I would like to begin today with a “this week in history” moment. Seventy years ago this week – August 2, 1939 – Albert Einstein wrote a letter to President Franklin Roosevelt. It was both extremely urgent and highly sensitive. The letter began:

“Some work by E. Fermi and L. Szilard, which has been communicated to me in manuscript, leads me to expect that the element uranium may be turned into a new and important source of energy in the immediate future. Certain aspects of the situation which has arisen seems to call for watchfulness and, if necessary, quick action on the part of the Administration.”

Einstein was worried that Nazi Germany had already begun research on nuclear fission, and the United States needed to act immediately to develop this potentially vital capability.

When you trace back the challenge of preventing the spread of WMD, some could argue that it began with those words.

Yet the WMD challenge described in that letter and the challenge faced after World War II during the Cold War Era are different than the one we face now – a fact due largely to globalization and ongoing developments in science and technology.

I spoke to a class recently at Johns Hopkins University, and to begin my talk, I held up two books: one of them, Thomas Friedman’s The World Is Flat, and the other, Doug Frantz and Catherine Collins’ The Nuclear Jihadist.

What’s the tie that binds these books together, I asked the students?

The answer is that one has made the other possible. In an era of globalization – where advanced scientific and technical knowledge and capabilities have spread beyond the major powers and where states are not the only global actors that matter – we must understand that the challenge of countering the proliferation of WMD has taken on new dimensions.

WMD is a 20th Century phenomenon being made more complex by these 21st Century realities. If you Google the words “how to build a nuclear bomb,” you get more than 6.5 million results. Even when you subtract for the cranks, kooks and uninformed, the results are still a very
significant number. The knowledge is out there, the expertise is out there, the drive – seen most clearly in states like North Korea and terrorist groups like Al-Qa’ida – is out there – and the materials can be found.

To be effective, we must adapt our approaches for countering WMD proliferation to the realities of the 21st Century. The WMD oligopoly – that is to say, where only a few states had the means to produce WMD – is a thing of the past.

We now live in what is close to an open market, where many states have the scientific and technological capabilities required to produce WMD and where networks like A.Q. Khan’s – the subject of The Nuclear Jihadist – and other non-state actors can distribute and acquire a wide range of capabilities once reserved for states. The destructive power of WMD, as one scholar has noted, is spreading downwards and outwards.

But let’s be clear – this globalized world does not exacerbate and complicate just nuclear threats. Biological capabilities, as the National Academy’s National Research Council wrote in 2006, have grown and spread even more dramatically.

The Academy notes that while the advances in the biological sciences have much good news in them, there are also threats. Let me quote directly from their 2006 report: “For millennia, every major new technology has been used for hostile purposes, and most experts believe it naïve to think that the extraordinary growth in the life sciences and its associated technologies might not similarly be exploited for destructive purposes.”

The Academy actually understates the challenge. Virtually all biological capabilities are dual-use and those capabilities that once were solely within the purview of laboratories associated with Nobel Prize winning scientists are increasingly part of undergraduate classrooms and advanced high school labs. This presents new and complex challenges on the biological threats front. According to experts, there are now sophisticated biotechnology capabilities on every continent on the planet, with the exception of Antarctica.

To put it plainly then, the WMD proliferation challenge in the 21st Century is keeping states and non-state actors from doing what they can do if they choose to do so.

So, what do we do about that? Are there new ways to think about the problem of countering proliferation within this globalized context? That’s what I would like to talk about today, focusing specifically on the contribution that must be made by intelligence.

First, though, I’d like to say a few words about the Intelligence Community. The Community has experienced significant – and, in my mind, very useful – reforms as a result of the 9/11 and WMD Commissions and the Intelligence Reform and Terrorism Prevention Act of 2004. The creation of the Office of the Director of National Intelligence (ODNI), for example, was designed to give the 16 operating units of the Intelligence Community a corporate headquarters that would produce integrated strategies and drive integrated action to accomplish the Community’s priority missions.
Intelligence reform is not something that is accomplished overnight and I think it is fair to say
the ODNI’s efforts to produce a well-integrated Intelligence Enterprise are still a work in
progress. But a good deal of progress has been made, particularly in integrating the work of the
intelligence agencies on the priority cross-cutting missions, such as counterterrorism,
counterintelligence, cyber and WMD counterproliferation.

