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Preventing Nuclear Terrorism

Even when talking about a subject that on the one hand is so gloomy if realistic, the main message here is actually quite a hopeful message. The most important part of this story is the subtitle of my book: *The Ultimate Preventable Catastrophe*. So, while some part of what I'm going to say at the beginning may seem a little frightening, don't give up before the end of the presentation. For those of you who get the book, make sure to read part two, not just part one, because after part one you might be tempted to do something else rather than your normal day-to-day business.

All of us can remember 9/11, three years ago just this month, when Al Qaeda hijacked airplanes and crashed them into the World Trade Center and the Pentagon. Probably for most of us we can remember where we were, what we were doing, what we thought. My wife was supposed to have been on American Flight 77 coming to Los Angeles that day for a board meeting here in town, but [the meeting] was postponed for a day so she was on the plane for the 12th, not for the 11th. Obviously, the plane never went.

One month to the day after those events—one month to the day—George Tenet, who was the Director of the CIA, walked into the Oval Office for the president's morning intelligence briefing and informed the president that a CIA agent code-named Dragonfire—a wonderful name—had reported that Al Qaeda had acquired a ten-kiloton nuclear weapon. That's a very small nuclear weapon, but one that would make a ten-kiloton blast, and it had this weapon in New York City. There was a stunned silence followed by a series of interrogating questions in which the president was essentially trying to see if this was a real possibility or just another story. Were there ten-kiloton weapons in the former Soviet arsenal? and they say "yes." Are all these weapons accounted for? The answer, "uncertain." Could Al Qaeda have acquired one of these weapons? The answer, "of course." Could Al Qaeda have bought a weapon like this to New York City and have it there without us otherwise knowing about it? The answer "certainly." So on this, Vice President Cheney evacuated, he left Washington. He stayed for some considerable period of time in a secret alternative site for our government called "Site R", which is a site in the hole of a mountain. At that point they set up very rapidly an alternative government consisting of several hundred people who worked in the government most of the time but who were there in this alternative site in the case that a weapon was in Washington as well. If it were to explode in Washington, all the current government would likely be killed, but the country

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would still survive and we would need a government to try to see what we could do to put the pieces together thereafter.

The point of this story, which is told in the introduction of the book, is that as the U.S. government confronted this report there was no basis in science, there was no basis in technology, no basis in logic, no basis in politics for dismissing this as a real possibility. Our government took it as a possible fact. Nuclear Emergency Support Teams were dispatched to New York City to search to see if they could find any signals of radioactivity, and other pieces of information in the report by Dragonfire were traced down. After less than a week it was concluded that this was a false alarm. Mayor Giuliani was never informed of this at the time—something that he expressed some considerable dissatisfaction about after he learned about it. But I believe the president made the right decision. If he had told Giuliani, he would undoubtedly have told his Commissioner of Police, and the more people that knew the more likely it would become a fact, and if you turned on your television and heard that the president thought that there might be a nuclear bomb in Los Angeles you wouldn't be here listening to a lecture tonight. I wouldn't be here giving it, so it can have a lot of consequences.

For tonight there are four things to remember. The first one was Dragonfire. The second story I tell in the introduction is four million. What

is four million? Four million is the answer to the question, “How many Americans does Bin Laden say Al

It seemed kind of strange. Four million. I couldn’t see how he gets this calculus. I think it’s crazy but at least I can see some logic in it. The children point came home to me more vividly recently with this horrible action in Russia with the kids at the school in Beslan where killing children was also part of a conception of what’s imagined, in some crazed way, to balance the scales of justice.

tables. You could put it in a big wheelie—these huge suitcase-types that you wheel around. And there are a large number of nuclear weapons much smaller than that. People have an idea that nuclear weapons are these huge things that you couldn’t possibly haul about. There are some nuclear weapons that are quite small. So, in any case what would a ten-kiloton explosion look like? Think of Hiroshima—that was twelve and a half kilotons, so it’s about the same size. In Los Angeles, if you imagine the bomb was at the intersection of Hollywood and Highland, a ten-kiloton explosion would vaporize everything a third of a mile from ground zero. So, that would be the Chinese Theatre, the Walk of Fame, the home of the Academy Awards would look like the Federal Office Building in Oklahoma City. Then you’d have raging fires out to past the Hollywood hill sign. So, in New York City, at Time Square on a work day, you could imagine killing half a million people instantaneously and about that many as well would die over the following several days.



