whatever oversight system you want to put on it, adequate performance is going to depend on us putting the systems in that everything else rides on.

CHAIRMAN CONWAY: Let me put it a different way then. What changes, if any, are you now going to implement because NNSA is requiring you to do something different, or because of their changes that they are making from their point of view? So I've concluded you would be doing this anyway.

ADMIRAL NANOS: Yes. No, I can't think of anything that I'm going to change, unless they decide to forbid us from doing things. If you're trying to get done. And Ralph has indicated he's going to forbid me making any improvement.

CHAIRMAN CONWAY: With that, then I want to thank you very much for the time and effort you put into preparing your testimony, and we wish you success in your operations. Thank you all. And with that, we'll ask for the contingent from Livermore. We'll start with you, Camille, if I may.

MS. YUAN-SOO HOO: Okay. That's fine.

CHAIRMAN CONWAY: If you want to at any time put your statement in the record to summarize, they'll do it whichever way you want to do it.

MS. YUAN-SOO HOO: I shall do that.
Mr. Chairman and Members of the Board,

thank you for the opportunity to provide testimony in regards to the Livermore Site Office's oversight of the Lawrence Livermore National Laboratory. Because I have submitted for the record, I will go ahead and summarize.

As you are aware, in the December Fiscal Year 02, realignment of NNSA, one of the major missions of the Site Office is for operations oversight, contract administration, as well as the [risk] acceptance official for NNSA.

In that role as the Site Manager, I take my responsibilities in the area of safety and security extremely seriously. I am committed to a technically sound and effective safety program.

I'm going to describe to you today the federal organization, as well as the staffing capabilities that I've put together towards this oversight role, as well as our model for oversight. And I will also make some comments on the lessons learned from the Shuttle Columbia accident.

When I first became Site Manager, I looked internally within our organization, and I wanted to determine what I needed to do within the organization so that I could be the "risk acceptor" and do that job
well.

In such, I looked at the organization, I looked at the staffing, as well as our technical capability of the staff, such that it can provide me with the analysis, and the advice and recommendations for me to make the final decisions as the "risk acceptor" for NNSA.

To that end, for the Livermore Site Office, as far as our organization is concerned, I have implemented a structure that has been approved by Ambassador Brooks of a two Deputy concept. One Deputy for National Security Operations, and one technical Deputy for the Safety and Environmental Programs area.

And the first Deputy for the National Security is responsible for all program oversight at the Lawrence Livermore Laboratory, including the projects, our infrastructure activities, safeguard security, business management, and the overall coordination of the contract performance evaluation process.

The second deputy is a technical Deputy, responsible for all the areas that you're looking at, which is in the areas of nuclear safety, ES&H, the implementation of ISM, the Environmental Management [EM] Programs. And that Deputy is responsible for having a system in place to assure that the nuclear
safety Authorizations Bases are adhered to at the Site.

With those two technical deputies, I rely on them, as well as other professionals within our organization and outside of our organization to provide me with the advice to make the final decisions that I need to make.

In regards to staffing, I believe you were out at our Site in September of '02. At that point in time, we committed to you that we would move subject matter experts into our Site Office in the areas of fire protection, Quality Assurance, seismic, as well as fill a systems engineering position, as well as a senior ES&H advisor. To this date, we have completed all of those actions within the NNSA Approved Staffing Plan of 90 FTEs, approximately 35 people are devoted to the area of ES&H. That is up from 29 in 2002.

I currently have five FRs in the nuclear facilities, and three in the non-nuclear facilities. We are down by two FRs, and that is the recent departures. The two FRs received promotions elsewhere within the NNSA and DOE system. I am in the process of backfilling those positions.

In addition, I am advertising for a Health Physicist position. The SME that we had has been
reassigned and, therefore, our Radiation Protection Program has suffered. And this is an area that I need to pay particular attention to until we fill that position, and get someone capable to take on the responsibilities.

