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Updated: 06/02/1998

## NEWS BRIEFING

Office of the Assistant Secretary of Defense  
(Public Affairs)



### Background Briefing Friday, November 14, 1997 Subject: Iraq's Chemical & Biological Weapons Capability Senior Defense Officials

**Mr. Bacon:** Many of you have asked questions about the chemical and biological weapons capability of Iraq, so we've gotten a senior military official and several of his civilian assistants to come down and answer your questions. The senior military official will begin with a brief opening statement, and then he and the senior civilian officials will respond to your questions for the next 20 minutes or so.

**Briefer:** You did a great job of delivering my opening statement!

I am, of course, the unnamed senior military official, and I have accompanying me these two gentlemen sitting on the end of the chairs here who are unnamed civilian officials from the Department of Defense. One of them is an expert in general on Iraq and the Middle East, and one of them is an expert on chemical and biological weapons issues, so I will defer questions appropriately to them if the issue comes up.

I'd just like to say before I take any questions that, as you know, some questions we may not be able to answer because of operational circumstances, and we'll tell you directly if that's the case, and we'll do our best to give you some information.

**Q:** The first obvious question would be how much chemical weapons and biological weapons exist in Iraq today, and to what extent do you know where they are?

**Q:** And what kind?

**A:** That's a broad question. I'll give my answer and then I'll defer to my expert on that issue.

First we do know that, or we believe that there are residual chemical capabilities and biological capabilities which Saddam Hussein and his regime have successfully concealed from UN inspection regimes. If we knew where they were with precision and how much they were and other details about them, of course we would have acted on that.

We know that compared to what the Iraqis publicly disclosed originally, after the DESERT STORM war, and what we later found, there was great divergence. They disclosed very little, we found a great deal.

To give you an example of a round number, they disclosed a small amount of a biological agent for research and development purposes, but we discovered in the course of UN inspections a large amount, a substantial amount – in the tons – of biological materials which...

**Q:** Can you give us a number?

**A:** It's a good question. I'll defer to this gentleman, if he can give you a more precise number than me. I don't want to give you the wrong answer.

**Q:** Are you talking about anthrax or a combination...

**A:** Anthrax is one biological agent. There were several. But that's certainly the leading, most deadly, most difficult biological agent.

But as an example, that trend has occurred throughout our dealings with Iraq. Their public statements and

our subsequent inspection under the UN monitoring regime has led to a finding which leads us to believe they have never told the truth, they have many more possible stored materials, hidden materials, materials which we cannot account for, because we have found great divergence between what they told us they had and what we proved they had later.

**Q:** Would you like to elaborate on that?

**A:** Let me go on a bit and see if I get at what you're really asking.

When you ask about a number of given agents, Iraq has declared almost 9,000 liters of anthrax, and they said, "and we destroyed it all." They declared several thousand liters of botulinum toxin, and they told us they produced other agents like aflatoxin and said they had it on missile warheads, etc. So Iraq has declared a lot, said they destroyed it.

I think the real issue is to understand what makes a difference in terms of biological agents. I think one of the key things here is to talk maybe about anthrax as an example.

Anthrax is a spore and if you, to get into numbers, if you inhale 10,000 spores of anthrax, it's sort of generally accepted as a lethal dose for anthrax. If you try to imagine what it is, you're talking about something that's smaller than a speck of dust – something you wouldn't even see that you're breathing. It's not like imagining you're walking into a dust cloud and you're saying wow, I'm in anthrax. No. We're talking about inhaling something that's really the size of a speck of dust, that's generally lethal. And by generally lethal I mean that if a group of people inhaled this amount, this number of spores, about 80 percent of them are going to die. It doesn't kill everybody. It's not like everybody getting a bullet through the heart and you're dead. About 80 percent of the people that get this amount of anthrax are going to die.

One of the key issues here too, I think, is if an attack occurs in a clandestine way symptoms don't come for one to three days, depending on how much you get. This initial exposure to anthrax is when you have a window for treatment. So if you've been exposed and you've inhaled anthrax in your system, you've got a short window where you've got to take some medical action in order to enhance your survival chances. After that, you develop flu-like symptoms and die within a matter of a few days.

That gives you a sense of what we're talking about with anthrax. So a kilogram of anthrax has literally millions and millions of potential deaths in it, and the key issue for biological agents is how you're going to disperse it. How you're going to take something that's sitting in a flask in a laboratory and turn that into a militarily significant weapon.

This is, I think, where it's really key to understand that Iraq did that step. They admitted to weaponizing anthrax on missiles. They admitted to conducting open air tests with both simulants and live agents. So they have an understanding of how to use anthrax. They understand how to go beyond the laboratory vial of anthrax and put it on a delivery system and understand how that can impact the population.

So I'd like to maybe say, to ask me how many kilograms of anthrax there are, as the General said, if we knew where they were and how much there were, we'd go get them. I think it's important to understand that a small amount delivered in the right way can make a tremendous impact.

**Q:** How long would it take to produce let's say a kilo or a half a kilo of anthrax?

**A:** I think it's important to understand that Iraq succeeded in doing this before the war, they've claimed they did. So they've got the expertise resident. I think it's also important to understand that you can do this with dual-use equipment. By dual use I mean you're taking stuff that you would use for normal pharmaceuticals or other benign applications and you're turning this into something that is potentially deadly.

So to get at your question, if you buy commercial equipment and put it in a room maybe from this over to there, so a very small room, within a month you can be producing kilogram quantities of anthrax.

To do that, if you're interested in more details in doing that, some of the key things are buying a growth media. If you've ever brewed beer, you know you mix up barley or wheat or some other protein-rich substance like that, then you introduce a culture and you let it grow in a fermenter, you separate out the anthrax you produce using a centrifuge – all these are things you can buy on the open market. You dry it out and put it in a delivery system.

You have to take some precautions to make sure you don't kill yourself doing this. You can set up air hoods

that are found in normal laboratories and are part of any research project. So taking standard, dual-use equipment that can be bought for literally a few hundred thousand dollars on the open market, in a small room you can be producing kilogram quantities of anthrax literally within a month.

**Q:** You mentioned that the important thing is having a delivery system to deliver this anthrax, which you suspect they have. Do they still, in your belief, have the delivery system to do so, and where can they deliver it?

**A:** There are several concerns we have about the delivery of anthrax. A practical means of delivery that we were concerned about during the war is by missile. We're concerned that Iraq has components to assemble missiles and also had the launch capabilities for these missiles.