The National Counterproliferation Center was created as part of the Intelligence Reform and
Terrorism Prevention Act of 2004 and on the recommendation of the WMD Commission of
2005. NCPC is charged with providing strategic leadership to the Intelligence Community’s
work on countering WMD proliferation. Our job, in short, is to help the Intelligence Community
succeed at this most challenging task, but not to do the work ourselves. NCPC has a staff of a
little over 60 people and in our four years of existence:

- We have published strategic intelligence plans for Countering WMD Proliferation,
  Countering Biological Threats and promoting Strategic Interdiction;
- We have developed performance metrics to measure performance in achieving priority
counterproliferation goals;
- We have helped create new, integrated approaches – and in some cases, programs and
  offices – to dealing with urgent counterproliferation priorities; and,
- We have worked closely with the National Counterterrorism Center to integrate the work
  of the counterproliferation and counterterrorism communities on WMD-Terrorism.

All of this progress has been important, but more remains to be done. In working strategically to
counter WMD proliferation, it has become clear to me that we need to ask different questions
and develop new approaches to counter WMD proliferation in the 21st Century. As a
crosscutting issue, counterproliferation is a team sport, but who should be on the team and what
are the roles of the team members? How do globalization of science and technology, the
increasingly dual-use nature of WMD-related technologies and the rise of non-state actors affect
how we work WMD proliferation issues? How do we move to the left on the proliferation
continuum to keep programs from starting and facilities from being built, not just going after
existing WMD programs and stopping shipments for them at ports?

In sum, how do we ensure a focus on actually countering WMD proliferation, not merely
describing it? Let me talk about three things we are working on within the Intelligence
Community to do just that.

- First, we are dealing with WMD counterproliferation as more than a technical issue and
  increasing the emphasis on issues like intentions and motivations;
- Second, we are looking beyond today’s headline issues to identify states of “over-the-
horizon” concern so we are not just reacting to events, but helping to shape them to avoid
  future WMD threats;
  and,
• Third, we are integrating the work of the counterproliferation and counterterrorism communities to better meet the challenge of WMD terrorism.

The first two issues I just mentioned concern state WMD programs, so let me start with state issues and then turn to WMD terrorism.

When it comes to countering WMD proliferation, intelligence must do more than just monitor emerging weapons programs or activities of concern. That is describing proliferation. Admittedly, it is important work and policy makers are big consumers of what I would call “descriptive analysis.” But countering proliferation requires understanding state motivations and then identifying the tools, levers, incentives, disincentives and opportunities that policy makers can use to respond to perceived needs and shape behavior. Policymakers can use this kind of intelligence and analysis to develop strategies to discourage, prevent, rollback and deter WMD programs.

Historically, we have not focused a great deal of attention on that front. The U.S. Government, like virtually all others, has approached WMD proliferation as a technical issue. The organizations within intelligence and policy agencies that worked proliferation issues were largely staffed with scientists, engineers and other “technical” experts. Policy makers sought analysis on technical developments, such as the range and flight characteristics of missiles, the timeline of a nuclear development program, or how a biologic pathogen could be weaponized.

While nuclear physicists and bioweapons specialists are necessary to have focused on WMD, they cannot be the only people looking at the problem. They will not and cannot be expected to understand a state’s leadership intentions and motivations, a state’s decision-making process, whether there are influential others who might have opposing views, or how a state’s economic, financial or regional security concerns might affect its decision-making calculus.

Countering WMD proliferation requires the knowledge of state behavior that comes from those charged with understanding regional, economic, politico-military and state leadership and elites. They are the people best suited to help identify state leadership motivations and intentions and then develop comprehensive approaches to countering interest in developing a WMD program. But, for too long, these non-technical experts have not been seen – or seen themselves – as core members of the counterproliferation team because proliferation was a technical problem.

Now, there is a clear logic behind this traditional technical focus. During the Cold War, what we needed most was technical information and our intelligence apparatus responded appropriately. With regard to state programs, we knew our adversaries’ intentions – the big question mark was their capabilities.

Now in the 21st Century, that has been largely reversed: some of our biggest gaps are around state intentions. In his Annual Threat Assessment before Congress earlier this year, Director of National Intelligence Dennis Blair made clear the importance – and difficulty – of understanding the intentions of some of the most important subjects of intelligence collection and analysis.
Let me give a hypothetical example to illustrate the challenge. State X is investing a significant amount of money in a biotech-related research center. The center has links with state X’s ministries of defense, commerce, and agriculture. The question is: would we know if this center was for an offensive biological weapons program, a defensive program, or for use in developing a genetically modified, disease-resistant cash crop, just from the equipment being purchased? Without understanding that state’s intentions – and in focusing only on the technical side of the issue – there is no way of knowing the intended use of the equipment.

