

1 proposed new initiatives and what impact, if any,
2 they may have upon assuring adequate protection of
3 health and safety of the public and workers at DOE's
4 defense nuclear facilities.

5 I welcome the witness this morning,
6 Brigadier General Ronald J. Haeckel. He is the
7 Principal Assistant Deputy Administrator for Military
8 Application of the National Nuclear Security
9 Administration [NNSA] within the Department of
10 Energy.

11 And with that, we turn to you, General,
12 and, again, I welcome you here this morning.

13 GENERAL HAECKEL: Thank you, sir. I've
14 been fitted for hearing aids that are due to be
15 delivered next month. So [Pointing to own hearing
16 aids] I may ask you to repeat questions if I don't
17 catch all the words, but I apologize for that.

18 DR. MANSFIELD: I have sympathy for you.

19 (Laughter.)

20 GENERAL HAECKEL: Mr. Chairman and
21 Members
22 of the Defense Nuclear Facilities Safety Board, thank
23 you for this opportunity to provide you with an
24 interim report of the National Nuclear Security
25 Administration's review of the Columbia Accident

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1 Investigation Board [CAIB] report of the loss of the
2 space shuttle Columbia.

3 We've nearly completed our review, and
4 recommendations are being developed. Today, I'll
5 provide you with some of the general highlights.
6 Once the report is complete and has been received by
7 our Leadership Coalition, I'd be pleased to provide
8 you with a copy of the report, along with more
9 details on our lessons learned, recommendations, and
10 suggested way ahead.

11 We anticipate completion of the report by
12 the middle of this month. The results and suggested
13 way ahead could be presented by our Leadership
14 Coalition as early as March.

15 Additionally, our report will be
16 forwarded to the Office of the Secretary of Energy as
17 a potential source of recommendations which may be
18 applicable Department-wide.

19 The 13-member NASA [National Aeronautical
20 and Space Administration] CAIB spent nearly seven
21 months investigating the root causes of the loss of
22 Columbia and had over 125 dedicated investigators,
23 consultants, and assistants at their disposal.

24 As a result, the report was exceptionally
25 well detailed and thorough in its analysis and

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1 provided succinct recommendations to NASA for
2 improving their organization and minimizing the
3 chance of another disaster of equivalent scale.

4 Ambassador Linton Brooks, the NNSA
5 Administrator, after reading the CAIB report and its
6 conclusion that organizational causes were key
7 elements of NASA's failure to identify and evaluate
8 critical safety issues, realized that there were
9 likely to be valuable lessons learned within the
10 report that could be developed, could be used to
11 develop, recommendations to improve the NNSA of the
12 future.

13 Accordingly, on September 9, 2003, he
14 directed me to lead a NNSA team to assess the
15 following questions.

16 First: is NNSA's management and safety
17 culture appropriate for an organization managing high
18 technology, high-risk activities?

19 Second: are there issues raised by the
20 CAIB report that should be considered as we implement
21 NNSA's new organization model?

22 Third: will the re-engineered NNSA
23 provide for the necessary technical capability for
24 properly executing NNSA's safety management and
25 regulatory responsibilities?

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1 And fourth and final: what changes would
2 you recommend that NNSA adopt in light of the lessons
3 learned by NASA?

4 I assembled three sub-teams as part of
5 our internal review, one for each of the first three
6 questions posed by Ambassador Brooks.

7 Each sub-team was comprised of NNSA
8 employees from Headquarters, the NNSA Service Center,
9 and the Site Offices. In all, over 30 people have
10 directly contributed to the review, and many others
11 have contributed indirectly through side discussions
12 and meetings with review participants.

13 Our first action was to read the CAIB
14 report in detail and to identify the Board's
15 conclusions regarding their assessment of NASA.
16 These conclusions were then assigned to one or more
17 of the sub-teams: culture, organizational structure,
18 and technical capability.

19 The sub-teams used these conclusions as
20 guiding points in assessing and comparing NNSA with
21 NASA. The review was strictly limited to the context
22 of the CAIB report.

23 Individual sub-teams met as required to
24 conduct their review, and the composite team met on
25 seven different occasions for progress reports and

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1 discussions.

2 These discussions were lively at times
3 and demonstrated some of the best open communications
4 between Headquarters and field elements that I've
5 [seen] during my tenure at NNSA.

6 I believe that when complete, the report
7 will be of great value to our organization and will
8 make significant recommendations that have the
9 potential to greatly improve the safety of our
10 operations and the overall effectiveness of NNSA.

11 As you know, the CAIB focused their
12 review on NASA's high-risk, high-consequence
13 activities related to human space exploration.

14 The NNSA CAIB Lessons Learned Team also
15 focused its efforts on potential high consequence
16 activities internal to NNSA, namely the operation of
17 nuclear facilities at NNSA Sites and the nuclear
18 weapons production program.

19 We did not examine our relationship with
20 the DoD [Department of Defense], where the NNSA
21 functions as a partner in designing and supplying
22 weaponized nuclear explosives to the U.S. military.

23 In short, the most important result of
24 the NNSA review is the need to understand and shape
25 NNSA's safety culture through leadership,

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1 organizational alignment with safety requirements and
2 policies, and the maintenance of adequate technical
3 capability.

4 There are striking similarities between
5 NASA and NNSA when comparing the two organizations'
6 safety systems and culture.

7 Both organizations were built on the Cold
8 War rivalry with the former Soviet Union, and both
9 suffered similar uncertainties in their missions with
10 the collapse of the Soviet Union.

11 The CAIB report states, "The end of the
12 Cold War in the late 1980s meant that the most
13 important political underpinning of NASA's human
14 space flight program, U.S.-Soviet space competition,
15 was lost, with no equally strong political objective
16 to replace it."

17 NNSA's core mission, nuclear weapons
18 design and production, suffered a similar loss of
19 national priority, and both organizations have
20 pursued similar paths in dealing with this loss,
21 mainly downsizing personnel, consolidating
22 operations, and relying more and more on contractors.

23 Both organizations have a proud tradition
24 of scientific and technical excellence. This led
25 NASA to view itself as a perfect place. This in turn

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1 led to NASA managers losing their ability to accept
2 criticism, leading them to reject the recommendations
3 of many boards and blue-ribbon panels.

4 A parallel to NASA's perfect place
5 culture within NNSA would be the nuclear weapons
6 design laboratories, commonly referred to as the
7 nation's crown jewels.

8 Also like NASA, DOE has been criticized
9 for years by Congress, GAO [General Accounting
10 Office], the IG [Inspector General] and others. For
11 example, the June 1999 report by the Special
12 Investigative Panel of the President's Foreign
13 Intelligence Advisory Board, the March 1999 Report by
14 the Commission on Maintaining United States Nuclear
15 Weapons Expertise, and the March 1997 120-Day Study
16 by the Institute for Defense Analysis.

