. The thing I just want to say is my term was over and you asked me to me to come back and I'm glad you did and I'm pleased to do that. You've got to hang in there, sir. We want to keep working with you. You're doing a great job.

GEN. WILLIAMS: Thank you, very much. Mary Ann.

MS. LEWIS: Thank you, General. This is my second time here and I just love it. Thank you so much. And representing SAVE International, which is the value engineering society, and we first had our very first big meeting with the General last September when he was awarded the Golden Shears award

by Congress and the SAVE International organization for the value engineering program at the State

Department which is so wonderful. Thank you for inviting me to participate.

GEN. WILLIAMS: Thank you for your participation. Derish.

MR. WOLFF: Well, everyone said what I was going to say better so I want to thank you. I've enjoyed it. It's amazing how we haven't gotten computerized maintenance improved yet and you moved us into this wonderful hall. But thank you, very much.

On a serious note, I think government is sometimes their own worst enemy in the sense they have very good programs and they hold it to some kind of absolute standard that the private sector does not.

And therefore they don't even measure the programs they have as doing very well and appreciate them. And I hope in that sense we help by comparing OBO's practices with the private sector. In many cases you're doing better than we are. And I think

it's very valuable to come to know that.

GEN. WILLIAMS: Thank you, very much. Harold.

MR. ADAMS: Well, General, I want to join all the others in thanking you for your leadership. You, each time, stretch us. I think that the dialogue and the questions that you give to us make us think about areas perhaps sometimes that we haven't thought much about.

And I hope that you all are learning and taking away a fraction of what we're taking away because I think we're all learning from this whole process also.

GEN. WILLIAMS: Thank you, Harold. Now, sir.

MR. THOMAS: Thank you, General. As you said, I am a substitute. This may be my first and only meeting but I feel privileged to be able to do so. I think like Harold I've gotten an awful lot more out of the meeting than I've contributed.

I even jotted down a couple of things while we were talking here during this day. And some of

the things that kept coming up time and again. And I think that really maybe ought to be your guide for the future in some regards.

We talked about partners, team, speed, trust, getting there together and accountability. More than any other words these came up it seemed like and I think that maybe is where we ought to head.

I do appreciate being here and as I mentioned, too, I come representing the American Council of Engineering Companies and we have found like you have with this board, I guess, whether you're running a one-many firm or you're running a firm of 50,000 it doesn't make any difference when you're sitting side-by-side you've got ideas that you can contribute that are of equal value sometimes.

And I think that's what you're bringing to this table, General. And I want to congratulate for that. Thanks for being a part of it.

GEN. WILLIAMS: Well, I think everyone has had an opportunity to speak except one person and she can't because she's taking notes. But this fine lady

has been with us since we started. She does a tremendous job for our note taking because we do capture our minutes and do them very accurately.

So I thank her for her service. She always comes and she always does a wonderful job. I want to thank also the security team. Joyce is not here but they have been running about and they will be assisting. It's not easy. They have regular jobs. They are not just doing this every day.

Some of these people are worried about visas. They're worrying about travel. They are worrying about a whole lot of things but they come out and support us on these days. So we want to thank Joyce and all of the other MSD people who may have helped her.

Also, and finally, last two persons. I want to thank Phyllis, she may have already departed, who's my special assistant for scheduling and the like. I mention when we moved upstairs that some of these things I couldn't do without her.

And then finally, Gina, on our staff who has the sole responsibility for arranging this

Industry Advisory Panel. She interacts with each of you. She deals with the invitees and the like. And I would just let you be the judge by this resounding round of applause that we should give Gina.

(Applause.)

MS. PINZINO: General, I'm afraid I have many accomplices. I can't take that applause just for myself. Michael Sprague, whose presentation you saw today, who does all of the wonderful presentations for us and he does an outstanding job. I could not ask for a better companion to work with and a better partner. So I say thank you for being so patient with us throughout this process and hopefully we can meet here again in this room.

GEN. WILLIAMS: Well, Gina, you've been trained well. You recognize your people as I do.

Okay. This is it for today and drive safe. And until we meet again, Gina will be in touch. It's been great. I have enjoyed it and take so much from you. (Applause.)

(Whereupon, the meeting was adjourned at 3:25 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