But this is not the only way to deliver anthrax. Iraq also admitted to looking and modifying tanks on airplanes to use them as a sprayer for delivering anthrax. Agricultural sprayers are another means of delivering anthrax. So you shouldn't think of delivery of anthrax as a classical military jet flying in or missile coming in. Those are certainly very effective ways, but also people driving down the street with an agricultural sprayer can do that.

**A:** One point that I need to make to clarify this a little bit is that one of the reasons we are so concerned about the absence of UNSCOM monitoring officials in Iraq is the possibility that even though much of their capability may have been lost, as you can tell from this answer, they can rapidly regenerate a capability at least a rudimentary capability, if not a fairly sophisticated capability to deliver this kind of weapon. That's why we believe that UNSCOM inspectors must be back in Iraq as soon as possible.

**Q:** Two related questions, if I may, to our expert here. One, a delivery system could also be by terrorist, could it not, carrying something or smuggling it into a water system such as a reservoir or something else?

Secondly you said, and I believe quoting the senior military official, talking about tons of an agent possibly. You said if you know where it is you'd go get it. But isn't there a danger that if you go get it, that you can set this off and spread it throughout that part of the world, if not farther, by winds or... How permeable is it and how persistent is it?

**A:** Thinking about delivering anthrax through a water system is not the way to think about the problem. It is a respiratory hazard primarily, so what you want to do to dispense anthrax is to put it in the air and put it in the right size particle so if people inhale it, it's trapped in the lungs, and as a result causes sickness and death.

**Q:** Can it be done by terrorists say in the United States or some other country using equipment they can purchase on the open market such as equipment that sprays things, what have you?

**Q:** A bottle and a hand grenade?

**A:** The answer is yes. Terrorism is very much an issue when it comes to biological agents.

**Q:** Back to the question about if you knew where it was, isn't there a danger you could set it off and spread it throughout that part of the world or wider?

**A:** There is a possibility that collateral effects could occur from a direct attack against repositories of biological agent. However, in most cases probably the effects would be relatively localized or contained. There is no indication that a broad dispersal of agent would occur merely from a kinetic energy attack by a bomb or something like that against a biological agent.

**Q:** I had a question about American firms exporting anthrax to...

**A:** We cannot answer that question.

**Q:** You can't talk about it?

**Q:** Have you taken any steps to stop that?

**A:** We can't answer that.

**Q:** Why is that?

**A:** Because that is about an American firm or an American issue, and we are not in the business of answering questions about anything that Americans do.

**Q:** Have you taken any steps to stop Western export of anthrax, collestrium...

**A:** Yes. All of the items that are precursors to or parts of the production of these agents are on the prohibited list of items under the UN sanctions. Ostensibly, if we're successful in the sanctions, we would stop those items from going into Iraq.

**Q:** Have you stopped...

**A:** We have stopped some items that could be used. However, it's greatly complicated by the issue that the official mentioned to you here of dual use. In some cases, normally useful items like vessels or containers for fermentation, can be imported into a country for real civil purpose, and then used improperly to make biological or chemical agents.

**Q:** I understand that, but I'm talking about the spores themselves.

**A:** No. We have never intercepted...

**Q:** Anthrax and the collestrium and the..

**A:** We have never intercepted raw agent going into Iraq.

**Q:** Let's assume for the sake of argument that Saddam has kept some anthrax spores since the Gulf War, which he didn't destroy. Question one, do they go off? Are they now dead, unless they've been nurtured? The second question on delivery means, I think I remember him saying that he did weaponize into SCUD warheads certain... He had certain SCUD warheads which were weaponized for delivery of BW agents, but I think I'm right in saying that UNSCOM found those, accounted for them and destroyed them. That's correct, isn't it?

**A:** That's correct. The second question about UNSCOM destroying the weapons, the SCUD warheads designed for delivery of BW is a correct statement.

Anthrax is a long-lived agent under proper conditions. It occurs naturally, so you'll find it living in the ground. It tends to degrade rapidly in sunlight, so if you keep it in the right environmental conditions you can have anthrax live for significant periods of time. Years.

We should mention about the last question that UNSCOM, we believe, has destroyed all of the weaponized SCUD warheads for chemical or biological munitions which they found. We still believe that there are some missing items that have not been fully accounted for.

**Q:** But specifically, you think there are some missing SCUD weaponized warheads? UNSCOM doesn't say that in its report.

**A:** We don't know for sure. And once again, the difference between what UNSCOM says and what U.S. intelligence might say is slightly different. We don't always agree on the circumstances. But our belief is that there is a possibility that there are residual SCUDs and possibly warheads. We just don't know.

What we do know is Iraq has directly lied to us; they have been duplicitous; they have attempted to conceal and hide these capabilities. Because of that, we are not sure of exactly what the circumstances are now.

**Q:** There are senior, well-informed Americans on the UNSCOM team. When you come to missiles, I think they say that, I forget, I think it's 819 missiles which Iraq had, and they've accounted for 817, and they think they know what happened to the other two. Are you saying those figures are wrong, or what?

**A:** We're saying that there are some discrepancies in our belief. We don't necessarily agree merely with the fact that there are two missing missiles. There could be more. We're not using a precise number because we don't know the precise number.

**Q:** Do you have evidence, or are you just looking at worst case?

**A:** We have evidence, documentary evidence, that leads to our belief that some number of missiles may be missing and have not been discovered, and attendant warheads is a possibility.

Part of the issue is, as I stated earlier, it's not just complete missiles that have to be accounted for, but the Iraqis obviously have their own internal expertise for producing missiles. So it's worrying about the missile components – the motors, the warheads, guidance systems, etc, that we have to account for in order to be sure they cannot take these components and put together a new missile. So counting the missiles – 817, 819 – again, I think is not looking at the complete picture for the threat.

By the way, I'm not disputing UNSCOM's figures. I am actually disputing your version of them because I think UNSCOM has recently reported their belief that there may be additional missiles that they think they might be onto in some places. Buried sites is an example. I believe that's well known in the public media.

**Q:** What is your assessment as to whether Saddam will shoot at that U-2? What's the intelligence community assessment?

**A:** Given the opportunity under current conditions he would, indeed, fire a missile at it.

**Q:** What do you say to charges as a representative of the intelligence community, since we're on background. What do you say to his charges that UNSCOM is just basically spying, because you gentlemen know an awful lot, it seems to me. They are doing your work.

