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DoD News Briefing: Lieutenant General Ronald Kadish, Director, BMDO

(Also participating in this briefing was Dr. Jack Gansler, Under Secretary of Defense, Acquisition, Technology and Logistics)

Mr. Bacon: We're going to do this in two parts, and we probably will not be able to answer all your questions. In fact I'm sure we won't be able to answer all your questions.

First, Lieutenant General Ronald Kadish, the director of the Ballistic Missile Defense Organization will describe what happened tonight. Then Jack Gansler, the under secretary of Defense for Acquisition and Technology will fit this into the context of the broader program, and we'll take a few questions and I think we'll probably be done in about 15 minutes or so. General Kadish?

General Kadish: Good morning. We did not intercept the warhead that we expected to have tonight. We're disappointed with that, but let me explain what I think happened, and I'll have some visual aids here to properly put it in context.

We had the launch of the target out of Vandenberg and that operation appeared to be fairly successful. We had an initial delay to the launch because of some battery problems that we worked out on the target. We had, as far as I know, only one anomaly with the target launch in that we did not get the decoy balloon to inflate, so it was an uninflated decoy. Everything appeared to be on track with the launch in the battle manager type systems, the integrated part of the system, to work right. We launched the interceptor. But we failed to have the kill vehicle separate from the booster second stage. All we know based on telemetry now, and of course we will get more data as time goes on, is that the kill vehicle was waiting for a signal that we had second stage separation. We did not receive that signal. Therefore, the timeline shut down and the kill vehicle did not separate, and therefore, we did not attempt or have any activity in the intercept phase. So we had a failure of the booster kill vehicle separation.

So from that standpoint, if you look at this chart, this is designed to show from the launch of the interceptor all the way through the kill vehicle separation. Then what the kill vehicle does with its star shot, firing the complex for the intercept out here.

So what we know today, or as of this hour, is that we did not get to this point on the flight. So none of this occurred. The failure was in the boost phase here. I would point out that, as you know, those who have followed the program, that the booster we are using is not the booster we intend to use in the operational system. It is a surrogate. A payload launch vehicle, which is second stage Minuteman booster that we have had high reliability with. So somewhere in this area we failed to get the proper sequence, and therefore the kill vehicle never separated to do its job.

Q: Where was the signal supposed to come from?

Kadish: It came internal to the booster, to the best of my knowledge.

Q: Any idea why the separation did not occur?

Kadish: We do not. You have the extent of my knowledge today. We're in dialogue with the people at Kwajalein. They are intensely investigating this. We'll have some reports four hours, eight hours, and then 48 hours from now that will help us sort through this.

Q: Do you receive the kind of real-time telemetry that will allow you to determine why there was...

Kadish: We watch telemetry all the way to splashdown, to the best of my knowledge.

Q: Will that be able to tell you why it was not...

Kadish: We certainly hope so.

Q: How many minutes into the flight was the separation supposed to have occurred?

Kadish: The EKV separation is about 157 seconds.

Q: I thought you said it didn't separate because it didn't get the signal to separate. Is that what you said earlier?

Kadish: It was looking for a second stage separation signal. It did not get that. So the timeline shut down.

Q: So the question is why you didn't get the signal.

Q: I'm not sure I understand what you're saying. The kill vehicle did not get the signal that it was supposed to separate?

Kadish: That's correct.

Q: Where was that signal supposed to come from?

Kadish: It's a part of the integrated system on the booster/kill vehicle combination. There's a series, and I need to caveat this, is that we are very early, we're only an hour or some minutes away from the event. All I can give you is what we have initially from our look at the telemetry. There is a lot I might say here that could turn out to be wrong, so please bear with me as we go through our investigation. So I would not like to speculate on a lot of this.

But the way the normal sequence works, as I understand it, is that as the booster separates stages there are signals given to the computers on the kill vehicle and to other computers on board, and all those signals are supposed to line up and as a part of the sequence of events to make things happen.