DR. MANSFIELD: Let me ask a question I asked of Mr. Erickson. The two FRs who have moved on due to promotions, how long did it take them to become qualified?

MS. YUAN-SOO HOO: It took them around 12 to 18 months to become qualified.

DR. MANSFIELD: How long did they stay in the FR positions?

MS. YUAN-SOO HOO: They were fairly new. They were about three years.

DR. MANSFIELD: Okay. Well, that's longer than the six months we were talking about.

MS. YUAN-SOO HOO: Yes. And again, they did move onto other FR positions at other Site Offices [one as an FR and one to Headquarters].

DR. MANSFIELD: All right. That's good. That's all right.

MS. YUAN-SOO HOO: Yes, so they're still within the NNSA-DOE system.

DR. MANSFIELD: That's good. On the issue
of the radiological SME, was he assigned at his own
initiative, or did you just need to pick him up for
the Radiological Systems Program? In other words,
since he was doing SME work for Radiation Safety
Oversight, why wasn't it possible for him to do the
Radiological Assistance Program at the same time,
without giving up the SME?

MS. YUAN-SOO HOO: I see. Yes, we had him
doing both at the same time. The Radiological
Assistance Program after 9/11, the activities
increased significantly. And Headquarters has decided
that they want to designate full-time Radiological
Assistance people. And, therefore, he was designated
as one who is full-time. That is why I am in the
process of backfilling.

DR. MANSFIELD: Okay. For a subject
matter expert, do you have a formal qualification
program, it's not like a fac rep where you need to
know every pipe and cable run. A subject matter
expert is qualified immediately, in effect, by being
an expert?

MS. YUAN-SOO HOO: Exactly, through their
education, as well as their experience.

DR. MANSFIELD: Thank you.

MS. YUAN-SOO HOO: Okay. I also -- and,
Mr. Chairman, you have asked previously to dwell on the NNSA Service Center for experts from time to time where those positions are not needed full-time on Site. And I do have a Service Level Agreement with the Service Center for that.

In terms of our Technical Qualifications Program, that was the other thing that I looked into, and am aggressively pushing on. This is a program where I think statistically, we are behind, but there's a reason for that. In terms of our Technical Qualification Program, we totally have revamped that program, to bring more structure, formality, and rigor into the program. And as a result, we have asked everyone to re-qualify, and so people have been re-qualifying. We're about over 50 percent re-qualified as of this date, and that's been an aggressive effort. And I expect to continue with that effort. And we will meet that 75 percent qualification from a departmental average, I think early sometime next year.

In terms of my role as the Risk Acceptance Official, that is delegated to me through NNSA, and through the official NNSA Functions, Responsibilities, and Authority Manual, or the FRAM. And I carry out those responsibilities through my role as a
Contracting Officer.

To assist me in terms of the Contracting Officer role, I do have Contracting Officer Representatives that have been formally appointed both at the Site Office, as well as within NNSA Headquarters. And in that role, I do integrate the direction to the Laboratories, as well as provide contract requirements where it comes to ES&H, as well as nuclear safety, and so on.

And, as well as, as part of my responsibility in terms of the ultimate acceptor of risk, I need to also assure myself that I have a oversight model in place that will provide me with the feedback that the Lawrence Livermore Laboratory is performing as expected by the Department.

So with that, I will describe our oversight model, and give you some indications as to the maturity, or whether it's in the developmental stages or not.

Our oversight model is based on it being constructive, as well as value-added. And we focus on metrics, observations, assessments, and validations, certifications to assure ourselves that the elements of risk are controlled. And we separate our oversight model into five different components.
The first one is our operational awareness activities. And that is simply defined as day-to-day activities to determine how well the contractor is performing their requirements. And we do that via walk-throughs, surveillances, validations, checking on corrective actions to determine whether it's been done, looking at some of the documentation, and also the meetings and communications with contractors from a real-time standpoint.

And this is a fairly mature system for us.