**A:** It's obvious that we are in the business of intelligence. Whether or not we get information from UNSCOM is probably not the issue here. UNSCOM delivers information to the United Nations. Our job, through a variety of means as you know, in the intelligence business, is to collect information. We're not going to discuss with anyone our sensors, our sources, or our methods. I think that's a common answer I've had to give you before. It would be foolhardy and crazy of me to stand up here and discuss how we gather information in this context.

**Q:** Given the way that target preparation has been worked on by Saddam himself – surrounding them with civilians, dispersing everything, moving his air defense even more so than he had before. I'm trying to get your assessment on the magnitude of difficulty, how difficult it's going to be to try to deal with that if it were to ever come to airstrikes. He's studied you carefully, obviously, the way you attack, and he's learned, has he not?

**A:** He's always, from the Desert Shield period, moved his air defense missiles around. That's actually common doctrine – move them occasionally so that they won't be easily targeted. So I don't think he's doing much of anything different at all.

He is trying to make it as difficult for us as possible to find and target those missile systems, obviously. But I wouldn't characterize it as different or unique or special in any way.

**Q:** You would not?

**A:** No.

**Q:** How about the connectivity of his air defense system which has been knocked down several times but is back up? How do you describe it at this point in terms of its robustness? He buried some communications capabilities that he hadn't buried before.

**A:** We assess his capability to be fair to good, not as good as it once was, but certainly it has improved in the aftermath of its state of affairs immediately after Desert Storm.

**Q:** Going back to the biologicals just for one second. We've been talking about anthrax. What other biological weapons do you believe he has, and how do they compare to anthrax in terms of affecting people?

**A:** Two of the other agents that he produced and said that he weaponized on SCUDs were a botulinum toxin and an aflatoxin. Botulinum toxin is, again, a very lethal agent. Technically different is that it's a toxin as it enters your system as opposed to being a spore that you inhale that then produces a toxin that kills you. And it's not as robust in terms of being able to live in the environment.

In terms of a lethal dose, whereas 80 percent of people would die with anthrax; a lethal dose for botulinum toxin, I think the figure is closer to 30 percent, so it's not as lethal across the population as anthrax.

In terms of trying to do a pound-by-pound comparison of the two, I think in both cases the real issue is in how you disperse the two. I don't think it really makes a difference whether one is four or times more lethal per kilogram. The real issue is dispersal of the two.

**Q:** And aflatoxin, the story one hears is that it gives you cancer over a long period of years, but people battle it.

**A:** I think it still is not completely understood exactly what he had in mind. I think some of the issues that remain to be investigated are inhalation doses of aflatoxin as opposed to skin exposure. If it gets trapped in your lung... It's not one that I think people recognize as being especially effective, but Saddam had a very broad program in terms of looking at potential biological agents, and this is one that he pursued for reasons that I think were clear to him.

Hopefully you're getting the feeling here, we're talking about – I use this term advisedly – a diabolical effort. Truly. It's one of the worst kinds of things to actually produce and weaponize these capabilities and use them against human beings – both biological and chemical. And there is irrefutable evidence that this gentleman, Saddam Hussein, and his regime, have done both.

**Q:** In terms of sites or locations where these agents and other agents or weapons of mass destruction may be in development, production or stored; are we talking about a very small number of sites centralized in Baghdad? Or are we talking about a network of sites spread out around the country in remote locations in the desert? Are there factories in downtown Baghdad that may not be what they appear to be? Or are they underground bunkers hundreds of miles from anywhere? And do you have some fix on what sort of numbers you're talking about of places that you'd like to either walk into or blow up, in dealing with Saddam's weapons of mass destruction more broadly speaking – the various chemical and nerve agents as well as whatever other efforts and nuclear programs.

**A:** Not to be flippant, but I frankly don't have a clue. I can't give you a list of, if you just let us inspect these – I'll make up a number – this is a made-up number, 200 sites, we can guarantee that we've uncovered all the program.

Despite years of intrusive UN inspections, Saddam was able to hide capabilities, moving them around. There is no answer. I don't think we can come back and say...

Your characterization about the difference in the nature of sites is absolutely right. Some sites do not appear to be what they are.

As you know, a famous incident which one can believe two different stories on, is that we attacked a baby-milk processing plant because we thought it was a biological warfare facility. Another way to put that is, we attacked a biological warfare facility which appeared to be, externally, a baby-milk production facility.

The truth of that is, in my view, the latter, not the former. But I'll have to say there are a large number of facilities in each of these categories. In round numbers we're talking about somewhere between 80 and 100-plus facilities of the chemical type, and around 100 or so, in very round numbers, of the biological warfare type, and far less, but some round number, give or take 20 or so, something like that, in the nuclear business.

Some of these sites are well known. Some of these sites we actually do not know for sure precisely where they exist. We know that they did exist. It's possible that they don't exist now. It would be a mistake for you to think of some form of permanence here. As the unnamed expert here has tried to explain to you, you can have in a very small facility, highly mobile equipment. You can put it in there, you can use it, and then you can remove it and move it somewhere else and use it again. It is the very disagreeable nature of this equipment.

**Q:** This begs the obvious question then. If we don't know what facilities...

**Q:** We're running out of time. I wonder if after you answer this question we could switch and talk a little bit about chemical capability.

**Q:** And nuclear.

**Q:** If you don't know where these things are, and maybe this is part of our fault as the media. We talk about going in and taking out by airstrikes, Tomahawk or otherwise, his ability to make weapons of mass destruction. What you're really telling us is there's no way that can be done.

**A:** In my view, this is my opinion, it is not logical to believe that we can, by indirect means, attack and destroy every facility. This is a very difficult circumstance, and the only way to physically assure ourselves of the control of these facilities is to go to them, control them physically with people on the scene, and monitor them with some kind of positive influence over them. Actually, sir, I believe that's good common sense, but it's also a good professional answer for me to give you.

**Q:** That's when UNSCOM...

**A:** That's the vital nature of UNSCOM.

**Q:** Just a point of clarification on the numbers that you offered, these are suspected sites or sites that you believe to be...

**A:** In some cases we have good information. In some cases we suspect. It just depends on the site and the circumstances.

**A:** A lot of them also were physically monitored by the United Nations Special Commission.

**Q:** Are they spread out, part of my initial question was...

**A:** All over.

**Q:** They may be down in the desert, in remote sites...

**A:** All over.

**Q:** What's the purpose of airstrikes then?

**A:** First of all, the purpose of airstrikes is an operational question which us intelligence guys do not answer. That's the truth. However, I will give you one more opinion.