Q: General, with many experts claiming that this is a possible \$60 billion boondoggle, a system that won't work, you now have two failures and one success. Doesn't that weaken your position considerably?

Kadish: What it tells me is we have more engineering work to do. And as we've said all along, this is a very difficult, challenging job. This is rocket science, so there's a lot of things that can happen in this process. In this particular case it appears it happened in an area that has little to do with the functionality of the key component of the system that we're testing.

Q: With the Pentagon supposed to make its decision, the review decision in the coming weeks, can they decide at this point to move forward with this?

Kadish: I defer to Dr. Gansler for that.

Dr. Gansler: Let me just make a couple of observations first on this. Having spent about 40 years going through this flight test thing -- what you usually find in trying to answer the question about why you don't know already is you get an instant read in real time, as someone pointed out, about some things like the signal didn't go. It then tends to take you days usually, not hours even, to try to understand by tracing it backwards where that came from and why it didn't go. So we won't have that information likely tonight or the next couple of days. It will take awhile.

When you then find out what it was, then you try to come up with a fix on it. I should point out that this is only the fifth time that that particular booster which was configured for this particular flight has been used. In other words, we used it on the first four flights. They're standard boosters, but the configuration is different and therefore the staging is somewhat different. It is planned to be used only another three times, and then after that we use the real booster. So it's a special arrangement that was set up in order to have a surrogate early on until we could get the operational booster. So the focus therefore of the booster portion of it is an important one. We do need to develop the booster. Unfortunately, what we'll learn from this one isn't what's wrong with the operational one and we'll have to go through the normal check out of what one would do on developing a Minuteman or developing an MX or so forth. It's that same kind of a booster development program.

The thing we were hoping to get out of this was much more information on the interceptor portion of it, which is really the part that is unique and different about this particular flight versus, say, a normal booster development or a missile development. This is closer to, say, a development that we've gone through in the past of anti-aircraft missiles, something like that. You want to see what the end game looks like. In that we normally have development problems, and that's the kind of thing that this represents as far as I can see.

Q: But do you still think it's possible for the Pentagon to go ahead with a deployment decision in the coming weeks after what happened tonight?

Gansler: The secretary and then the president are going to be evaluating a variety of things. As the president in fact said, there were four measures that he was going to be using -- important inputs for that decision will be threat information that we'll get from intelligence inputs, also impacts on what it would likely mean in terms of the arms control agreements, other considerations that the Secretary first and then the President will be evaluating. I would say the Secretary certainly over the next month, and the President over the months shortly thereafter, trying to assess, based upon what we've learned from these three flights in terms of design information, what we have on other threat information. He'll have to make an assessment of whether or not it is still critical to try to make the 2005 date. That was the thing that was driving us.

That's the thing that the decision now relative to trying to build a site at Shemya for the X-band radar -- which, by the way, the X-band radar part of it was working. That was something we were able to determine from the X-band radar that the balloon didn't inflate.

Others have said how easy it is to put up decoys, by the way. This is the proof that one decoy we were trying to put up didn't go up.

Q: The Secretary has already said he thinks the threat is there, and he thinks the cost is such that we should go forward. But as far as technical feasibility, do you think that it's still possible to give thumbs up for?

Gansler: That's something we're going to be evaluating. To be honest with you, I think it's fair to say that had we not had a kill in that third flight, that you would probably have very low confidence. The fact that the system, which we tested tonight again, and we tested in the second flight with the battle management system, the thing that was added tonight that was different was the link from the ground up to the intercept vehicle while it was in its boost phase. That was really the only new item. But checking out the whole system...

This is an extremely complex system. So you check out the satellites that detect the boost, that part of it worked. You check out the target vehicle. You're checking out the battle management system. You're checking out the X-band radar link. You're checking out the communication link up to the interceptor booster, and then the final part. The part we didn't get and what we were hoping to get was much more information on the terminal phase.

So the question is whether we have enough information on the terminal phase in order to be able to make an assessment that says we should go ahead and try to build that site at Shemya. That's one that the Secretary and the President are going to have to call, not...