17 DOE has been criticized for its
18 reluctance to adopt changes recommended by outside
19 organizations. In fact, it was this very criticism in
20 part that led Congress to create the NNSA as a
21 semi-autonomous agency within DOE.

22 The NNSA CAIB Lessons Learned Review Team
23 identified several potential attributes of an
24 effective NNSA safety culture, including: a visible
25 commitment to safety, both corporately and

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1 individually along with genuine concern for coworker
2 safety; trust; support of open communications and
3 valuing a diversity of opinions coupled with senior
4 management embracing the concept that healthy tension
5 is good; determination of NNSA's safety performance
6 baseline and the establishment of performance metrics
7 and indicators; rigorous self-assessments along with
8 objective evaluation and consideration of outside
9 reviews and recommendations; visible accountability,
10 that is, a system of rewards and punishments; a
11 technically competent staff that is committed to and
12 involved in assuring the safety of operations.

13 The NNSA Review Team found that the
14 organization was lacking in varying degrees in all of
15 the above attributes. However, changes in an
16 organization's culture cannot take place without the
17 buy-in and active leadership of top management.

18 The NNSA Review Team believes that to be
19 effective, the NNSA Leadership Coalition and other
20 senior managers must fully and actively support
21 NNSA's safety culture in order for individual
22 employees to commit themselves to a culture of safety
23 excellence.

24 The NNSA leadership must develop and
25 establish clear safety values and expectations in

1 order for safety to be an organizational value that
2 is a fundamental part of mission accomplishment.

3 They must also demonstrate a genuine
4 attitude of ownership for safety within NNSA.
5 Although cultural values are intangible, these values
6 as fully espoused by senior leadership can lead to
7 tangible improvements for the safety of operations.

8 The NNSA Review Team also acknowledges
9 that it is important for NNSA to be able to judge the
10 status and effectiveness of its safety culture as it
11 exists today and in the future, as well as identify,
12 and track trends in its effectiveness.

13 DOE and NNSA have invested many resources
14 in Integrated Safety Management [ISM]. The team
15 believes that ISM could serve as a model of a system
16 that has demonstrated its value and that has survived
17 multiple changes of leadership in DOE and NNSA.

18 It's our belief that ISM can help lead
19 NNSA and its contractors to a stronger safety
20 culture. ISM is a key enabler of safe operations for
21 the use of effective work planning, hazards
22 identification, the development and implementation of
23 work controls, performance of work within those
24 controls, and feedback for improvement.

25 However, without robust and active

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1 support by NNSA senior management, ISM will not lead
2 to an enduring NNSA safety culture, nor is ISM
3 specifically designed to improve an organization's
4 safety culture.

5 The majority of the NNSA Review Team
6 believes that NNSA has adequate concern for safety
7 for potentially high consequence programs, such as
8 nuclear facility operations and nuclear weapons
9 design and construction, including adequate systems
10 to ensure that operations are proven safe prior to
11 initiation or deployment.

12 But additional cultural change is needed
13 to maximize the assurance of safety in those
14 high-risk activities. NNSA needs to actively
15 encourage diversity of views, accept outside
16 criticism, and avoid oversimplification of technical
17 information.

18 Additionally, NNSA must be vigilant in
19 guarding against the organization being conditioned
20 by past successes. As the CAIB report states, and
21 with which the team agrees, organizations that deal
22 with high-risk operations must always have a healthy
23 fear of failure. Operations must be proven safe,
24 rather than the other way around.

25 The CAIB concluded that within NASA, the

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1 loss of truly independent robust capability to
2 protect the system's fundamental requirements and
3 specifications inevitably compromised those
4 requirements and, therefore, increased risk.

5 In particular, they found that
6 organization responsible for program accomplishment
7 decided on its own how much safety and engineering
8 oversight was needed.

9 The CAIB concluded that separation of
10 authority of program managers, who by nature must be
11 sensitive to costs and schedules, and owners of
12 technical requirements and waiver capability, who by
13 nature are more sensitive to safety and technical
14 rigor, is crucial.

15 The ability to operate in a centralized
16 manner or decentralized manner, as appropriate, is
17 the hallmark of a high-reliability organization.
18 However, complex organizational structures, such as
19 NASA, that mix centralized and decentralized
20 functions, or split functions into centralized and
21 decentralized pieces, can hinder effective operations
22 and result in severe consequences.

23 The CAIB determined that NASA failed to
24 operate effectively in both centralized and
25 decentralized modes based on the roles,

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1 responsibilities, authorities, and relationships that
2 developed over time.

3 As a result, organizational complexity
4 created artificial barriers to effective
5 communications throughout the organization.
6 Assigning individuals to multiple and in some
7 instances competing places in the organization
8 complicated the problem.

9 Confusion about decision-making processes
10 within NNSA, the attenuation of technical
11 information, and the lack of clear accountability
12 created by redundant management activities, were
13 previously significant concerns with NNSA.

14 The "NNSA of the Future" model, with its
15 line management responsibility for safety, eliminates
16 much of the complexity and confusion that previously
17 existed by now clearly holding Site Office Managers
18 accountable for the operational safety and security
19 of their Sites.

20 The NNSA Safety Functions,
21 Responsibilities, and Authorities Manual, the FRAM,
22 published on October 15th, 2003, is an important step
23 in eliminating any remaining confusion about those
24 responsibilities.

25 NNSA's new organizational model depends

1 heavily on decentralized decision-making by Site
2 Office Managers.

3 As NNSA's risk acceptance officials, the
4 primary responsibility of Site Office Managers is
5 operational safety and security.

6 NNSA has intentionally optimized its
7 organization for decentralized risk acceptance
8 decision-making to ensure the risk acceptance
9 authority is delegated to the technically competent
10 senior managers who have access to the most accurate
11 and current information.

12 However, some confusion still exists
13 regarding the role of centralized decision-makers
14 with respect to operational safety oversight given
15 that NNSA has a limited independent safety
16 organizational construct.

17 NASA's organizational structure changes,
18 designed to approve efficiency, undermined the
19 redundancy essential to successfully operating a
20 high-risk enterprise.

21 NASA's contractual arrangements,
22 organizational structure, and downsizing together
23 undermined the adequacy of federal oversight of a
24 contractor, and resulted in the transfer of too much
25 authority for safety to the contractor.

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1 The team concluded that for NNSA,
2 redundancy and the level of oversight should be
3 proportional to the risk, that is, higher risk would
4 equal more redundancy.

5 No hazardous facility or operation that
6 presents a risk to the public and/or co-located
7 workers should be without redundancy in oversight
8 processes.