We do also have standard operating procedures within our office. FRs are stationed in the nuclear facilities. We do have space, and they're stationed there. The subject matter experts are also required to do walk-throughs on at least a monthly basis. Even Senior Managers, including myself, are required to do walk-throughs. And the walk-through results are documented and fed into the system for review.

The second area that we do are in the form of reviews and audits. And the reviews and audits take from the form of external reviews, to internal reviews are done by the Site Office. External reviews could be from entities, such as the California state, the EPA [Environmental Protection Agency], the Office of Performance Assurance (Glenn Podonsky's...
organization), IG [Inspector General], GAO [General Accounting Office], that type of reviews.

In addition, that is complimented by our own internal reviews, and those reviews could be periodic reviews to for-cause reviews. And again, those reviews are always coordinated in terms of notify to Headquarters so that they are aware of the reviews. And for the reviews that we conduct ourselves, we generally ask whether the Headquarters organizations would like to participate. There is an opportunity for that.

Thirdly, in terms of reporting system monitoring, as you're well aware, the Department has a number of systems in place for reporting safety issues. And we do do that, and we do communicate with NNSA in terms of the areas that we have issues with, as well as real-time notification when the issues are significant. And this is an area where we need to put a little more work into, in the regard that while the data is in the system, we have not done as well as we should in terms of analyzing the data, and in tracking and trending it. And that is one area where we're in the process of making sure that we can put systems together to improve upon that.

The fourth area is in terms of contractor
performance measures and metrics. And that, in itself, deals with the University of California contract, the Appendix F process, which we have developed so-called top objectives that have been accepted by the NNSA Senior Leadership, the University of California, as well as the Laboratory Directors. And specifically, in the area that you're interested in, we have a performance objective dealing with maintaining a secure, safe, environmentally sound, and effective and efficient operations in terms of the mission objectives.

And tiered down from that particular objective, we do have performance measures in terms of continuing improvement in the ISM area, as well as in terms of improvements in the performance of the nuclear safety area. So those areas are specifically evaluated on an annual basis, and with Ambassador Brooks being personally involved.

The review is supported not only by lessons learned self-assessments, but also by results of the areas that I mentioned before in terms of internal-external reviews, our operational awareness, tracking and trending of data that is in the current system.

Lastly, in terms of our contractor
assurance is the new Contractor Assurance System. And that is in the developmental stages. Both Lawrence Livermore is putting together an extensive effort to get a solid Contractor Assurance System in place, and we are working with them. And that is, again as I said, it's evolving.

Now I also wanted to make some comments in regards to the Headquarters interactions, as well as their role in terms of oversight. I have never found, from my standpoint, a lack of interest from Headquarters, may it be Ambassador Brooks, or Dr. Beckner on down, in terms of the activities on Site, whether they're ES&H or program activities. They are always accessible in terms of telephone calls, e-mails, etcetera.

And we do keep them aware, and we generally use staff within Dr. Beckner's office as the focal point when we have safety issues. We call, report, either e-mail or what, discuss it with them. And that is usually where the requests go in as far as if anyone would like to participate in any of our own on-Site reviews.

I consider myself as the Site Manager, part of NNSA, an extension of Ambassador Brooks. So from that standpoint, while the NNSA realignment
strived to reach clarity in terms of roles and responsibilities, from the Headquarters' standpoint as well as Site Office standpoint. And again, we're in the process, and I think we get better day by day from that standpoint.

I don't see it as a Headquarters versus Field or Site Office standpoint. We all perform the same function, but we just have different roles and responsibilities. We're accountable for different things.

As far as our own self-assessment program is concerned, we have had a self-assessment program. It can be improved, but I think that it has been a fairly structured self-assessment process; especially in the ES&H area. What is still in the developmental stages is in all the other functional areas. We have not done as well in the other areas for self-assessments. However, we have conducted ISM self-assessments, and I would say on almost an annual basis. We're in the process of conducting one now, as well as the Service Center has just finished up a QA assessment. But before they came, we performed a self-assessment ourselves.