So, the second thing to remember is four million, and there’s a debate about this among people that try to study Bin Laden and Al Qaeda in the international security community who say,

“Oh, no. They’re not really serious about this, it’s too hard to believe.” Actually, when people say they want to kill large numbers of people, most people find it unbelievable, and any of us who study history know that this is not the first time claims about proposals to kill millions of people were discounted. So I myself take this quite seriously. I think it’s a serious effort. If you ask yourself how many 9/11 attacks would it take to kill four million Americans, we can do the math. It would be about 1,400. So, you’re not going to get this goal by hijacking airplanes and crashing them into buildings. Someone is going to have to go upscale in terms of consequences.

Now, imagine, God forbid, a terrorist nuclear bomb like the bomb that Dragonfire said, and we thought, was in New York City was in Los Angeles. How big is a ten-kiloton bomb out of the former Soviet arsenal? Less than half the size of one of these

Qaeda needs to kill?” Four million. Several months after the 9/11 attack, Bin Laden’s press spokesman, a fellow named Abu Gheith, put up on the Al Qaeda website Al Qaeda’s objective for America in which he said, “our goal is to kill four million Americans, including two million children and to maim an equivalent number.” He then goes on to explain in a fascinating, if grotesque, calculus that this number is not picked up out of thin air. This number is actually what is required, he says, to balance the scales of justice for the deaths and destruction that have been caused to Muslims by what they call “Jewish-Christian crusaders,” by whom they mean Israel and the United States. He then goes through a whole series of incidents and gives us his body count, and I describe this in the introductory chapter—Chatilla, how many? sanctions against Iraq, how many? And even when I wrote the book, which was just published a month ago, I never quite got the thing about the children.

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Because nuclear weapons, even for those of you old enough to remember the Cold War, have kind of got out of people’s heads, we put up a website called nuclearterrorism.org which you can go to and you can put in the zip code you’re interested in and see the consequences of a ten-kiloton weapon in that neighborhood. Just think of ground zero, a third of a mile gone completely, and out to beyond a

mile looking like the federal office building in Oklahoma City. So, for a small nuclear weapon this is a huge consequence.

I go through this much detail in an introductory fashion, not to try to be just doom and gloom, but to say this is a real possibility that we face. I not

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only believe this is a great threat for us now, today, but President Bush has said that this is our ultimate nightmare. As he says, “the world’s most destructive technologies in the hands of the world’s most dangerous actors” - that’s his bumper sticker for it, and it’s a very good bumper sticker, I believe. What’s the world’s most destructive technology? Nuclear. Who are the world’s most dangerous actors? Terrorists, because, as Bin Laden says, there are people who love death more than we love life. They also don’t have a return address. A good part of the reason why the Soviet Union never attacked the U.S. was that those of us who are old Cold War warriors, and that would include me, built up a vast arsenal of nuclear weapons so that they would know—any Soviet leader would know—that the moment an attack occurred on the U.S. they had signed a suicide note for their country. Well, that clarifies the mind, but in the case of a nuclear bomb, if it went off tonight in San Francisco or in Boston or in Los Angeles, who did it? Let’s imagine even that Bin Laden says, “Good for us. Five hundred thousand down, three and one-half million to

go.” So, we would be unhappy, we would be angry, we would be eager to attack somebody but, excuse me, if we knew where Bin Laden was we would be capturing him tonight. So, a person who has no return address is very difficult to deter.

Okay, point two, four million. Dragonfire and four million.

Two more points. The book consists of part one and part two. Part one says “inevitable,” part two says “preventable.” Let me say a word about each. Part one is for an ordinary citizen who reads the newspapers, not for national security experts. This is kind of speaking to people as citizens and is written for somebody who is running for Congress, but not a national security expert, who wants to play a role and cares about the country. I go through who, what, where, when and how. So, who could want to do this? Al Qaeda? I go through the history of their search for nuclear weapons. Bin Laden says it’s their religious duty, but I point out they’re not the only game in town. There’s a group called Hezbollah. This is a very, very sophisticated terrorist group that operates in conjunction with Iran. They are, as the Deputy Secretary of State Rich Armitage says, the A-Team of terrorists. They’re much more sophisticated than Bin Laden and Al Qaeda. They actually blew up the barracks of the U.S. soldiers at Khobar Towers, and they’ve mounted a number of terrorist attacks upon Israel. This is a sophisticated group, but there are a whole number of others. The Chechens, actually. I pointed out that their most likely target for their first weapon would be Moscow, not the U.S. And when I talk to the Russians about this I tell them, “Wake up. These guys would toast Moscow first.” I’m worried about their second nuclear weapon more, that they might actually

sell it to Al Qaeda, that it would come to the U.S., but I’m also interested in Moscow. So that’s the who.

