

Summary of DNFSB Discussion and Questions
Testimony of Brigadier General Ronald J. Haeckel, USAF
3 February 2004

The below are notes from the questions, answers and statements made by the DNFSB and General Haeckel, in the sequence of occurrence. There is no attempt to precisely quote the words of the parties, but hopefully the sentences capture the essence of what was said. All answers are those as presented by General Haeckel at the hearing.

Dr. Eggenberger

- **Question:** When do you expect your (NNSA CAIB Review) report to be final and handed out?
 - **Answer:** We expect the report to be signed by the middle of this month and presented to the Leadership Coalition in March.

- **Question:** I believe your recommendations will be put into one of the three categories described: management and safety culture, corporate organization and technical capability. But it is key to have a good implementation plan. Do you believe an implementation plan will follow the report?
 - **Answer:** It is correct that the recommendations will be placed into one of the described categories, however, some recommendations span two or even all three categories and those overarching recommendations will be highlighted as such in the report. With respect to an implementation plan, we have not met with Ambassador Brooks on how he plans to review and/or implement our recommendations.

- **Statement:** You stated that assigning line management responsibility for safety has removed some of the past complexity. It's not clear how this all works together. Go back to some of the recent occurrences and it might be useful to analyze them in light of your recommendations. For instance, the Plutonium uptake problem at Los Alamos, the cracked high explosive at Pantex and the multiple staging of units at Pantex. Reviewing these in the context of your report can help give you a feel for the state of affairs.
 - **CDR Brese Comment:** Although there was no formal question for the record or tasking in this statement, it would be a good idea to complete the exercise recommended by Dr. Eggenberger.

Dr. Mansfield

- **Statement:** I see that there is a difficulty for headquarters to have detailed insight about the Site Offices. I don't see, in NNSA, the ability, like there is in Naval Reactors, to demand notification of irregularities. For example, at NASA, who at headquarters knew about the foam strikes and that they deviated from the existing specifications?

- **Statement:** ISM doesn't identify problems related to design. NNSA has placed great reliance on nuclear explosive safety studies and expert systems that need determined care. It is not clear that anyone goes back and re-examines our past decisions in light of new

information to see if they are still valid. I'm concerned that personnel at the labs are discouraged from investigating problems unless asked by the customer or that there is no concern to have Los Alamos look at a problem associated with a Livermore weapon. Instead, there should be a culture of encouraging people to pull the string and managers should tell them they will figure out how to find the time and resources to investigate problems. For example, I don't understand why everyone in the high explosive community was not immediately informed of the cracking problem at Pantex.

- **Statement:** I like the concept of implementing a Chief of Defense Nuclear Safety.

Dr. Matthews

- **Question:** One item not talked about is how to achieve the balance of safety vs. productivity.
 - **Answer:** The team came to the conclusion that NNSA has an adequate concern for safety, including systems to ensure that operations are proven safe. The team also believes we have the right leadership in place to ensure the balance. Of note, we did have a minority opinion that disagreed with the majority of the team and that will be included as part of the report, so that it is not lost.
 - **CDR Brese Comment:** This appears to hit on the Corporate Organization recommendation that NNSA should elevate the management and oversight of operational and infrastructure issues within Defense Programs. We intentionally left this out of the testimony because this was not one of the “bones” we were ready to give the Board out of the draft report.
- **Statement:** I'm not sure NNSA headquarters has the formality of process and technical depth to balance between the two effectively.

Mr. Conway

- **Statement:** In your testimony, you quote the CAIB in their statement that organizations that deal with high-risk operations must always have a healthy fear of failure – operations must be proved safe, rather than the other way around. Looking at Dr. Eggenberger's examples, were we proving operations are safe, or the other way around?
- **Statement:** The testimony also talks about NASA transferring too much authority to the contractor. I'm concerned about the special contracting provisions in one of your recent contracts (CDR Brese Note: meaning Sandia National Laboratory). But this contractor has a reputation for trying to keep DOE at bay. I hope we're not proceeding down the same path as NASA.
- **Statement:** The testimony mentions several former studies that I believe have been shelved without seriously considering or implementing the recommendations. I hope your study will not also go on the shelf. I think you need to go back and review those past studies, especially the Chiles Report.

Dr. Fortenberry (Technical Director)

- **Question:** You stated that the majority of your team believed NNSA has an adequate concern for safety and adequate systems in place to prove operations are safe instead of proving them unsafe. Can you elaborate on what led your team to those conclusions?
 - **Answer:** The team mainly relied on its past experiences as a group. I'd like to wait until the report is finalized to address the question about systems for proving operations are safe versus unsafe.
- **Statement:** As for systems that are in place, I don't see dedicated generic safety systems and processes, such as safety R&D. I'm interested in hearing about what systems NNSA has in place.
- **Question:** With respect to potential high-consequence activities and performance indicators, there is really no ability to trend high-consequence events. So, there can't be an over-emphasis on being informed about daily events. What is your take on that?
 - **Answer:** It's true that you can't trend high-consequence events, but you can trend supporting processes and occurrences that might eventually lead to a high-consequence event if left unchecked.

Dr. Mansfield

- **Statement:** Back to pulling the string, we need smart people who know when something needs to be done. However, those issues are normally raised by the contractor via the USQ (Unresolved Safety Question) process. If you decide to establish the Chief of Defense Nuclear Safety, then maybe that is something he could do – review positive and negative USQs.
- **Statement:** With regard to the loss of technical expertise and personnel who do not desire a directed reassignment to Albuquerque, why not make Germantown part of the Service Center?
- **Question:** Could you describe the SFI (Significant Findings Investigation) process?
 - **Answer:** It's how we track the process of resolving identified abnormal conditions or configurations in our weapons.
 - **Dr. Mansfield Statement:** But we don't have an SFI-like process for production and I think you should look at that.

Dr. Matthews

- **Question:** With regard to the contractors' readiness to implement LO/CAS, does NNSA have performance indicators, etc. that the NNSA can monitor the contractors' implementation of LO/CAS and did your team review the Davis-Besse near miss?
 - **Answer:** LO/CAS is still in development and performance indicators and metrics are not yet formalized. I can provide those to the Board later [**ACTION ITEM**]. As far as

Devis-Besse, the team did not look at that specifically, but it is an example that we raised as the type of external operational experience that should be reviewed by NNSA.

Dr. Eggenberger

- **Statement:** I support your idea of strengthening the technical capability of the Site Office Managers and their staff and I like the idea of having someone, like a Chief of Defense Nuclear Safety, charged with monitoring and improving site technical capability.
- **Statement:** The real risk-acceptance official at NNSA and DOE is the Secretary of Energy and he needs a strong technical capability to assure safety. Calling the Site Office Managers the risk-acceptance officials causes confusion.
 - **Brig Gen Haeckel Response:** I can give you more detail about the definition of Site Office Managers being called risk-acceptance officials [**ACTION ITEM**].

Mr. Conway

- We will keep the record open on this hearing until March 3rd for anything that you would like to submit at a later date and we may have some additional questions to forward to you as well.

ACTION ITEMS

1. Provide additional information on LO/CAS plans including performance indicators and metrics.
2. Define what is meant by “risk-acceptance official” with respect to the duties and responsibilities of Site Office Managers.