So it's my expectation that we perform self-assessments, and what we need to do now is to
make sure that the self-assessments we do are of good quality, high standards. We defined the craft to be used, and conduct them. And also have outside participants where resources are available to do that.

Now as far as the Shuttle Columbia is concerned, when that report came out, and I read the report, and it gave me great concern in terms of making sure that we within NNSA take lessons learned, and we benefit from those lessons learned, as difficult of an accident as it was. So from that standpoint, we talked with the Laboratory. The Laboratory also read the report, got the teams together. Our Senior Nuclear Safety Advisor is a part of the team with General Haeckel, and is working actively in terms of looking at NNSA-wide Lessons learned. While we also have an internal team within our Site Office that is looking at areas that we could learn from from a Site Office standpoint. And that team also works with the Livermore contractor in terms of their efforts, in terms of the lessons learned.

So I guess in conclusion, let me just say that I am committed to a technically sound and effective Safety Operational Oversight Program. And I believe that there is continuous improvement that we will continue to undertake. And in the areas of
safety, it takes a commitment, a culture, and a continuous practice. And for me to do my job well in the long-run, I think, Mr. Chairman, you've said in previous testimony, is that we're all here in terms of the long-term viability of the science at our national laboratories. And so if I do my job well, that is an indication in terms of their long-term viability. But at the same time, if I do my job well, I think that the workers at Livermore, as well as the community and the general American public, can be assured that NNSA is performing its federal role.

CHAIRMAN CONWAY: Thank you. Dr. Eggenberger.

VICE CHAIRMAN EGGENBERGER: With respect to the Columbia accident, and with respect to safety, are there any changes that you anticipate or can see in your organization with respect to how it does assessments and analysis of safety data?

MS. YUAN-SOO HOO: What we are seeking in our organization is that there are several factors that can be learned. One is in terms of the communication process, and I, for one, do not want to have any indication from folks that they cannot come to me with a difference in opinion in terms of any safety issues. And so from that standpoint, from an
open door standpoint, whenever we review any safety
document, the team is invited to present to me their
recommendations and advice. And that's all team
members. And so, that's one lesson from the Shuttle
Columbia, but we've already implemented that, and had
that in place prior to the report coming out.

In addition, some of the other issues
related to whether safety professionals are considered
as support staff, or an integral part of conducting
the mission of the Laboratories. And that is one that
I think that we, as well as the Laboratory, have to
work on more, because I think whenever you're in an
area where there are specific rules and regulations
that you have to comply with, there is always the
perception that you are dealing with compliance, for
the sake of compliance, versus mission accomplishment.
And I think that is a culture that we need to
continue to move with, from the standpoint that safety
is not -- it's not one or the other - safety or
mission accomplishment. Safety is integral to mission
accomplishment, and we do both together.

VICE CHAIRMAN EGGENBERGER: Thank you.
CHAIRMAN CONWAY: Dr. Mansfield.
DR. MANSFIELD: Nothing.
DR. MATTHEWS: Your role as the Risk
Acceptance Official, it's a powerful statement, in my opinion.

MS. YUAN-SOO HOO: Yes, it is.

DR. MATTHEWS: And I'll ask the same question I asked Mr. Erickson. What do you see as the three biggest risks at the Livermore Site? And how do you convince yourself that the risks are acceptable? In fact, what processes do you use to assure that?

MS. YUAN-SOO HOO: Okay. I would say that the three that I probably am most concerned about, certainly the Superblock activities, our plutonium activities. The second one would be the explosive activities that we have at Site 300. Can I give you four?

DR. MATTHEWS: Sure. Two will do, but four....

MS. YUAN-SOO HOO: Certainly, we also have our Waste Operations. The other one that I continue to be concerned with, and I know that Mike is actively working with, is the integration of ISM, and the integration of corrective actions across the whole laboratory, as opposed to just looking at it in a stovepipe fashion between each directorate.