What might they do with a weapon? There are two versions: A ready-made bomb—like the ten-kiloton bomb that Dragonfire warned about—or a homemade bomb. The ready-made bombs come in many varieties. I discuss in the book the suitcase bombs that the former Soviet arsenal included, some of which you can carry around literally in a suitcase or a backpack and some number of which it is unclear what happened to them.

But the other side of this is homemade nuclear bombs. The book has an appendix of frequently asked questions in which I discuss dirty bombs and attacks on nuclear power plants, but in the book I’m talking about nuclear bombs, which are bombs that create a mushroom cloud, and their vast destructive effect. It’s conceivable for a terrorist to make a nuclear bomb if they start with one

I discuss the suitcase bombs that the former Soviet arsenal included, which you can carry around literally in a suitcase or a backpack

hundred pounds of highly enriched uranium. The hard thing to do is make highly enriched uranium or plutonium—that is actually beyond the capacity of the terrorist groups. That’s a multi-billion dollar investment over many years in a big facility. Iran is now in its 18th year of this project and is just now coming to the finish line. It’s possible to do. Pakistan did it over a decade with a very successful effort, but terrorists are not going to do this by themselves. But if terrorists got 100

pounds of highly enriched uranium that had been made by somebody else and stolen or given to them—from that to a nuclear bomb like Hiroshima is a very straight path. As President Bush said in the run-up to the war with Iraq, if Saddam got a soft-ball-size lump of highly enriched uranium he could make a bomb in a year. That’s true, but so could Al Qaeda or any other group. If you start with the highly enriched uranium the rest of the design is unfortunately quite straightforward and simple. The rest of the material that’s required is stuff that’s industrially available. So, either a pre-made bomb or a ready-made bomb or a homemade bomb.

Where could they get it? Well, I go through the list. Russia is the most likely place. Why Russia? Because most of the stuff is there. The Willie Sutton principle—remember the famous American bank robber who was asked, “Why do you rob banks?” He said, “Because that’s where the money is.” You would go to Russia first, but there’s a long list. How about Pakistan? Pakistan has about 50 nuclear weapons and enough material for 50 more weapons. The relationships between the people who guard those weapons and materials and groups like Al Qaeda is often quite thick. Indeed, their relationships were very tight before 9/11. Musharaff has turned out to be our ally in this effort, but really the people in those structures have deep affection for Osama and the Al Qaeda group. There are risky research reactors in about 20 developing and transitional countries. They include Belarus and Uzbekistan, where research reactors were made during the Cold War. There’s more than a bomb’s worth of highly enriched uranium there and terrorists might conceivably get it. So I go through the list of those. That’s the where.

When could they have such a weapon? Well, if they bought it last week they could have it today. Most of these weapons don’t have on them complex electronic locks and so there’s no reason why they couldn’t use them when they get them. If there’s a lock on them they could hotwire them over a short period of time. Or if they got the hundred pounds of highly enriched uranium they could make one in less than a year. So, when?—it could be already.

How could they get it here? Well, let me count the ways. I started doing this chapter and found it fascinating because at first, I had a list of three ways, then I had 30, then I had 300, then I thought, “No, no. This is too much.” So I did a section called “follow the golf clubs.” How does a lady in Jakarta who wants to play golf at Pebble Beach get her golf clubs to Pebble Beach if she doesn’t want to take them on the plane? She looks through the Yellow Pages, she finds a freight forwarder, she call them up and says, “I would like my golf clubs at Pebble Beach.” They come, they get the golf clubs and if she needs them in three days they put them in one of the containers that go in the belly of an airplane and they deliver them. Or if you want them there in several weeks they put them in one of those cargo containers that come to Long Beach, to the port, and they get them unloaded, get them in the truck, and take them to Pebble Beach. What’s the chance that anybody independently looks at this bag of golf clubs between Jakarta and here? Less than point one of point one percent of those ever get inspected and I could just as well have 100 pounds of highly enriched uranium.

Or, follow the drugs. As my old colleague who’s now the Chancellor at UCLA, Al Carnesale, likes to observe, if you have any doubts about the ability

of terrorists to bring a nuclear bomb to Los Angeles, they could always hide it in a bale of marijuana. We know that illegal drugs come here every day. How do they get here? Well, let me count the ways. There’s about 300. The answer to the question how do they get here is, it’s easy.