9 And NNSA Site Managers do have multiple,
10 although not necessarily redundant, federal sources
11 of technical information to support risk acceptance
12 and safety assurance decision-making, including
13 Authorization Basis [AB] professionals, Facility
14 Representatives, and Subject Matter Experts [SME].

15 Additionally, the DOE Office of
16 Independent Assessment [OA] provides the NNSA
17 administrator with an independent audit function,
18 although the Office of Assessment has no day-to-day
19 safety assurance function. However, the team
20 believes NNSA can enhance the levels of redundancy in
21 its oversight processes.

22 Finally, the CAIB determined that NASA's
23 complex and often hierarchal organizational structure
24 diffused and confused responsibility, essentially
25 leaving no one person accountable.

1 NASA's culture also lent greater
2 technical credence to communications that originated
3 from higher in the organization. The organizational
4 structure often stifled or blocked communications.

5 The NNSA Review Team identified several
6 potential attributes for an effective NNSA safety
7 organization, including: effective centralized and
8 decentralized operations requiring independent,
9 robust, safety and technical requirements management
10 capability; assuring safety requires a careful
11 balance of organizational efficiency, redundancy, and
12 oversight; and, finally, effective communications
13 along with clear roles and responsibilities are
14 essential to a successful organization.

15 The team agreed that NNSA should consider
16 establishing the position of Chief of Defense Nuclear
17 Safety in lieu of an ES&H advisor.

18 This individual would be responsible for
19 developing, maintaining, and overseeing corporate
20 technical, environment, safety, and health policies
21 and standards, including reviewing and approving any
22 waivers to those policies or standards.

23 He or she might also be empowered to veto
24 NNSA Headquarter's programmatic or budget decisions
25 deemed unsafe or in violation of existing policies

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1 and standards potentially leading to an unsafe
2 condition, until resolved to the Chief's or NNSA
3 Administrator's satisfaction.

4 The Chief could also be tasked with
5 monitoring the health of NNSA's ES&H technical
6 staffing. Additionally, this office would provide
7 technical staffs a place in Headquarters to
8 communicate minority opinions that have been
9 overlooked or rejected in other parts of the
10 organization.

11 The combination and interrelationships of
12 contractor and Site Office self-assessment and
13 oversight by Headquarters should not be permitted to
14 tip in either direction. The careful balance between
15 organizational efficiency and the adequate assurance
16 of safety through redundancy and oversight must be
17 maintained.

18 With regard to the implementation of the
19 Line Oversight/Contractor Assurance Systems or
20 LO/CAS, the adequacy of these new assurance systems
21 should be verified before reducing existing
22 oversight, particularly in high hazard operations.

23 NNSA should consider reinstating
24 Headquarters line management oversight practices to
25 address self-assessment and external review of

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1 federal and M&O [management and operating] contractor
2 operations until LO/CAS is fully implemented.

3 The importance of fully evaluating and
4 considering minority opinions cannot be overstated.
5 The Naval Reactors [NR] program has embraced this as
6 part of their culture from the program's inception,
7 and NNSA as a whole should embrace it as well.

8 It may be necessary to provide a new or
9 revitalized organizational conduit along with revised
10 decision-making processes as a means to encourage the
11 airing of minority opinions and the effective
12 evaluation of their input into NASA's
13 decision-making.

14 In regards to technical capability, the
15 CAIB concluded that NASA, one, became dependent on
16 contractors for technical support. Two, contract
17 monitoring requirements increased. And three, as
18 engineers were placed in management roles, their
19 positions were subsequently staffed by less
20 experienced engineers.

21 Years of workforce reductions and
22 outsourcing culled NASA's layers of experience and
23 hands-on systems knowledge that once provided a
24 capacity for safety oversight.

25 Safety and mission assurance personnel

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1 were eliminated. Careers in safety lost
2 organizational prestige, and the respective program
3 manager decided how much safety and engineering
4 oversight was needed.

5 The CAIB also concluded that NASA had a
6 number of information systems for reporting and
7 capturing information with potential safety
8 significance.

9 However, information captured in those
10 systems was not consequently analyzed, tracked,
11 trended, or acted upon to resolve underlying causes,
12 and this failure was one of many root causes in both
13 the Challenger and Columbia accidents.

14 Finally, the CAIB concluded that NASA did
15 not have a recurring training program, was not
16 aggressive in training, and did not institutionalize
17 lessons learned into training. The CAIB was appalled
18 that the Navy had trained more personnel in the root
19 causes of the loss of the Challenger than had NASA.

20 After studying the CAIB report, the NNSA
21 Review Team highlighted three items with regard to
22 adequate technical capability, including workforce
23 reductions, outsourcing, and loss of organizational
24 prestige can cause an erosion of technical
25 capability;

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1 technical capability to track known problems and
2 manage them to resolution is essential; and a quality
3 technical training and qualification program is vital
4 for the success and safety of high-risk operations.

5 Similarly, the erosion of ES&H technical
6 capability may be a serious issue within NNSA. As
7 the organizational transition progresses, that is,
8 stand up of Service Center in Albuquerque, it is not
9 clear whether the Site Offices have sufficient ES&H
10 support.

11 Consolidation of personnel into the
12 Service Center has already resulted in a large loss
13 of ES&H nuclear safety expertise. Over 50 percent of
14 nuclear safety experts within the ES&H Department
15 have taken other positions or declined the directed
16 reassignment.

17 Headquarters, the Service Center, and
18 Site Offices must establish clear mutual expectations
19 of each other's technical capabilities and support
20 plans.

21 Although each recently completed and
22 validated individual staffing plans, a deeper,
23 integrated review may be useful in ensuring that
24 adequate technical capability is maintained, and
25 sufficient capability and processes are in place for

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1 the recruiting, training and career development of
2 technical personnel.

3 Like NASA, NNSA has access to a wide
4 variety of information management systems, including
5 local issue tracking and management systems with the
6 contractor.

7 Examples include: NNSA Lessons Learned
8 System; Occurrence Reporting and Processing System or
9 ORPS; Safety Issues Management System [SIMS] for
10 DNFSB-related issues; Corrective Action Training
11 System for OA findings and corrective actions;
12 Significant Finding Investigations or SFIs for weapon
13 related issues; and Government-Industry Data Exchange
14 Program for suspect or counterfeit materials issues.

15 Also like NASA, NNSA needs the ability to
16 capture, analyze, and share safety information but
17 has limited capability to do so in some areas. NNSA
18 may need to consider establishing an analysis and
19 trending function for complex wide issues at either
20 Headquarters or the Service Center, to be
21 periodically reviewed by NNSA senior leadership.

22 Additionally, NNSA needs a process to
23 identify and evaluate operation experiences outside
24 of itself and DOE, such as the Davis-Besse near miss
25 and the Columbia, to disseminate the lessons learned

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1 from those experiences, and to develop and implement
2 recommendations resulting from those lessons learned.