DR. MATTHEWS: So the second part of my question is: what process do you use to convince...
yourself that the risk is acceptable?

MS. YUAN-SOO HOO: Oh, yes. Okay. The process I use is through a number of factors; the advice that I obtain from my technical professionals within the Site Office; and that is through their day-to-day surveillance, walk-throughs, my personal walk-throughs. For instance, whenever I am about to approve a particular safety document, there have been times where I have gone out to take a look at exactly what that entails.

I also, whenever I look at the risk associated with things, I also do not hesitate to call some of my counterparts, or folks within NNSA to discuss on a more generic basis, the issues that I'm faced with, to just get some outside opinion.

I also have experts within the Lawrence Livermore Lab that I also seek out advice from, so that I make sure that I get advice and recommendations from all sorts before I make that recommendation, so that I can better assess the level of risk that I'm accepting.

DR. MATTHEWS: Do you use any formal risk-based criteria that looks at the consequence and likelihood?

MS. YUAN-SOO HOO: Our Nuclear Safety
Experts do.

DR. MATTHEWS: Okay. And one final question. Mr. Erickson testified that he has no programmatic responsibilities in his role. Is that true for you too?

MS. YUAN-SOO HOO: It is true from the sense that we do not have delegated programmatic responsibilities from Dr. Beckner in the DP [Defense Programs] side of the house. We do have some delegated programmatic responsibilities on the EM side of the house, outside of NNSA.

DR. MATTHEWS: Thank you.

CHAIRMAN CONWAY: Did I understand you to say you've entered into an agreement with Albuquerque Service Center?

MS. YUAN-SOO HOO: Yes. The NNSA Service Center, we have Service Level Agreements for each of the functional areas. And that would entail what do we expect from the Service Center; for instance, in the area of ES&H, or in the area of security, and so on.

CHAIRMAN CONWAY: So these are formal agreements?

MS. YUAN-SOO HOO: Yes, they are. And these agreements are intended for -- and, obviously,
this last year was the first year that we've put these things in place, but they are intended that we would update it periodically, about a year basis, to determine, you know, as we mature in terms of this new Site Office concept, as the Service Center gets more established, then what type of services can be drawn from them.

CHAIRMAN CONWAY: If you ran into a problem, and it's not specifically mentioned in your agreement, you can't just call upon them to send you a Subject Expert?

MS. YUAN-SOO HOO: No, it's not as formal as that. We provide, basically, an outline of expectations in terms of what type of services we would like. That way, the NNSA Service Center can also determine their manpower, staffing requirements based on what the customers may need. However, on occasion, there will be things that will not be written down, that will just happen. And what we do is, we can just simply call the Service Center, and talk with them. And then determine where best to get those resources.

CHAIRMAN CONWAY: Okay. Kent, did you have a question?

MR. FORTENBERRY: Yes. Just, I would like
a little better understanding, both Admiral Nanos and
yourself talked a lot about Appendix F.

MS. YUAN-SOO HOO: Yes.

MR. FORTENBERRY: I believe those are very
similar, if not identical.

MS. YUAN-SOO HOO: They are basically
identical.

MR. FORTENBERRY: Right. And there's sort
of a sense that that Appendix drives the performance
assessments. And looking at it, you read off a couple
of things which were, in fact, probably, at least half
of the safety-related items: achieve continual
improvement in ISM, continue to comply and improve
performance with the CFR 830 Rule, manage inventories
of material consistent with approved plans, maintain a
purchasing management program. And that's the level
of detail, and there may be -- maybe I left out an EM
item here.

That's not really a lot of detail -- in
other words, your contract, the contract with the
Laboratory, doesn't provide you the mechanism to where
you've communicated exactly what needs to be done in
this area. It's very difficult to do. You have to
rely on a lot of hands-on activity. For example, you
had some USQ issues that came up earlier in the year.
I think you were fairly disappointed in what you saw in terms of USQ implementation from the laboratory. You mentioned you've now initiated an assessment of that program.