The purpose of airstrikes cannot be to destroy each and every one of these facilities, but it can be to cause, to influence behavior that will then allow us to do the positive kind of control we talked about.

**Q:** To what extent do we believe that he has buried his capability? I know you've talked about moving it around, but to what extent has he buried it, and also what do we think he is protecting with these human shields, and how many places has he put human shields at this point?

**A:** We do believe that Saddam Hussein practices burying items that he would like to avoid disclosing to the UN or to protect. That's a well known fact. We have discovered sites where material has been buried. So we don't know the extent of that. Once again, that's kind of a circular question. If we did, we would have done something about it.

As far as the human shield issue goes, it's a fairly new phenomenon, but in this event, but it is not unknown, and actually what he has done in the past is generated a public presence at facilities that he wants to somehow try to protect. By generating that human presence, he believes that he will then influence us to not strike it.

I'd say that right now, according to my information, he's done that at many sites throughout the city of Baghdad and its environs, and may have done it elsewhere in Iraq in a fairly substantial way. However, we have also seen that fall off after some period of time.

The people that go to these sites may not be prepared to stay for a long period of time, and the whole idea is the immediate nature of the possibility of strikes by the United States is what he's trying to factor.

**Q:** Are there specific stockpiles or something that you can identify that he is protecting this way at this point?

**A:** No.

**Q:** I just wanted to check an anthrax fact. I've been told that if there were to be a strike on a facility that had anthrax stored in dried form, which is likely, that it would be possible to contain that. Is that right?

**A:** Can you try that one again?

**Q:** Saddam Hussein, according to UNSCOM, stores his anthrax in dried form. If there were to be a strike on a facility that had anthrax in its dried form, then you would not have the problem of spores traveling around Iraq, that it could be destroyed. Is that right?

**A:** That's a very difficult question. I don't think there really is an answer to it. It depends on the weapon system that is used to target the facility. This is in the operational thing so let me give my opinion.

One of the things I think is important is to develop weapons that generate enough heat to destroy chemicals or biological agents in place as opposed to dispersing them through blast waves. Part of this also depends on understanding the details of the interior of the building. In order to be able to predict how blast waves may move and break containers. So I think it's a very complicated question. I don't think we're prepared now to give you any more answers than that.

**Q:** Do we have such weapons now?

**A:** No.

**Q:** Chemical?

**Q:** Nuke, please.

**Q:** I'll take your question, I'm... (Laughter)

**Q:** How far are they along with their nuclear capability, do you believe? Do they have any kind of a nuclear device now? Are they on their way to having one fairly soon?

**A:** Our best estimate is they're still years away from being able to produce enough nuclear material for a device. This clock several years away would start when the UNSCOM intrusive inspections stop.

**Q:** They haven't gotten any weapons grade uranium or plutonium from the former Soviet Union, you don't believe?

**A:** We don't believe so, no.

**Q:** Chemicals. What evidence do you have of chemical stocks? I think there's some evidence that there are chemicals as yet unaccounted for. I think there are invoices showing large quantities which have not all been accounted for. Is there evidence beyond that of existing chemical weapons?

**A:** Some.

**A:** Obviously Iraq demonstrated success in producing nerve and blister agents and decided to use them in its war with Iran, so in terms of classic weapons, classic agents – and the Kurds – classic agents like mustard and sarin, they've weaponized them and used them and understand them very well.

They've also admitted to producing a more modern nerve agent called VX. And also disclosed that they had precursor agents for producing, I think, approximately 500 tons of VX that they could produce with these precursors they've identified.

To try to give you a sense of what this means, a ton, if you can think of maybe four 55-gallon barrels, give you a mental picture of what a ton of agent would look like.

VX is different from the sarin they used in the war with Iran and against the Kurds in that it's highly persistent. Sarin tends to dissipate in the atmosphere, so after it's been released, within a few hours – don't pin me

down on what a few means, but certainly not very long, it disperses in the atmosphere and is no longer a hazard; whereas VX stays around for a very long time. That means that VX tends to be a skin hazard. If you can imagine, maybe a pinprick amount on your skin is enough to kill you within minutes; whereas sarin, because it's not persistent, is an inhaled hazard which, again, can kill you within minutes. It literally paralyzes you and stops you from breathing.

So the issue here, I believe, is that again, Iraq has the expertise, they have the people that have done this, they have a chemical industry in country. Without intrusive inspections, they can use this existing chemical infrastructure to within months, or maybe one month, to start producing a stockpile of VX – again, depending on what kind of precursor chemicals they've hid and...

**A:** Just a follow on piece of information. UNSCOM has discovered and assisted in the destruction of thousands of chemical munitions and tons of chemical agents.

**Q:** Does VX go off over time? I think it degrades in purity and strength fairly rapidly – within weeks. I'm trying to figure out whether he would have stock left from the Gulf War or whether he'd have to make it from scratch.

**A:** This, I think, is part of the chemical engineering expertise. Iraq, I think, learned to produce sarin in more pure quantities as they had experience. I think their initial productions of sarin had a very short shelf life. As you develop expertise and can solve some of the problems with impurities – and impurities can be as simple as having water in your system –you don't have to think of it as other kinds of things. But as simply as having water in your system can cause the agent to degrade fairly rapidly.

I frankly don't know where they are in terms of sophistication for producing long-lived VX.

**Q:** Kind of a quick, unrelated question, but do you know where Saddam is? Do you track his movements at all?

**A:** I can't answer that question.

**Q:** The UNSCOM people said that they thought that the expulsion orders and so on were triggered because they were on the brink of a major discovery? Do you share that? And what do you think they may have been onto?

**A:** I do not know what they may have been onto. I do believe that virtually every time that Mr. Hussein or his regime have engaged in this kind of brinkmanship and crisis development, there's been a reason. It's either a reason to hide something or to gain something in terms of their perception. In this case it's easy for me to believe that the inspection regimes were possibly leading to some finding that he wished to preclude. That's possible. I personally do not have any detailed knowledge about what it might have been.

**Q:** Given the fact that he's still building missiles that have a very low range, how fast could they ramp that up to be able to build a long-range missile the way they had before?

**A:** They're allowed to research and develop missiles with a range of less than 150 kilometers, which they are doing, at this point. So as my unnamed colleague also said, it's these same people who were developing extending the range of the SCUD during the 1980s that would be the same people that now that there are no inspectors there could turn from this research and development effort to basically developing and fabricating the Al Hussein missile, the 600-plus kilometer range thing. I mean the expertise is there, the physical factory capability is essentially there. So that's the problem area.