3 Finally, NNSA requires a cadre of
4 technically trained personnel in order to properly
5 perform its mission. This includes key senior
6 management positions, such as Site Office Managers,
7 whose responsibilities include safety of nuclear and
8 other hazardous facilities and operations.

9 Formal qualification and experience
10 requirements, training and/or compensatory measures
11 must be identified for those individuals with NNSA.

12 The Technical Qualification Program or
13 TQP remains an important and valuable tool within
14 NNSA that must be well-utilized and managed to be
15 useful.

16 The Site Offices and Headquarters have
17 recently re-baselined their TQP requirements, and
18 review and analysis of that effort is underway.

19 In closing, these same interim results
20 will be presented to senior managers at our NNSA
21 Safety Summit tomorrow. I think it's clear that the
22 NNSA CAIB Lessons Learned Review Team believes
23 further changes are needed at NNSA to ensure the
24 safety of future operations and to avoid the pitfalls
25 experienced by NASA. In particular, the need to

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1 assess and as necessary alter our culture will be a
2 significant challenge.

3 NNSA is committed to objectively
4 reviewing and considering the recommendations of the
5 Review Team.

6 At this time, I would be happy to answer
7 questions.

8 CHAIRMAN CONWAY: Thank you, General
9 Haeckel. Dr. Eggenberger?

10 VICE CHAIRMAN EGGENBERGER: Do I have to
11 be first?

12 CHAIRMAN CONWAY: Yes.

13 VICE CHAIRMAN EGGENBERGER: Okay. When
14 do you expect your report to be finished and handed
15 out?

16 GENERAL HAECKEL: We expect that the --
17 that our writing will be completed, and that the
18 report will be signed the middle of this month, and
19 that it will get to the Leadership Coalition for
20 their digestion in the Leadership Coalition meeting
21 in March.

22 VICE CHAIRMAN EGGENBERGER: Okay. The
23 three things that you talked about, safety management
24 and culture, organization and technical capability,
25 I think I understand them. I think everybody kind of

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1 understands them. And my belief is that you will
2 probably put out a set of recommendations that
3 follows each one of those categories, or could at
4 least be grouped into those categories.

5 And a couple things always bother me in
6 that when one makes recommendations, people tend to
7 look at them as single entities and not grouped
8 together such that one can understand the effect of
9 one on the other. And I believe that's very
10 important to end up with a good implementation plan.

11 So is it your expectation that DOE will
12 now prepare, the management people will prepare, an
13 implementation plan for your report? Do you believe
14 that's probably how it will go?

15 GENERAL HAECKEL: When we were putting
16 our recommendations together, it was clear to us that
17 several of the recommendations spanned or could span
18 all three categories.

19 VICE CHAIRMAN EGGENBERGER: Yes.

20 GENERAL HAECKEL: And we attempted to
21 identify those and cross-reference those so we could
22 capture that, and document that, so that people
23 would have the mindset of looking at a certain
24 recommendation and realizing that this affects the
25 culture and technical capability and organizational

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1 efforts all at the same time, and could be a very
2 significant effort to the overall effort.

3 I have not discussed with Ambassador
4 Brooks how he plans to use this. He did meet with
5 our group and express his support for us and his
6 desire for these recommendations. He met with us
7 personally. So I believe that he's very serious
8 about this, and in subsequent conversations, he has
9 expressed his seriousness.

10 And I would hesitate to guess what -- how
11 Ambassador Brooks would proceed, but I know that he
12 plans to discuss this with the Leadership Coalition
13 in March.

14 VICE CHAIRMAN EGGENBERGER: Okay. Let's
15 just take for an example the corporation
16 organization. You made a statement in here that --
17 it says, "The NNSA of the Future' model with its line
18 management for safety eliminates much of the
19 complexity and confusion that previously existed, now
20 clearly holding Site Office Managers accountable for
21 the operational safety and security of their Sites."

22 There's an awful lot in that sentence.
23 And the details and the understanding of that, as it
24 relates to some of the recommendations that you've
25 essentially woven in here, it's not clear to me, or

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1 how all this fits together.

2 And let me give you an example, and then
3 I'm going to say something that I think would be very
4 helpful.

5 I think we're talking basically about
6 operational safety here. And if you can go back, you
7 can go back into recent occurrences at some of the
8 Sites. And one can write down a list of occurrences.
9 And I think it would be useful to attempt to analyze
10 them in light of the recommendations that you are
11 going to make to the Ambassador and in light of how
12 his implementation plan will address those.

13 And let me -- this is kind of jargon
14 here. But people that have been working in NNSA, I
15 think, will understand those. And I'll give you
16 three examples that just came to my mind.

17 One is the situation with the Plutonium
18 Recovery Line at Los Alamos. That's one. A second
19 one is the cracked high explosive at Pantex. And the
20 third one is the multiple staging of units at Pantex.

21 And I think if one looks at the three
22 things that you talked about -- basically, culture,
23 the organization, and the technical capabilities --
24 how those reflect on the either correct or incorrect
25 decisions that were made on those three different

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1 projects.

2 And you can go through and you can list
3 more of these. And I think then that would at least
4 give you a state. You could then define the state at
5 which NNSA is in.

6 So I -- this is a little bit of a
7 lecture, but I'm trying to be helpful. And at the
8 same time, reports tend to get glossed over. And I
9 think it would be very bad if this, your report, was
10 glossed over by others.

11 MR. AZZARO: Excuse me. Mr. Chairman, if
12 I may, General -- Dr. Eggenberger was saying a number
13 of different things, and I noticed that you were
14 nodding your head several times. The court reporter
15 doesn't capture that.

16 Can you respond to some of that verbally,
17 what those nods meant, that you understood what he
18 was saying or agreeing with him?

19 GENERAL HAECKEL: I understand the
20 specific incidences that you were pointing out.

21 VICE CHAIRMAN EGGENBERGER: Yes.

22 GENERAL HAECKEL: And I also understand
23 that to address an environment between centralized
24 Headquarters and decentralized Site Managers, you
25 have to understand the environment for the things

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1 that you're trying to improve, and that these
2 specific incidences here which shed light on what the
3 environment was and what you were trying to
4 strengthen.

5 Is that right, sir?

6 VICE CHAIRMAN EGGENBERGER: The gist is
7 it would then give you the state of affairs at points
8 in time at particular Sites.

9 GENERAL HAECKEL: Yes.

10 VICE CHAIRMAN EGGENBERGER: That's right.
11 And again, I'm taking too much time. But this whole
12 concept, you used some powerful terms like risk
13 acceptance official. And the three, your three
14 things of, again, of culture, organization, and
15 technical competence, all relate on that.