At the end of part one you come to the conclusion it’s “inevitable” if we just keep doing what we’re doing. My view is that if the U.S. government just keeps doing what it’s doing today and has been doing over the last half dozen years, and if the other governments in the world just keep doing what they’re doing, we will have a nuclear 9/11 to awake us to this reality. I believe actually such an attack might be imminent. How likely? If we were talking about the insurance business, who knows? Warren Buffett, who’s a pretty smart insurer, says this is going to happen. He says, and I quote him in the book, he says he can see no way that it’s not going to happen. I’m

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hoping that after he reads the book he’ll see at least one way. In any case, I’m making it more likely than not—that is, I bet \$51 dollars against other people’s \$49, if you want it in betting terms. So that’s the bad news. Now let me turn to the good news briefly.

Preventable. We have Dragonfire, four million, inevitable and this is the last point—preventable. Unlike other catastrophic terrorism of which there’s

a number of varieties, and unlike the fact that there will be additional catastrophic terrorist attacks on America of 9/11 proportions—that is, kills hundreds or thousands of people—I would say the chances of

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that are 100 percent, unlike bio-terrorism, where I'm sure there will be additional attacks like the anthrax attacks, the ultimate terrorist weapon, a nuclear bomb, is preventable. How can this be? Because there's fortunately in this issue a strategic narrow [window] to check this issue, this challenge.

There are only two elements in the world from which you can make a fissionable explosion: They are highly enriched uranium and plutonium. Neither of these elements exists in nature. You can't go dig them up. Neither of these can be made in somebody's basement. As I say, it's a multi-billion dollar, multi-year undertaking. So all we have to do, though "all" is big, is prevent terrorists acquiring highly enriched uranium and plutonium and we can prevent nuclear terrorism. Now, what's required to do that? Well, locking down all the stuff that now exists, preventing any more being produced and cleaning it out of the places where you can't lock it down successfully. That is the big picture.

I tried to organize a campaign for doing this under a doctrine of three "nos." Let me say just a word about each of them, because each of them is a lot of stuff, but I'm just going to do it briefly. The nos are: no loose nukes,

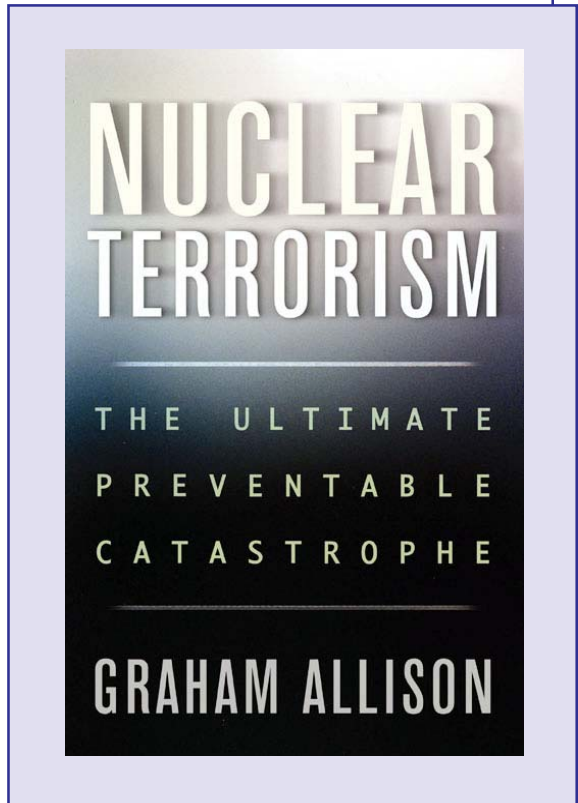
no new nascent nukes and no new nuclear weapon states. Let's go through them very quickly. No loose nukes means developing with Russia a new gold standard and locking down all weapons and all materials, first in the U.S. and Russia and then every where else on the fastest feasible timetable to this new gold standard.

The U.S. loses how much gold from Fort Knox? Zero. Not an ounce. Russia loses how many treasures from the Kremlin armory? None. So do human beings know how to lock things down that they really care about people not stealing? Yes. There's no lock that's 100 percent, but relative to the people who want to steal gold, the chances of them getting it out of Ft. Knox is very, very slim—almost nonexistent. I had a debate with a senator whose name I won't mention but who kept saying, "You can't be serious about this! You mean locking down nuclear weapons as good as gold?" I said, "Yeah, I'm absolutely serious about that. Why not? What is gold?" Gold will become a relatively uninteresting substance after a nuclear terrorist attack, I believe. So, no loose nukes.