**Q:** How long?

**A:** Several months.

**Press:** Thank you very much.



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## NEWS BRIEFING

Office of the Assistant Secretary of Defense  
(Public Affairs)



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**Briefer:** You did a great job of delivering my opening statement!

I am, of course, the unnamed senior military official, and I have accompanying me these two gentlemen sitting on the end of the chairs here who are unnamed civilian officials from the Department of Defense. One of them is an expert in general on Iraq and the Middle East, and one of them is an expert on chemical and biological weapons issues, so I will defer questions appropriately to them if the issue comes up.

I'd just like to say before I take any questions that, as you know, some questions we may not be able to answer because of operational circumstances, and we'll tell you directly if that's the case, and we'll do our best to give you some information.

**Q:** The first obvious question would be how much chemical weapons and biological weapons exist in Iraq today, and to what extent do you know where they are?

**Q:** And what kind?

**A:** That's a broad question. I'll give my answer and then I'll defer to my expert on that issue.

First we do know that, or we believe that there are residual chemical capabilities and biological capabilities which Saddam Hussein and his regime have successfully concealed from UN inspection regimes. If we knew where they were with precision and how much they were and other details about them, of course we would have acted on that.

We know that compared to what the Iraqis publicly disclosed originally, after the DESERT STORM war, and what we later found, there was great divergence. They disclosed very little, we found a great deal.

To give you an example of a round number, they disclosed a small amount of a biological agent for research and development purposes, but we discovered in the course of UN inspections a large amount, a substantial amount – in the tons – of biological materials which...

**Q:** Can you give us a number?

**A:** It's a good question. I'll defer to this gentleman, if he can give you a more precise number than me. I don't want to give you the wrong answer.

**Q:** Are you talking about anthrax or a combination...

**A:** Anthrax is one biological agent. There were several. But that's certainly the leading, most deadly, most difficult biological agent.

But as an example, that trend has occurred throughout our dealings with Iraq. Their public statements and

our subsequent inspection under the UN monitoring regime has led to a finding which leads us to believe they have never told the truth, they have many more possible stored materials, hidden materials, materials which we cannot account for, because we have found great divergence between what they told us they had and what we proved they had later.

**Q:** Would you like to elaborate on that?

**A:** Let me go on a bit and see if I get at what you're really asking.

When you ask about a number of given agents, Iraq has declared almost 9,000 liters of anthrax, and they said, "and we destroyed it all." They declared several thousand liters of botulinum toxin, and they told us they produced other agents like aflatoxin and said they had it on missile warheads, etc. So Iraq has declared a lot, said they destroyed it.

I think the real issue is to understand what makes a difference in terms of biological agents. I think one of the key things here is to talk maybe about anthrax as an example.

Anthrax is a spore and if you, to get into numbers, if you inhale 10,000 spores of anthrax, it's sort of generally accepted as a lethal dose for anthrax. If you try to imagine what it is, you're talking about something that's smaller than a speck of dust – something you wouldn't even see that you're breathing. It's not like imagining you're walking into a dust cloud and you're saying wow, I'm in anthrax. No. We're talking about inhaling something that's really the size of a speck of dust, that's generally lethal. And by generally lethal I mean that if a group of people inhaled this amount, this number of spores, about 80 percent of them are going to die. It doesn't kill everybody. It's not like everybody getting a bullet through the heart and you're dead. About 80 percent of the people that get this amount of anthrax are going to die.

One of the key issues here too, I think, is if an attack occurs in a clandestine way symptoms don't come for one to three days, depending on how much you get. This initial exposure to anthrax is when you have a window for treatment. So if you've been exposed and you've inhaled anthrax in your system, you've got a short window where you've got to take some medical action in order to enhance your survival chances. After that, you develop flu-like symptoms and die within a matter of a few days.

That gives you a sense of what we're talking about with anthrax. So a kilogram of anthrax has literally millions and millions of potential deaths in it, and the key issue for biological agents is how you're going to disperse it. How you're going to take something that's sitting in a flask in a laboratory and turn that into a militarily significant weapon.

This is, I think, where it's really key to understand that Iraq did that step. They admitted to weaponizing anthrax on missiles. They admitted to conducting open air tests with both simulants and live agents. So they have an understanding of how to use anthrax. They understand how to go beyond the laboratory vial of anthrax and put it on a delivery system and understand how that can impact the population.

So I'd like to maybe say, to ask me how many kilograms of anthrax there are, as the General said, if we knew where they were and how much there were, we'd go get them. I think it's important to understand that a small amount delivered in the right way can make a tremendous impact.

**Q:** How long would it take to produce let's say a kilo or a half a kilo of anthrax?

**A:** I think it's important to understand that Iraq succeeded in doing this before the war, they've claimed they did. So they've got the expertise resident. I think it's also important to understand that you can do this with dual-use equipment. By dual use I mean you're taking stuff that you would use for normal pharmaceuticals or other benign applications and you're turning this into something that is potentially deadly.

So to get at your question, if you buy commercial equipment and put it in a room maybe from this over to there, so a very small room, within a month you can be producing kilogram quantities of anthrax.

To do that, if you're interested in more details in doing that, some of the key things are buying a growth media. If you've ever brewed beer, you know you mix up barley or wheat or some other protein-rich substance like that, then you introduce a culture and you let it grow in a fermenter, you separate out the anthrax you produce using a centrifuge – all these are things you can buy on the open market. You dry it out and put it in a delivery system.

You have to take some precautions to make sure you don't kill yourself doing this. You can set up air hoods

that are found in normal laboratories and are part of any research project. So taking standard, dual-use equipment that can be bought for literally a few hundred thousand dollars on the open market, in a small room you can be producing kilogram quantities of anthrax literally within a month.

**Q:** You mentioned that the important thing is having a delivery system to deliver this anthrax, which you suspect they have. Do they still, in your belief, have the delivery system to do so, and where can they deliver it?

**A:** There are several concerns we have about the delivery of anthrax. A practical means of delivery that we were concerned about during the war is by missile. We're concerned that Iraq has components to assemble missiles and also had the launch capabilities for these missiles.

But this is not the only way to deliver anthrax. Iraq also admitted to looking and modifying tanks on airplanes to use them as a sprayer for delivering anthrax. Agricultural sprayers are another means of delivering anthrax. So you shouldn't think of delivery of anthrax as a classical military jet flying in or missile coming in. Those are certainly very effective ways, but also people driving down the street with an agricultural sprayer can do that.