To get to the left of the proliferation problem, we need to learn about and understand a state’s motivations, determine ways to address those motivations and identify what levers and opportunities can be applied or exploited to dissuade interest in WMD. Policymakers can then develop country specific strategies to counter proliferation before it begins. Indeed, as I said before, counterproliferation needs to be a team sport, but in the past we have only been playing with part of our team on the field. That is changing today as the Intelligence Community positions itself to tackle new challenges in new ways.

Now, don’t get me wrong: just because we need to work the left-hand side of the proliferation continuum does not mean we can afford to neglect the capabilities we have established to the right. We need to sustain our excellence in technical collection and analysis on proliferation issues – capabilities that remain fundamentally important for policymakers and our colleagues in defense. We need to work interdiction issues, both strategically and tactically. But true success in countering state WMD proliferation in the 21st Century will only come from integrating new kinds of collection, analysis and action into what we have traditionally done well on the technical side of the issue.

Some of that integration must come from a part of the U.S. Government that rarely gets the attention, much less the credit, it deserves. I am talking about the Department of Energy’s National Nuclear Laboratories. These labs have remarkable capabilities and a unique ability to produce scientific and technological synergies to support Intelligence Community analysis, collection and operations. They are called “nuclear” labs, but in my mind they are really “national security laboratories,” because they support a broad range of issues beyond nuclear. They are important contributors to such issues as cyber, biological threats and WMD-terrorism. The labs have their detractors and they have suffered budget cuts and personnel layoffs recently. But as the scientific and technological gap that has long existed between us and the rest of the world narrows – that is, as the S&T world becomes flatter – we need to realize that no other country has any institution or set of institutions like the Department of Energy National Laboratories and we need to sustain them as centers of national security excellence. The Labs role in countering WMD proliferation will remain vital.

I want to turn now to the Intelligence Community’s work against terrorist WMD efforts. When it comes to terrorist groups, we find ourselves in the same position we were in during the Cold War when it came to state programs. Our adversaries have made their intentions clear: they want the ability to produce mass casualties. The big question mark is on capabilities. Let me talk more about that with an example.
Five days a week, the National Counterterrorism Center prepares a top secret, codeword-classified document called the “Threat Matrix.” It contains all known threats accumulated in the past 24 hours aimed against the U.S. homeland and our allies and interests abroad. Invariably, there are WMD threats in the matrix. The threats run the gamut, but the one thing they all have in common is terrorist intention, and their inability – so far, at least – to get their hands on the materials needed to carry out their intentions.

To combat this threat, we need to work at the nexus of counterproliferation and counterterrorism. And that is why the National Counterproliferation Center is working hand-in-hand with the National Counterterrorism Center to ensure that those who work state threats, WMD material security and other WMD capability issues are engaged closely with those looking at terrorists who seek to acquire such materials and capabilities. Unlike with state programs, no technologies are dual-use when terrorists are seeking to acquire them. Going back to my earlier example, Al-Qa’ida would not be acquiring fermenters to advance science or improve crop yields; they would be seeking a new way to cause harm to as many people as possible.

The National Counterproliferation Center and the National Counterterrorism Center have put in place new processes to ensure a strong and steady focus across the Intelligence Community on WMD terrorism and have launched initiatives to develop new tools and approaches to counter WMD terrorism. This is not an issue that can be rapidly resolved but is, rather, one that will require a consistent mission focus, skill and collaboration across the Intelligence Community for years to come.

Countering these non-state as well as state-based WMD challenges requires persistence in engaging at all points of the proliferation continuum. But it also requires thinking and working beyond the headline issues of today.

If we focus our attention only on the states or terrorist groups mentioned in those headlines, we are just asking to be surprised. If our capabilities are focused solely on Iran and North Korea and Al-Qa’ida, we will have done policymakers a huge disservice when an “over-the-horizon” nation goes nuclear, or a new terrorist group starts putting the pieces together for a biological weapon. This is where a real partnership between policymakers and the Intelligence Community is essential. In addition to supporting policymakers on the issues in today’s headlines, we also need to think beyond those issues. More specifically, we need to do the hard work of analysis and collection that allows:

- First, for the early warning of new proliferation problems; and
- Second, for policy makers to develop strategies to counter WMD proliferation even before it gets started.

In Einstein’s letter to Roosevelt – at the conception of the nuclear age – Einstein recommended “watchfulness” and “quick action” to develop nuclear weapons. Those words, more than half a century old, should take on a renewed meaning as we now work to counter this uniquely 21st Century WMD threat. The Intelligence Community, in coordination with partners across the US Government – is instituting a new watchfulness to guide its action – watchful for nascent WMD
programs, watchful for levers that can discourage such programs, and watchful for the threats that have been made real in this era of globalization.

With that, I would be happy to take your questions.