16 So, again, the devil is in the details
17 here. And with that, I'll - that's all I'm going to
18 say for now.

19 CHAIRMAN CONWAY: At this time.

20 VICE CHAIRMAN EGGENBERGER: At this time.

21 CHAIRMAN CONWAY: Thank you. Dr.

22 Matthews?

23 DR. MANSFIELD: No, Jack Mansfield, not
24 Matthews.

25 CHAIRMAN CONWAY: I'm sorry. I looked at

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1 you and I was thinking of Bruce.

2 (Laughter.)

3 DR. MANSFIELD: But thank you, General.
4 I see in the NASA experience, and I can see in DOE's
5 practice, a difficulty for Headquarters to exercise
6 detailed insight into what's going on at the Sites.

7 The -- it's true it's -- I recognize that
8 you've assigned Site Office Managers responsibility
9 and accountability for operational safety. But I
10 don't see in Headquarters the ability to do what, for
11 instance, Naval Reactors does: demand to be notified
12 of every irregularity so that someone at Headquarters
13 can do what the Site Manager may not have time or the
14 responsibility to do: pull the string on details.

15 That's what I see about the Challenger
16 accident. I asked the question, who at NASA
17 Headquarters knew of the history of foam strikes, you
18 know, that they were defined in standards and specs
19 as abnormal but accepted as normal? You know, who at
20 Headquarters knew that? Who was even notified when
21 foam strikes occurred, at Headquarters?

22 Gosh, I'd want to know that. If that
23 were Naval Reactors -- I'll make up a story because
24 I don't want to get into any particular details on
25 Naval Reactors. But suppose periodically some welds

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1 in HY-80 [high yield] steel had a different color.
2 And no submarines had collapsed or sunk, but nobody
3 understood why the welds were a different color.

4 You know, I'm almost sure that Naval
5 Reactors wouldn't do any welds until they figured
6 that out. And that's what I saw missing at NASA.
7 And I don't see that at NNSA. I don't see someone at
8 Headquarters demanding to know every irregularity so
9 that they can pull the string and get someone to
10 look, dig into it, and find out what's wrong.

11 I see the -- for instance, you know,
12 ISM, I commend [you] for your account of how ISM can
13 provide a safe work environment. But ISM by itself
14 doesn't automatically discover design issues that
15 might lead to unsafe conditions. We're working with
16 - especially with Pantex -- we're working with high
17 explosives in different configurations.

18 Right now, we -- you satisfy yourself
19 that the operations are safe because you've got great
20 trust in expert bodies, the NESS [Nuclear Explosive
21 Safety Study] teams, for instance, the CEP
22 [Containment Evaluation Panel] for underground tests,
23 things like that.

24 But it seems to me that that reliance on
25 those expert systems, which has served us so well,

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1 demands exquisite care by somebody. And I think --
2 you know, I question why it's not Headquarters. I
3 question why there isn't someone at Headquarters that
4 pulls a string on every issue that --

5 The NESS, for instance, essentially does
6 a one-time analysis. This -- here's a NEOP, a
7 nuclear explosive operation [procedure]. Is this
8 okay, yes or no? If yes, you do it. If no, you fix
9 it.

10 No one to my knowledge continually pulls
11 the string and asks, well, you know, were we hasty on
12 this? Did we -- is there later knowledge that needs,
13 requires us to reexamine what we've decided before?

14 The -- I was concerned in conversations
15 with lab people that they're in some cases actively
16 discouraged from undertaking R&D [research and
17 development] on things that they find in question,
18 like the behavior of cracked HE [high explosives],
19 unless someone at Pantex requests a judgment or an
20 opinion on how the cracked HE behaves.

21 I would think that you would insist that
22 people pull the string everywhere. Whenever they
23 suspect a case, they go to their boss, and he not
24 only -- he doesn't tell them, don't you do that
25 unless you are asked by a customer. You know, he

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1 tells them, that's your job, I'll find a way to give
2 time for you to look at that.

3 That's what I think would be -- would be
4 an NNSA operation which would be closer to the Naval
5 Reactor model. It takes a focused effect -- or
6 focused effort by Headquarters, focused effort by
7 Headquarters, to know enough to pull the string.

8 And, you know, that is -- it just hasn't
9 been there. Maybe it was never there in NNSA, that
10 someone in Headquarters was, you know, clever enough
11 or experienced enough to know there was something
12 behind what he was reading. And you know, I believe
13 something like that is necessary.

14 Now it could be that you've set up
15 exactly the right mechanism for this. By assigning
16 the responsibility and accountability for operational
17 safety to the Site, at least Headquarters is free of
18 that responsibility to spend effort to find out
19 what's going on, and what's behind occurrences, and
20 what's behind non-standard behavior of these
21 potentially dangerous things.

22 I -- we have a difficulty at NNSA similar
23 to that of NASA, in that we've got to rely on the
24 contractors for a good part of the knowledge. We are
25 in much better shape than NASA in that we have a much

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1 closer on-the-floor partnership between the --
2 especially Pantex, for instance, the one I'm most
3 concerned about -- where the contractor and the Site
4 Office at least have a good record of identifying and
5 addressing safety issues as they come up.

6 We found recently how delicate it is,
7 that process is, and how easily it can get overturned
8 by not having the right people involved.

9 In particular, it raised the issue, we
10 all have raised the issue, why wasn't everybody in
11 the high explosive community automatically called in
12 on day one when there was a high explosive cracking
13 incident? Why is there a principle, which I heard
14 announced yesterday by a high functionary within your
15 organization, that "it's just not done" to involve
16 Los Alamos in an issue about weapons at Pantex?

17 You know, I'm concerned about that. That
18 that doesn't allow you the best opportunity to pull
19 the string and find out what's going on.

20 Finally, I think your notion of a Chief
21 of Defense Nuclear Safety could well be an excellent
22 mechanism for establishing this kind of direct
23 detailed oversight. Thank you, Mr. Chairman.

24 CHAIRMAN CONWAY: Now we'll get to Dr.
25 Matthews.

1 DR. MATTHEWS: Thank you, Mr. Chairman.
2 First, let me commend you on a nice written
3 testimony, and really hitting on some very important
4 issues that in my view, if NNSA takes seriously and
5 puts an action plan together, we'll --

6 GENERAL HAECKEL: I was delinquent when
7 we started up, and I would not want to take credit
8 for all of that with my distinguished guests behind
9 me, within striking distance.

10 (Laughter.)

11 GENERAL HAECKEL: I wanted to make sure
12 that I thanked Bob Degrasse, Xavier Ascanio, Ray
13 Corey, Bob Brese, and Emil Morrow for all the help
14 that they've given me over the last several months.

15 DR. MATTHEWS: Well, let me then commend
16 you and your colleagues for an excellent piece of
17 work, and talking about some real important issues
18 that we've recognized, too.