MS. YUAN-SOO HOO: Yes.

MR. FORTENBERRY: Appendix F wouldn't say anything about that. You might get there somehow through the 830 Rule compliance, but we're not talking about being out of compliance. We're just talking about poorly implemented programs. And I just want to make sure I've got the right sense of that.

You really have to have a lot of interaction with the contractor. Your contract itself doesn't really specify in any level of detail the kind of self-assessments or performance assessments that are needed.

MS. YUAN-SOO HOO: Yes. Let me clarify that. The intent of the Appendix F, in terms of the broad objectives - and the objectives were developed broadly, so that it can be all-encompassing. And that is the agreement between the University, as well as NNSA, in terms of the areas that we deem important and would like them to focus on.

MR. FORTENBERRY: And in fact, I guess both Livermore and LANL, just because of the way
they're written, depending on the expectation of the Department, or maybe the expectation of the contractor itself, could meet Appendix F. Currently, last year, the year before. You could say, "Yes, we've continued to improve ISM; we're improving performance on 830 Rule; we have an Emergency Management Plan."

MS. YUAN-SOO HOO: Yes.

MR. FORTENBERRY: The point I'm trying to make is that the contract is just a very fundamental outline. It takes a lot of interaction, hands-on. You've got to communicate, the Department has to communicate very specific expectations. And you can't go to the contractor with a checklist that comes from the contract. There's a lot of interaction there.

MS. YUAN-SOO HOO: The Appendix F provides the basic framework. However, it is tiered down below to have the specific measures, as well as the contractor provides basically an evaluation plan that details out the areas. And we work with them in terms of that, so from the broadest sense that you see, in terms of the objective and what I read, it does appear broad. However, it does provide the details that is not -- it doesn't show up, I guess, in the top nine to twelve objectives that we have developed. However, it does provide the Site Office with the opportunity to
look at specific areas, as well as provide them with the feedback and the final assessment in those areas, that will eventually be consolidated at that upper level.

MR. FORTENBERRY: Okay. Thanks. And the reason I was interested in that is the focus on managing the contract that we're seeing, particularly in the EM side, as being sufficient. You've got a good contract. All you have to do is manage the contract. It's extremely difficult to provide the level of specificity that you need to just manage the contract in this area.

DR. MANSFIELD: Could I follow-up on that? As I understand it, the only thing that's made part of the contract is the negotiated Appendix F. But there is a mutually agreed set of details that support that.

MS. YUAN-SOO HOO: Exactly. We need that.

DR. MANSFIELD: Okay.

MS. YUAN-SOO HOO: Yes.

DR. ANASTASIO: And that's true for safety, and for the program, and for everything. As you said, milestones are achievable goals. They're set up at a lower level than what you see in the contract that we agree with the Site Office.
DR. MANSFIELD: How are they maintained?
Do you jointly sign something that is not part of the contract, that includes details like that? Are they memorialized somehow?

MS. YUAN-SOO HOÓ: They are in writing. They are maintained by the Laboratory. They're the basis for how they perform their self-assessments.

DR. MANSFIELD: So they can't change willy-nilly.

MS. YUAN-SOO HOÓ: No.

CHAIRMAN CONWAY: Okay. With that, we'll turn to you, Dr. Anastasio.

DR. ANASTASIO: Thank you, Mr. Chairman.
I hope that in the interest of time, you'll accept my written document, and I'll try to do a quick summary.

CHAIRMAN CONWAY: Very good.

DR. ANASTASIO: Mr. Chairman and Members of the Board, thank you for the opportunity to discuss our systems we have to assure work is performed safely at the Lawrence Livermore National Laboratory. Of course, these systems are dynamic. We strive to continuously improve safety through self-assessments and corrective actions.

We vigorously try to identify deficiencies ourselves, and fix them. But, of course, the