Q: Is there any chance there would be another test before that decision?

Gansler: The next test that's scheduled right now is in the October/November time period. As you remember in the last flight when we had a failure, we spent quite a bit of time trying to analyze and then fix before we go ahead. If this requires major analysis and fix, that even could be delayed. But otherwise it's probably in the October/November time period. Because of the construction time cycle at Shemya and the fact that we have the engineering work to be done for that site and then the construction to start in the spring, it seems to me that that's trying to push the decision pretty far down. We'd like to have a decision made by November rather than a flight by November.

Q: It seems pretty clear that you didn't get the data from this test that you'd hoped to have and that you needed to have in order to provide that recommendation to go ahead.

Gansler: I would say we didn't get the data we had hoped to have. The question of whether it's an absolute need or not is the one that the Secretary and the President will be deciding.

Q: General Kadish, of all the things that could have gone wrong with this flight, was this at the very bottom of your concern list?

Kadish: It wasn't even on my list. We had good confidence in the reliability of this. It's worked very well before. And to have the kill vehicle not separate was not something we worried about.

Q: You had a glazed look in your eye from the pool coverage when you took the phone call saying it didn't work. You seemed fairly shocked. Is that a good description?

Kadish: I was more disappointed than shocked. I'm never surprised by the things that can happen. This was not -- again, this is rocket science and things do happen on this stuff that are unexpected. But of all the things we worried about and had risks associated with it, this was not something we thought would happen.

Q: Dr. Gansler, you say that the President and the Secretary will have to make a decision based on whether or not, will have to decide whether or not there's enough data, and yet they are not physicists, they are not scientists, they will have to... It's the scientists and the physicists who will have to decide if there's enough data.

As someone who's been testing for a long time, would it be your recommendation, is it your determination that there is enough data or not enough data? And would you go ahead with a project like this based on the data that you've got?

Gansler: The distinction I was making was the fact that the Secretary and President will be deciding not just on technical feasibility, but on other considerations as well. In terms of the technical feasibility of it, in terms of is this design likely to work under the conditions that we assessed, I would personally say that I gained a great deal of confidence from that intercept that we had successfully in terms of the interceptor portion of it because it did work and it did actually do some discrimination. On the rest of the system, which you can't just say is the interceptor technically feasible. What about the rest of the system? The rest of the system now has successfully worked twice, the last two flights, although the interceptor didn't. We didn't get to the interceptor on this one, and the prior one we had a failure on it.

So in a sense we've tested the major elements of this system sufficiently to say that the design is probably the one that's pretty solid. That is the same conclusion, by the way, that the Welch committee came to as well in terms of the technical feasibility. We have always said, and they said they same thing, that in terms of making the schedule it is a high risk program, and you wouldn't like, if you had the time, you wouldn't like to make a go-ahead decision of any sort on the basis of what we've seen so far, just these three flights. But because of the fact that we have a significant number of additional flights planned before the '03 decision to build the missiles, one could then decide that it's a low enough risk to go ahead and build the radar at Shemya. That's the decision that they're going to be making, not on whether we're ready to release the missiles.

Q: Just a followup. This was a booster that you've used before and you had a high amount of confidence in. The proposed booster, the one that you really want to us is eight months behind schedule already, I believe. So doesn't that say that as much confidence as you have in a tested booster, you can't certainly have that much confidence at all in a booster that's eight months behind schedule. Doesn't that feed into this decision also?

Gansler: It does. In fact the booster is going to be the gating item for the second decision which is the one in '01, and that's the decision whether you're going to actually deploy and make a commitment to the radars. And you're correct. That is a gating decision and if we don't have some successful booster launches we probably would delay that decision.

The whole schedule is a tight schedule. It has been a tight schedule right from the beginning, and it's been more threat driven in terms... But on the other hand, it's still event driven because if we don't have successful events, then we wouldn't go ahead.

As I said, I wouldn't personally feel, unless we had a successful intercept, that I had a lot of confidence in intercept design. If I didn't have a successful booster test I wouldn't have a lot of confidence in the booster, and so forth.