**A:** One point that I need to make to clarify this a little bit is that one of the reasons we are so concerned about the absence of UNSCOM monitoring officials in Iraq is the possibility that even though much of their capability may have been lost, as you can tell from this answer, they can rapidly regenerate a capability at least a rudimentary capability, if not a fairly sophisticated capability to deliver this kind of weapon. That's why we believe that UNSCOM inspectors must be back in Iraq as soon as possible.

**Q:** Two related questions, if I may, to our expert here. One, a delivery system could also be by terrorist, could it not, carrying something or smuggling it into a water system such as a reservoir or something else?

Secondly you said, and I believe quoting the senior military official, talking about tons of an agent possibly. You said if you know where it is you'd go get it. But isn't there a danger that if you go get it, that you can set this off and spread it throughout that part of the world, if not farther, by winds or... How permeable is it and how persistent is it?

**A:** Thinking about delivering anthrax through a water system is not the way to think about the problem. It is a respiratory hazard primarily, so what you want to do to dispense anthrax is to put it in the air and put it in the right size particle so if people inhale it, it's trapped in the lungs, and as a result causes sickness and death.

**Q:** Can it be done by terrorists say in the United States or some other country using equipment they can purchase on the open market such as equipment that sprays things, what have you?

**Q:** A bottle and a hand grenade?

**A:** The answer is yes. Terrorism is very much an issue when it comes to biological agents.

**Q:** Back to the question about if you knew where it was, isn't there a danger you could set it off and spread it throughout that part of the world or wider?

**A:** There is a possibility that collateral effects could occur from a direct attack against repositories of biological agent. However, in most cases probably the effects would be relatively localized or contained. There is no indication that a broad dispersal of agent would occur merely from a kinetic energy attack by a bomb or something like that against a biological agent.

**Q:** I had a question about American firms exporting anthrax to...

**A:** We cannot answer that question.

**Q:** You can't talk about it?

**Q:** Have you taken any steps to stop that?

**A:** We can't answer that.

**Q:** Why is that?

**A:** Because that is about an American firm or an American issue, and we are not in the business of answering questions about anything that Americans do.

**Q:** Have you taken any steps to stop Western export of anthrax, collestrium...

**A:** Yes. All of the items that are precursors to or parts of the production of these agents are on the prohibited list of items under the UN sanctions. Ostensibly, if we're successful in the sanctions, we would stop those items from going into Iraq.

**Q:** Have you stopped...

**A:** We have stopped some items that could be used. However, it's greatly complicated by the issue that the official mentioned to you here of dual use. In some cases, normally useful items like vessels or containers for fermentation, can be imported into a country for real civil purpose, and then used improperly to make biological or chemical agents.

**Q:** I understand that, but I'm talking about the spores themselves.

**A:** No. We have never intercepted...

**Q:** Anthrax and the collestrium and the..

**A:** We have never intercepted raw agent going into Iraq.

**Q:** Let's assume for the sake of argument that Saddam has kept some anthrax spores since the Gulf War, which he didn't destroy. Question one, do they go off? Are they now dead, unless they've been nurtured? The second question on delivery means, I think I remember him saying that he did weaponize into SCUD warheads certain... He had certain SCUD warheads which were weaponized for delivery of BW agents, but I think I'm right in saying that UNSCOM found those, accounted for them and destroyed them. That's correct, isn't it?

**A:** That's correct. The second question about UNSCOM destroying the weapons, the SCUD warheads designed for delivery of BW is a correct statement.

Anthrax is a long-lived agent under proper conditions. It occurs naturally, so you'll find it living in the ground. It tends to degrade rapidly in sunlight, so if you keep it in the right environmental conditions you can have anthrax live for significant periods of time. Years.

We should mention about the last question that UNSCOM, we believe, has destroyed all of the weaponized SCUD warheads for chemical or biological munitions which they found. We still believe that there are some missing items that have not been fully accounted for.

**Q:** But specifically, you think there are some missing SCUD weaponized warheads? UNSCOM doesn't say that in its report.

**A:** We don't know for sure. And once again, the difference between what UNSCOM says and what U.S. intelligence might say is slightly different. We don't always agree on the circumstances. But our belief is that there is a possibility that there are residual SCUDs and possibly warheads. We just don't know.

What we do know is Iraq has directly lied to us; they have been duplicitous; they have attempted to conceal and hide these capabilities. Because of that, we are not sure of exactly what the circumstances are now.

**Q:** There are senior, well-informed Americans on the UNSCOM team. When you come to missiles, I think they say that, I forget, I think it's 819 missiles which Iraq had, and they've accounted for 817, and they think they know what happened to the other two. Are you saying those figures are wrong, or what?

**A:** We're saying that there are some discrepancies in our belief. We don't necessarily agree merely with the fact that there are two missing missiles. There could be more. We're not using a precise number because we don't know the precise number.

**Q:** Do you have evidence, or are you just looking at worst case?

**A:** We have evidence, documentary evidence, that leads to our belief that some number of missiles may be missing and have not been discovered, and attendant warheads is a possibility.

Part of the issue is, as I stated earlier, it's not just complete missiles that have to be accounted for, but the Iraqis obviously have their own internal expertise for producing missiles. So it's worrying about the missile components – the motors, the warheads, guidance systems, etc, that we have to account for in order to be sure they cannot take these components and put together a new missile. So counting the missiles – 817, 819 – again, I think is not looking at the complete picture for the threat.

By the way, I'm not disputing UNSCOM's figures. I am actually disputing your version of them because I think UNSCOM has recently reported their belief that there may be additional missiles that they think they might be onto in some places. Buried sites is an example. I believe that's well known in the public media.

**Q:** What is your assessment as to whether Saddam will shoot at that U-2? What's the intelligence community assessment?

**A:** Given the opportunity under current conditions he would, indeed, fire a missile at it.

**Q:** What do you say to charges as a representative of the intelligence community, since we're on background. What do you say to his charges that UNSCOM is just basically spying, because you gentlemen know an awful lot, it seems to me. They are doing your work.

**A:** It's obvious that we are in the business of intelligence. Whether or not we get information from UNSCOM is probably not the issue here. UNSCOM delivers information to the United Nations. Our job, through a variety of means as you know, in the intelligence business, is to collect information. We're not going to discuss with anyone our sensors, our sources, or our methods. I think that's a common answer I've had to give you before. It would be foolhardy and crazy of me to stand up here and discuss how we gather information in this context.