19 I want to talk about one that you didn't
20 talk about. And it's based on Integrated Safety
21 Management guiding principles, which you
22 appropriately talked about the importance of that for
23 a strong safety culture.

24 And one principle is balance of
25 priorities, also known as safety versus productivity,

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1 which is, I think, some of the motivation behind the
2 changes that we are seeing, both in NNSA and EM
3 [Environmental Management].

4 Dr. Eggenberger mentioned three recent
5 incidents which could get down to a decision against
6 productivity versus safety, all three of which could
7 result in a nuclear situation, nuclear accident or
8 some sort of dispersal.

9 And so what I want to ask you is: do you
10 think that NNSA, now and as they move into the re-
11 engineering, does pay the right attention to
12 balancing productivity versus safety? Do they have
13 mechanisms to make those decisions and technical
14 capability to make those decisions? And primarily,
15 to assure that the likelihood of a nuclear event is
16 reduced to the minimum.

17 GENERAL HAECKEL: There's one paragraph
18 in the testimony that says the majority of our Board
19 feels that NNSA has paid adequate attention to
20 safety. And there's always the pressure to complete
21 the schedule for the productivity at the detriment of
22 safety, that we have to constantly watch over.

23 But the majority of our Board believed
24 that NNSA's concern for that proper balance was
25 there. We did have a minority opinion, that is going

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1 to be published, that did not agree with that
2 statement. And it's going to be part of our report,
3 and we had no -- we squelched no minority opinion.

4 So just the fact that there was a
5 minority opinion says that that's an ever-present
6 thing that we have to watch. I personally believe
7 that we have the right people in places of
8 leadership, with adequate attention to those details,
9 to make sure that that balance is proper.

10 DR. MATTHEWS: Okay. And as a follow-up,
11 because you talk about some of the technical
12 capabilities, do you think that NNSA, particularly at
13 the Headquarters level, has the formality and
14 approach and the technical depth to properly make
15 that balanced decision, productivity versus safety?

16 GENERAL HAECKEL: I noted in the
17 testimony several weak areas that needed attention.
18 The number of people, their qualifications, their
19 initial training, their recurring training. And
20 we'll make specific recommendations about that, and
21 the TQP program also, to bolster that.

22 So again, I think it's adequate, but as
23 far as safety is concerned, we can always do better.
24 And I think there's some very good ideas that are in
25 our future that would strengthen that.

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1 And again, referring back to the
2 testimony, our Site Offices have already looked at
3 that mix and reevaluated that mix just recently. So
4 that is a work in progress.

5 DR. MATTHEWS: Good. Thank you.

6 MR. FORTENBERRY: John?

7 CHAIRMAN CONWAY: Let me finish first.
8 General, on page 4, you point out that in the NASA
9 report there was a healthy fear of failure, of
10 operations must be proved safe, rather than the other
11 way around.

12 GENERAL HAECKEL: Right.

13 CHAIRMAN CONWAY: I agree with that. And
14 the three instances that Dr. Eggenberger cited and
15 suggested that you look at, and when you do that,
16 take a look and see: were the decisions made based on
17 proving it's safe, rather than the other way around.
18 There's the chance that they were doing it the other
19 way around.

20 Also, you make reference to -- in the
21 report that -- the NASA -- problem -- there was a
22 transfer of too much of authority for safety to the
23 contractor. I would agree with that.

24 And that's why I'm somewhat concerned
25 with the recent contract, special contract

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1 requirements that's been issued by your organization,
2 particularly in entering into a new contract with one
3 of the contractors, in which there's a movement back
4 from NNSA oversight of safety and making that the
5 responsibility of the contractor.

6 And in the contract itself, it refers to
7 the fact you're going to watch for opportunities now
8 to back off and give the contractor -- make the
9 contractor have oversight on its own safety. And
10 this is a contractor who in the years past has
11 objected and has tried to have federal
12 representatives, Site Representatives, not in their
13 -- at their operations level.

14 So again, I hope the lessons we've
15 learned from NASA of turning over too much authority
16 to a contractor for safety, that we're not going down
17 that road also. You also refer to a number of former
18 studies that have been made of NNSA and defense
19 operations. And these reports have been going on the
20 shelf.

21 One of them, I would suggest, you might
22 want to go back and reread. It's the Chiles Report.
23 Admiral Chiles put a great deal of effort in the
24 past, particularly on technical training. And I
25 suggest there was a lot of -- there were a lot of

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1 good recommendations in that report that I do not
2 believe have been implemented.

3 So rather than have another -- your
4 report going on top of these other reports, and
5 they're all going on the shelf, we've got to go back
6 and reexamine these reports. In particular, the
7 Chiles Report, in my opinion, was an extremely
8 excellent, an extremely good one.

9 Dr. Eggenberger?

10 VICE CHAIRMAN EGGENBERGER: No more
11 questions.

12 CHAIRMAN CONWAY: Dr. Mansfield?

13 DR. MANSFIELD: Well, no more questions
14 for you.

15 CHAIRMAN CONWAY: Bruce?

16 DR. MATTHEWS: No, I don't have any more
17 questions.

18 CHAIRMAN CONWAY: Okay. Kent?

19 MR. FORTENBERRY: Yeah. A few things.

20 And since the Chairman raised this point about
21 ensuring operations are proven safe before
22 initiation. In your testimony, what you said was
23 that the majority of the Board had concluded that
24 adequate systems were in NNSA to ensure that that
25 occurred, that operations were proven safe before

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1 commencing. And I would interpret that to -- or I
2 would assume from that we would probably not see any
3 recommendations addressing that point.

4 Can you speak to that a little bit and
5 maybe describe what made the Board reach the
6 conclusion that there was adequate systems in place
7 and what those systems were?

8 GENERAL HAECKEL: I think the experience
9 of the people that participated in the Lessons
10 Learned, the NNSA Lessons Learned Board, brought that
11 out in our discussions.

12 And I would like to probably wait until
13 the full report comes out before I can say exactly
14 what we would recommend to enhance that or to make
15 sure that NNSA continued to be in that vein, to prove
16 that things were safe versus unsafe.

17 But I think we relied mostly on our
18 experience with the projects that we were on and
19 discussions with other individuals and other
20 organizations within NNSA.

21 MR. FORTENBERRY: Or sort of a feeling
22 based on experience? And just in observation, in
23 terms of systems being in place, a casual observation
24 from me would be that what I don't see are systems.
25 For example, generic safety issue process and, I'll

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1 say, dedicated safety R&D to address those generic
2 issues as they are brought up, you know,
3 specifically.

4 But I don't see those things, which I
5 would consider, you know, systems. If you ask, do
6 you generally feel that we proved things are safe
7 before we commence, and if the answer is yes, that's
8 one thing.