Q: General Kadish, I'd just like to ask you to respond to the same question. On the basis of the single time that the intercept phase of this system has been exercised, are you confident you have enough data to draw judgment on the feasibility of that part of the system?

Kadish: I don't think we should draw conclusions from any one test that are irrevocable. What we have is a number of tests and legacy tests for all the elements of the system. When added together, it provides us a great body of evidence of the capability of the system. Certainly on that test that we had the intercept, it gave us all a lot of confidence that the design we have of the kill vehicle, which is the key to the system, worked in a phase that we never had data on. So from that standpoint a key piece of the puzzle was put into place. But just as we've been saying for a long time, no one test tends to tell you everything you need to know. We have a body of tests even before this one that tells us an awful lot. And we have increasing confidence as a result of that.

Gansler: These flight tests are validations of a lot of the ground and simulation tests. That's a huge body of data that we have. We need more flight tests.

Kadish: We need more flight tests.

Q: Let me put it to you the other way. You've known for some time you would have to make a DRR recommendation on technical feasibility this summer. You now lack data from two tests on the intercept phase. What does the absence of that data do to your ability to produce this review? And the quality of the review that you're going to produce.

Kadish: I guess the way I would put it is, we will summarize the data and the situation that we face as of the time we need to make that assessment which is in the coming weeks, to the best of our knowledge, and that data... The data that we have and the test data that backs it up will be a high quality evaluation of the situation we face today. Would we like to have more data? Yes. But we are where we are, and this is a natural course of most programs that I'm associated with. If you go back in history to the ICBM development, to the Safeguard development, there were many successes but also many failures early in the program, and programs have to deal with the data that you have at any given time.

So to answer your question, we will do the best assessment we can given where we are today, after we've concluded the analysis of the...

Q: The bottom line is, despite what happened tonight, early this morning, you can still say this is technically feasible in a review, is that right?

Kadish: General Welch's group said that. We will evaluate what we have and provide our best recommendation through Dr. Gansler to the Secretary.

Q: General Kadish...

Q: Doesn't this test also show that the schedule of 2005 is really unrealistic based on how things are going? You said at the last briefing that that schedule was based on essentially everything working the way you thought. Over the testing process you've had a setback. It just seems that the booster being behind schedule, with other complications...

Kadish: I think what we need to do now, just like we do after every test, whether a success or failure, is evaluate what we need to do from here on out and the viability of our schedules from that point, and see if there are mitigating factors.

Dr. Gansler pointed out there is another flight test we have available to us. Whether we can gather the data for that to effect the types of decision making we want in the fall timeframe is going to be a problem, and we have to decide what to do with that.

Q: On that next test, there's no way that that test could be moved up, it might actually be later than it is now scheduled, but no way it could be moved up?

Kadish: That's something we're going to have to look at. But again, this is tough work, and we've got to make sure that we don't do a very expensive test just to do the test.

Q: It seems to me that the problems you had tonight dealt with parts that were old. Let me qualify that. The PLV, it's my understanding, is based on decommissioned Minuteman II parts, and the decoy balloon that didn't inflate, it's my understanding is from leftover balloons that you had from the mid '80s when you did some testing with the airborne surveillance test bed. So as the NMD test program progresses, are you getting more concerned about the reliability of some of these older surrogate and other assets that are crucial for you to conduct these tests? And secondly, did the Welch panel have anything to say about this matter?

Kadish: I think we would be better served to think of them as more reliable because we have tested them a lot. Now certainly age is a factor, but we have programs to make sure that these things are still viable. I'm not ready to say that age was the factor here. I probably would say, I don't know if Dr. Gansler agrees, that reliability is the issue. And reliability is somewhat independent of age if we keep these things up to speed like we think we do.

Gansler: We've got a lot of .999's, and you multiply them together and there's one... To answer the second half of your question, I don't believe that the Welch panel specifically addressed the aging question, to my recollection.

Kadish: Right.

Press: Thank you very much.