**Q:** Given the way that target preparation has been worked on by Saddam himself – surrounding them with civilians, dispersing everything, moving his air defense even more so than he had before. I'm trying to get your assessment on the magnitude of difficulty, how difficult it's going to be to try to deal with that if it were to ever come to airstrikes. He's studied you carefully, obviously, the way you attack, and he's learned, has he not?

**A:** He's always, from the Desert Shield period, moved his air defense missiles around. That's actually common doctrine – move them occasionally so that they won't be easily targeted. So I don't think he's doing much of anything different at all.

He is trying to make it as difficult for us as possible to find and target those missile systems, obviously. But I wouldn't characterize it as different or unique or special in any way.

**Q:** You would not?

**A:** No.

**Q:** How about the connectivity of his air defense system which has been knocked down several times but is back up? How do you describe it at this point in terms of its robustness? He buried some communications capabilities that he hadn't buried before.

**A:** We assess his capability to be fair to good, not as good as it once was, but certainly it has improved in the aftermath of its state of affairs immediately after Desert Storm.

**Q:** Going back to the biologicals just for one second. We've been talking about anthrax. What other biological weapons do you believe he has, and how do they compare to anthrax in terms of affecting people?

**A:** Two of the other agents that he produced and said that he weaponized on SCUDs were a botulinum toxin and an aflatoxin. Botulinum toxin is, again, a very lethal agent. Technically different is that it's a toxin as it enters your system as opposed to being a spore that you inhale that then produces a toxin that kills you. And it's not as robust in terms of being able to live in the environment.

In terms of a lethal dose, whereas 80 percent of people would die with anthrax; a lethal dose for botulinum toxin, I think the figure is closer to 30 percent, so it's not as lethal across the population as anthrax.

In terms of trying to do a pound-by-pound comparison of the two, I think in both cases the real issue is in how you disperse the two. I don't think it really makes a difference whether one is four or times more lethal per kilogram. The real issue is dispersal of the two.

**Q:** And aflatoxin, the story one hears is that it gives you cancer over a long period of years, but people battle it.

**A:** I think it still is not completely understood exactly what he had in mind. I think some of the issues that remain to be investigated are inhalation doses of aflatoxin as opposed to skin exposure. If it gets trapped in your lung... It's not one that I think people recognize as being especially effective, but Saddam had a very broad program in terms of looking at potential biological agents, and this is one that he pursued for reasons that I think were clear to him.

Hopefully you're getting the feeling here, we're talking about – I use this term advisedly – a diabolical effort. Truly. It's one of the worst kinds of things to actually produce and weaponize these capabilities and use them against human beings – both biological and chemical. And there is irrefutable evidence that this gentleman, Saddam Hussein, and his regime, have done both.

**Q:** In terms of sites or locations where these agents and other agents or weapons of mass destruction may be in development, production or stored; are we talking about a very small number of sites centralized in Baghdad? Or are we talking about a network of sites spread out around the country in remote locations in the desert? Are there factories in downtown Baghdad that may not be what they appear to be? Or are they underground bunkers hundreds of miles from anywhere? And do you have some fix on what sort of numbers you're talking about of places that you'd like to either walk into or blow up, in dealing with Saddam's weapons of mass destruction more broadly speaking – the various chemical and nerve agents as well as whatever other efforts and nuclear programs.

**A:** Not to be flippant, but I frankly don't have a clue. I can't give you a list of, if you just let us inspect these – I'll make up a number – this is a made-up number, 200 sites, we can guarantee that we've uncovered all the program.

Despite years of intrusive UN inspections, Saddam was able to hide capabilities, moving them around. There is no answer. I don't think we can come back and say...

Your characterization about the difference in the nature of sites is absolutely right. Some sites do not appear to be what they are.

As you know, a famous incident which one can believe two different stories on, is that we attacked a baby-milk processing plant because we thought it was a biological warfare facility. Another way to put that is, we attacked a biological warfare facility which appeared to be, externally, a baby-milk production facility.

The truth of that is, in my view, the latter, not the former. But I'll have to say there are a large number of facilities in each of these categories. In round numbers we're talking about somewhere between 80 and 100-plus facilities of the chemical type, and around 100 or so, in very round numbers, of the biological warfare type, and far less, but some round number, give or take 20 or so, something like that, in the nuclear business.

Some of these sites are well known. Some of these sites we actually do not know for sure precisely where they exist. We know that they did exist. It's possible that they don't exist now. It would be a mistake for you to think of some form of permanence here. As the unnamed expert here has tried to explain to you, you can have in a very small facility, highly mobile equipment. You can put it in there, you can use it, and then you can remove it and move it somewhere else and use it again. It is the very disagreeable nature of this equipment.

**Q:** This begs the obvious question then. If we don't know what facilities...

**Q:** We're running out of time. I wonder if after you answer this question we could switch and talk a little bit about chemical capability.

**Q:** And nuclear.

**Q:** If you don't know where these things are, and maybe this is part of our fault as the media. We talk about going in and taking out by airstrikes, Tomahawk or otherwise, his ability to make weapons of mass destruction. What you're really telling us is there's no way that can be done.

**A:** In my view, this is my opinion, it is not logical to believe that we can, by indirect means, attack and destroy every facility. This is a very difficult circumstance, and the only way to physically assure ourselves of the control of these facilities is to go to them, control them physically with people on the scene, and monitor them with some kind of positive influence over them. Actually, sir, I believe that's good common sense, but it's also a good professional answer for me to give you.

**Q:** That's when UNSCOM...

**A:** That's the vital nature of UNSCOM.

**Q:** Just a point of clarification on the numbers that you offered, these are suspected sites or sites that you believe to be...

**A:** In some cases we have good information. In some cases we suspect. It just depends on the site and the circumstances.

**A:** A lot of them also were physically monitored by the United Nations Special Commission.

**Q:** Are they spread out, part of my initial question was...

**A:** All over.

**Q:** They may be down in the desert, in remote sites...

**A:** All over.

**Q:** What's the purpose of airstrikes then?

**A:** First of all, the purpose of airstrikes is an operational question which us intelligence guys do not answer. That's the truth. However, I will give you one more opinion.

The purpose of airstrikes cannot be to destroy each and every one of these facilities, but it can be to cause, to influence behavior that will then allow us to do the positive kind of control we talked about.