Second. No new nascent nukes. We haven't appreciated the extent to which if people get highly enriched uranium or plutonium they are about 90 percent of the way to having a nuclear bomb. So, no new national production of highly enriched uranium or plutonium. The specific test case for this today is Iran. Iran is just about to get across the finish line. So, I outline a strategy which I believe could be implemented today, but the window keeps narrowing all the time, for

stopping Iran where they are right now and backing them down step-by-step in a verifiable process in which there would be no new production of highly enriched uranium or plutonium in Iran—which means stopping these factories from being completed.

The third one is no new nuclear weapons states. There are eight states that have nuclear weapons in the world today. Five acknowledged. India and Pakistan have tested and say that they're nuclear weapons states, but



other people haven't "accepted" them in any official status, and Israel, which is an undeclared nuclear weapons state. So, that's eight. I say draw a bright line there and say simply, "We're not having any more." Yes, it is unfair that these eight should have them and other people shouldn't, to which the answer is we're going to work in the longer run on getting this problem

solved—the eight—but in the short run it's not advanced by having more. In any case the current challenge to this is called North Korea. North Korea is *the* most dangerous property on earth. Why? Because with Americans hardly even noticing, since January of 2003—so just the last 18 months—while we've been consumed by Iraq, Kim Jong Il has noticed that we've been giving him a pass and he's been moving rapidly to build additional nuclear weapons or to produce material for additional nuclear weapons. Since January 2003 he withdrew from the non-proliferation treaty, he kicked out the IAE inspectors, turned off the video cams that were watching these fuel rods that had enough stuff for six more nuclear bombs, he put that stuff on trucks and took them off to factories that are reprocessing them to produce more plutonium and at some point he's going to announce "We're finished. We have a nuclear arsenal."

Indeed, when this mysterious explosion occurred in North Korea last week, one of the worries within the intelligence community is that it could be a nuclear bomb. This could be the wake-up call to that fact and the intelligence community tonight is still sitting on their seat thinking, "Is this going to happen and if it didn't happen, when could it happen?" So, if North Korea succeeds with this project

they're going to be a nuclear weapon state and they're going to have a nuclear weapons production line for another dozen weapons a year.

What do we know about North Korea? We know that it sells whatever it makes to anybody that will pay for it.

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So, they are in the business of Missiles-R-Us. They sell missiles to whom? People who pay, Iran, Iraq, Egypt, Libya, and others.

They have two other products: illegal drugs and counterfeit hundred dollar bills. That's it. The rest of the place has no income. Ten percent of the citizens have been starved to death in North Korea in the last half dozen years. So it's a genuine basket case as a country, ruled by a strange fellow, Mr. Kim Jong Il, who, if he has a nuclear arsenal and a nuclear weapons production line, will for sure sell nuclear weapons to other states and terrorist groups and we will not know that the weapon has been sold. So, I think this is the most dangerous site. In the book I outline the strategy for trying to deal with North Korea now. This window is closing, very, very fast, but if North Korea makes its way into this status as a nuclear weapon state with a nuclear weapon production line, then the likelihood of nuclear terrorist attacks on the U.S. goes right up the scale. So, this would be the worst failure in American security policy ever,

I believe, if this is allowed to happen and it's just about to happen. But I have a strategy, which some people will regard as slightly crazy, but if I were in charge I would do it tonight. I would have done it two years ago.

So, three nos: no loose nukes, no new nascent nukes, no new nuclear weapons states.

My final point is just a question. There's a strategy group that met in the summer in Colorado, Republicans and Democrats from the national security community. There were two or three former secretaries of defense, a couple of former secretaries of state, three or four former directors of CIA, and several former national security advisors. A broad base of sensible people in my view, plus some people in the academic community. The subject this past summer was nuclear terrorism and my book was some part of the argument about it and at the end of the conversation Bill Perry, who's one of the genuine wise men, in my view, in the national security world, who was Secretary of Defense under Clinton and a very calm man, he hardly ever raises his blood pressure, said, "We are racing towards unprecedented catastrophe. I see no sense of urgency in the public about this threat. What in the world can we do to awaken the public and energize the administration?" I would say that's the question before the house. I don't have a very good answer to that. I saw Bill in San Francisco Monday night, and he's still worrying about that question.

Thank you.

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