9 But to say, we believe there are systems
10 in place to ensure that, that's -- I would certainly
11 be interested in what those would be and what the
12 Board has identified those to be.

13 And I think that the Chairman expressed
14 particular interest in that, so, you know, that would
15 be of great interest.

16 I want to also try to understand in your
17 testimony and a lot of discussions, there's been the
18 use of a few terms that seem to be interchanged --
19 decentralized operations, responsibility for
20 operational safety, and risk acceptance. Those seem
21 to be interchangeable in your testimony, and I don't
22 believe they are at all. I think there's a great
23 deal of difference between those.

24 Can you maybe help me out a little bit
25 there? When -- I know your testimony speaks

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1 specifically to decentralized operations and a
2 reaffirmation that that is what NNSA should pursue.
3 And it also mentions risk acceptance. Is that the
4 same thing in the mind of the Board?

5 GENERAL HAECKEL: I think there are
6 subtle issues, and we can take that one for the
7 record and get you a good definition of what we meant
8 for each one of those, and get that back to you.

9 MR. FORTENBERRY: I'll give you a couple
10 of things that bother me about that, and it might
11 help.

12 The testimony that you gave also seems to
13 indicate a desire to or a positive attribute of
14 having centralized, independent, safety and technical
15 requirements capability.

16 And if you establish that at a level
17 that is centralized, it is above the level of risk
18 acceptance. And so it tends to lose meaning.

19 If you're establishing technical
20 requirements and safety requirements, and then at a
21 lower level, you are assigning risk acceptance,
22 you've defeated the first action.

23 The same thing in terms of oversight.
24 There seems to be some illusion that NNSA needs to
25 look at its Headquarters oversight and, you know,

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1 maybe make some changes there. I'm not sure. I'm
2 sort of reading into what you're writing here.

3 But again, if you establish the risk
4 acceptance at a level that's below the oversight,
5 your oversight tends to lose meaning, if you
6 understand what I'm saying, because the risk
7 acceptance is down at the decentralized level.

8 GENERAL HAECKEL: But there would be an
9 oversight process at the Site, and the Site Manager
10 would be the risk acceptance official.

11 MR. FORTENBERRY: So you're not talking
12 about a centralized oversight? You're talking about
13 a Site level oversight?

14 GENERAL HAECKEL: But then there's -- but
15 then the centralized part would be an independent
16 look, getting into the redundancy and the
17 independence of a safety review that is separate from
18 the line production productivity pressure to complete
19 the thing on schedule.

20 And that's why when I was discussing
21 LO/CAS that we had recommended that NNSA look at
22 reestablishing the Headquarters Site Assessment Teams
23 until LO/CAS is fully implemented and all those
24 things are defined and ready to go.

25 So I guess it's a multi-tiered type of an

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1 operation where you have risk acceptance at the Site
2 Manager. You have his own oversight process that is
3 coincident to that, but then you also have a
4 centralized, separate process, whether it be the
5 Chief of Nuclear Safety or the Site Team in
6 anticipation of a fully implemented LO/CAS that would
7 also take a look at that.

8 MR. FORTENBERRY: You can understand sort
9 of my difficulty in this. Dr. Mansfield mentioned
10 the Site Office being responsible for operational
11 safety. That does not mean being the risk acceptor.
12 That means he is responsible for operational safety.

13 GENERAL HAECKEL: But my organizational
14 expert is Bob Degrasse, and with your permission, I'd
15 like to see if he had any short comments to make on
16 that.

17 CHAIRMAN CONWAY: Bob, do you want to add
18 anything? Or do you want to think this through and
19 then submit it for the record?

20 GENERAL HAECKEL: We can do that.

21 CHAIRMAN CONWAY: Yeah.

22 GENERAL HAECKEL: We can do that.

23 MR. FORTENBERRY: One other point, if you
24 don't mind?

25 CHAIRMAN CONWAY: Okay.

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1 MR. FORTENBERRY: I just want to ask
2 about -- unless you want to speak to that?

3 DR. MANSFIELD: When you're finished, I'd
4 like to --

5 MR. FORTENBERRY: I wanted to get a --
6 make sure I saw the difference in high consequence
7 activities and performance indicators. Again, I sort
8 of get the sense that it's very important in terms of
9 addressing high consequence activities and preventing
10 high consequence events.

11 It's very important to establish baseline
12 performance level, and then monitor the trends to see
13 what's happening. And of course you can see the
14 difficulty of that is that by its nature, you're not
15 going to have trends in high consequence events.
16 They're going to be, hopefully, random and
17 catastrophic or high consequence.

18 And so, I want to make sure there's a --
19 at least get the sense of -- an appreciation for
20 that. And that there isn't an overemphasis on
21 day-to-day events in terms of informing us of how
22 comfortable we are that we've protected against the
23 high consequence events.

24 It's a subtle difference, perhaps.
25 Depending on how you look at it, could be a

1 significant difference. But --

2 GENERAL HAECKEL: There could also be
3 processes to support high consequence events that
4 would be able to be trended also.

5 MR. FORTENBERRY: Sure.

6 GENERAL HAECKEL: And you could do a
7 defense in depth, where you stand back -- and this is
8 just generally speaking -- but you stand back and
9 look at those supporting processes. And if you see
10 a problem with trending in those, then you -- at
11 least I would be concerned because that feeds a
12 potentially high consequence overall effort.

13 MR. FORTENBERRY: So I gather from that,
14 there is an appreciation of that difference and the
15 challenges in translating one trend to speak for
16 another phenomena?

17 MR. AZZARO: Again, sorry, gentlemen.
18 You're nodding your head. If the court reporter is to
19 get that, is that a yes, or what did you mean by
20 that?

21 GENERAL HAECKEL: I understand that it
22 would be difficult to define a trend or spot a trend
23 in high consequence events until it was too late.
24 And that's the challenge, is to --

25 MR. FORTENBERRY: And that certainly

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1 shapes your thinking when you're trying to address
2 that event.

3 GENERAL HAECKEL: That's right.

4 MR. FORTENBERRY: That's my point. And
5 it calls for something a little bit more
6 sophisticated, perhaps, then tracking lock-out,
7 tag-out, for example, which is very important. And
8 it can tell you something about your operations, but
9 it doesn't -- if it's being done correctly, it
10 doesn't necessarily tell you that you're preventing
11 high consequence events.

12 GENERAL HAECKEL: Okay.

13 CHAIRMAN CONWAY: Dr. Mansfield?

14 GENERAL HAECKEL: Okay.

15 DR. MANSFIELD: General Haeckel, my
16 comments [about] having somebody pull the string from
17 Headquarters on every odd occurrence or
18 safety-related occurrence, doesn't mean that they
19 have to -- when I say, pull on every occurrence, it
20 doesn't mean you have to spend time on every
21 occurrence.