**Q:** To what extent do we believe that he has buried his capability? I know you've talked about moving it around, but to what extent has he buried it, and also what do we think he is protecting with these human shields, and how many places has he put human shields at this point?

**A:** We do believe that Saddam Hussein practices burying items that he would like to avoid disclosing to the UN or to protect. That's a well known fact. We have discovered sites where material has been buried. So we don't know the extent of that. Once again, that's kind of a circular question. If we did, we would have done something about it.

As far as the human shield issue goes, it's a fairly new phenomenon, but in this event, but it is not unknown, and actually what he has done in the past is generated a public presence at facilities that he wants to somehow try to protect. By generating that human presence, he believes that he will then influence us to not strike it.

I'd say that right now, according to my information, he's done that at many sites throughout the city of Baghdad and its environs, and may have done it elsewhere in Iraq in a fairly substantial way. However, we have also seen that fall off after some period of time.

The people that go to these sites may not be prepared to stay for a long period of time, and the whole idea is the immediate nature of the possibility of strikes by the United States is what he's trying to factor.

**Q:** Are there specific stockpiles or something that you can identify that he is protecting this way at this point?

**A:** No.

**Q:** I just wanted to check an anthrax fact. I've been told that if there were to be a strike on a facility that had anthrax stored in dried form, which is likely, that it would be possible to contain that. Is that right?

**A:** Can you try that one again?

**Q:** Saddam Hussein, according to UNSCOM, stores his anthrax in dried form. If there were to be a strike on a facility that had anthrax in its dried form, then you would not have the problem of spores traveling around Iraq, that it could be destroyed. Is that right?

**A:** That's a very difficult question. I don't think there really is an answer to it. It depends on the weapon system that is used to target the facility. This is in the operational thing so let me give my opinion.

One of the things I think is important is to develop weapons that generate enough heat to destroy chemicals or biological agents in place as opposed to dispersing them through blast waves. Part of this also depends on understanding the details of the interior of the building. In order to be able to predict how blast waves may move and break containers. So I think it's a very complicated question. I don't think we're prepared now to give you any more answers than that.

**Q:** Do we have such weapons now?

**A:** No.

**Q:** Chemical?

**Q:** Nuke, please.

**Q:** I'll take your question, I'm... (Laughter)

**Q:** How far are they along with their nuclear capability, do you believe? Do they have any kind of a nuclear device now? Are they on their way to having one fairly soon?

**A:** Our best estimate is they're still years away from being able to produce enough nuclear material for a device. This clock several years away would start when the UNSCOM intrusive inspections stop.

**Q:** They haven't gotten any weapons grade uranium or plutonium from the former Soviet Union, you don't believe?

**A:** We don't believe so, no.

**Q:** Chemicals. What evidence do you have of chemical stocks? I think there's some evidence that there are chemicals as yet unaccounted for. I think there are invoices showing large quantities which have not all been accounted for. Is there evidence beyond that of existing chemical weapons?

**A:** Some.

**A:** Obviously Iraq demonstrated success in producing nerve and blister agents and decided to use them in its war with Iran, so in terms of classic weapons, classic agents – and the Kurds – classic agents like mustard and sarin, they've weaponized them and used them and understand them very well.

They've also admitted to producing a more modern nerve agent called VX. And also disclosed that they had precursor agents for producing, I think, approximately 500 tons of VX that they could produce with these precursors they've identified.

To try to give you a sense of what this means, a ton, if you can think of maybe four 55-gallon barrels, give you a mental picture of what a ton of agent would look like.

VX is different from the sarin they used in the war with Iran and against the Kurds in that it's highly persistent. Sarin tends to dissipate in the atmosphere, so after it's been released, within a few hours – don't pin me

down on what a few means, but certainly not very long, it disperses in the atmosphere and is no longer a hazard; whereas VX stays around for a very long time. That means that VX tends to be a skin hazard. If you can imagine, maybe a pinprick amount on your skin is enough to kill you within minutes; whereas sarin, because it's not persistent, is an inhaled hazard which, again, can kill you within minutes. It literally paralyzes you and stops you from breathing.

So the issue here, I believe, is that again, Iraq has the expertise, they have the people that have done this, they have a chemical industry in country. Without intrusive inspections, they can use this existing chemical infrastructure to within months, or maybe one month, to start producing a stockpile of VX – again, depending on what kind of precursor chemicals they've hid and...

**A:** Just a follow on piece of information. UNSCOM has discovered and assisted in the destruction of thousands of chemical munitions and tons of chemical agents.

**Q:** Does VX go off over time? I think it degrades in purity and strength fairly rapidly – within weeks. I'm trying to figure out whether he would have stock left from the Gulf War or whether he'd have to make it from scratch.

**A:** This, I think, is part of the chemical engineering expertise. Iraq, I think, learned to produce sarin in more pure quantities as they had experience. I think their initial productions of sarin had a very short shelf life. As you develop expertise and can solve some of the problems with impurities – and impurities can be as simple as having water in your system – you don't have to think of it as other kinds of things. But as simply as having water in your system can cause the agent to degrade fairly rapidly.

I frankly don't know where they are in terms of sophistication for producing long-lived VX.

**Q:** Kind of a quick, unrelated question, but do you know where Saddam is? Do you track his movements at all?

**A:** I can't answer that question.

**Q:** The UNSCOM people said that they thought that the expulsion orders and so on were triggered because they were on the brink of a major discovery? Do you share that? And what do you think they may have been onto?

**A:** I do not know what they may have been onto. I do believe that virtually every time that Mr. Hussein or his regime have engaged in this kind of brinkmanship and crisis development, there's been a reason. It's either a reason to hide something or to gain something in terms of their perception. In this case it's easy for me to believe that the inspection regimes were possibly leading to some finding that he wished to preclude. That's possible. I personally do not have any detailed knowledge about what it might have been.

**Q:** Given the fact that he's still building missiles that have a very low range, how fast could they ramp that up to be able to build a long-range missile the way they had before?

**A:** They're allowed to research and develop missiles with a range of less than 150 kilometers, which they are doing, at this point. So as my unnamed colleague also said, it's these same people who were developing extending the range of the SCUD during the 1980s that would be the same people that now that there are no inspectors there could turn from this research and development effort to basically developing and fabricating the Al Hussein missile, the 600-plus kilometer range thing. I mean the expertise is there, the physical factory capability is essentially there. So that's the problem area.

**Q:** How long?

**A:** Several months.

**Press:** Thank you very much.



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