22 I mean, I believe it's possible for you
23 to have smart people that know when there's something
24 that needs to be looked at in more detail. I just
25 don't believe it's being done now. I believe if they

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1 had had someone charged with that responsibility at
2 NASA, they certainly would have asked questions about
3 foam strikes.

4 We have a mechanism for raising these
5 issues, but normally the issues are raised by
6 contractors at the Site through the USQ [Unreviewed
7 Safety Question] process. And they're -- it's either
8 self-initiated by continuing examination of
9 operations, or they're initiated by an event such as
10 cracked HE.

11 I would think that if you were to finally
12 establish a Headquarters Chief of Defense Nuclear
13 Safety, that that would be a focus for being notified
14 and reviewing every USQD, every Unresolved Safety
15 Question Determination, or at least all positive
16 ones.

17 Maybe all of them. Maybe all of them.
18 Your screening negative ones, that is, ones that are
19 judged not to be in error, is as important as
20 reviewing ones that have -- reviewing negative ones
21 - that have been determined not to be dangerous is as
22 important as reviewing ones that are determined to be
23 dangerous.

24 But I agree with you how difficult it is
25 to do that when you've had the loss of so many people

1 at Headquarters, especially with all the nuclear
2 safety team that have been carefully put together
3 over the years, at numbers like 50 percent are what
4 I have heard also.

5 I have a naive organizational question
6 that probably won't be accepted well by anybody at
7 DOE. Why don't you make Germantown part of the
8 Safety Center -- or the Service Center -- so that
9 people don't have to move to Albuquerque to deal with
10 issues at Pantex or at the other labs? At any rate,
11 that's -- I throw that up as a balloon.

12 But I'd like to ask you to describe, if
13 you can, the significant finding investigation for
14 weapon related issues. Could you describe that
15 process in a simple fashion, the SFI [Significant
16 Finding Investigation]?

17 GENERAL HAECKEL: The SFI process? I
18 don't know that I can do it in sufficient detail to
19 satisfy you, but my understanding is if we have an
20 abnormal indication, we want to understand why that's
21 abnormal configuration or indication, and resolve
22 that as quickly as we can, and I guess more
23 importantly is to understand as quickly we can.

24 DR. MANSFIELD: It has to do with the
25 correct -- it has to do with the weapon correctly

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1 operating for the Services?

2 GENERAL HAECKEL: Yes.

3 DR. MANSFIELD: There isn't, as I
4 understand it, there's no SFI-like process for odd,
5 unexpected details during Pantex operation. It's an
6 ad hoc process.

7 GENERAL HAECKEL: But in your first
8 portion, I made a note of that, that that sounded
9 very -- note to myself -- that sounded very similar
10 to the SFI process and would that be translatable and
11 useable in other circumstances.

12 DR. MANSFIELD: Okay. Good. That's --
13 and you'll continue to look at that?

14 GENERAL HAECKEL: Yes, sir.

15 DR. MANSFIELD: That's all I have.

16 CHAIRMAN CONWAY: Dr. Matthews?

17 DR. MATTHEWS: Yes. I want to ask about
18 your evaluation of the readiness of the Sites and the
19 contractors to implement the line oversight
20 contractor assurance systems. You refer to it by the
21 adequacy they need to be verified.

22 And my question is, does NNSA have
23 performance measures, indicators, requirements that
24 would verify that the Sites and the contractors can
25 implement LO/CAS?

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1 And a sort of follow-up question, has
2 your team looked at the Davis-Besse lessons learned,
3 in which one of the big lessons they learned is you
4 can be fooled by performance indicators, and you've
5 got to do them right before you're ready to go. I'm
6 just curious what your comments would be on that.

7 GENERAL HAECKEL: To my understanding,
8 the LO/CAS process is still in development. And the
9 contractor assurance or assessment system would be in
10 place, and the line oversight would be monitoring
11 that with its own requirements.

12 And I'm not familiar with anything that
13 has been finalized on those LO/CAS metrics. I'll do
14 another pass at that, and if there are things that
15 NNSA has decided upon as far as indicators go, I'll
16 provide those for the record for you.

17 DR. MATTHEWS: It would be useful.

18 GENERAL HAECKEL: As far as Davis-Besse
19 is concerned, we focused just on the NASA Accident
20 Investigation Board Lessons Learned. In my
21 testimony, I added in Davis-Besse as a possible
22 outside occurrence that -- as an example of what NNSA
23 should be looking at in the future. And -- but
24 that's not - those two examples, of the Columbia and
25 the Davis Besse, were not all inclusive, obviously,

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1 just examples. So I believe we should move towards
2 more of that in the future.

3 DR. MATTHEWS: Good. I think that would
4 be wise.

5 CHAIRMAN CONWAY: Dr. Eggenberger here?

6 VICE CHAIRMAN EGGENBERGER: The current
7 organization that puts emphasis on improving the
8 technical capabilities of the DOE staff at the Sites
9 I think is a very positive thing. And I think that
10 that should be continued.

11 I think a lot of the discussion here
12 today was where else should that also be implemented.
13 And so don't give up on the improving that
14 capability.

15 Now this, everybody seemed to be a little
16 itchy when the word "risk acceptance official" keeps
17 coming up. And it's obvious to me who the risk
18 acceptance official is, and that is the Secretary of
19 Energy. And all you have to do is look at a scenario
20 where you have an accident where you have some
21 dispersal of material, and it bumps up the line, and
22 it doesn't stop at the manager of the Site. It runs
23 right on up, up to the Secretary of Energy.

24 So I know, if I were in the position of
25 Ambassador Brooks, I certainly would not like to

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1 accept that kind of responsibility without having my
2 strong technical capability supporting me. So I
3 think it's a term that causes a lot of confusion.

4 And I would like to say I liked your
5 testimony very much. It was to the point, and it's
6 a job well done.

7 GENERAL HAECKEL: Thank you, sir.

8 CHAIRMAN CONWAY: Okay. General, we
9 thank you very much for coming here today. You're
10 free to submit additional information. We will keep
11 the record open until March 3rd. And we may have
12 additional questions, which we would send to you.
13 But you're free to submit any additional information
14 that you may wish to put into the record.

15 GENERAL HAECKEL: Yes, sir. Thank you.

16 CHAIRMAN CONWAY: Now we'll turn it to
17 the audience. Is there anyone in the audience that
18 wishes to be heard this morning? I see no one rising.

19 So with that, then the -- we will recess
20 until February 9th, at which time we will hear from
21 the Assistant Secretary of ES&H, Ms. Cook. Thank
22 you, General.

23 GENERAL HAECKEL: Thank you, sir.

24 (Whereupon, the above-entitled matter was
25 concluded at 10:07 a.m.)