Overseeing An Era of Change

An Interview With NSA Director
Lt. Gen. Michael V. Hayden (U)

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Editor's Note: On 5 January 2000, Lloyd Salvetti, the Director of the Center for the Study of Intelligence and Chairman of the Editorial Board of Studies in Intelligence, accompanied by Studies Editorial Board members, conducted the following interview with Lieutenant General Hayden. (U//FOOU)

We asked for the opportunity to interview you for Studies in Intelligence at a classified level to give the Intelligence Community a full appreciation of the vision you have for the National Security Agency (NSA) and the cryptologic service, and particularly to come to an understanding of the future of the Agency. We are all grappling with how our Community and our individual services are going to respond to the nation’s priorities in the years ahead. To kick this off, we have all heard about the 100-days program—it has gotten a lot of attention, a lot of publicity—and to ask you what made you choose a marker of 100 days and how is it going midway through the process? (U//FOOU)

As for the technique of 100 days, they pulled me from Korea and didn’t have time to send me to DIRNSA school en route to NSA, and so I just needed a technique to create an artificial sense of urgency—or create a sense of urgency—one way or another. There is a real sense of urgency with regard to change.

NSA as an institution is methodical, and it is thoughtful in its decisionmaking. It's comfortable deferring decisions until it has more precise data, taking it to the sixth significant digit. The questions facing NSA were so difficult that an institution with that kind of an approach would always subject issues to additional analysis in the hope that the desirable future course of action would become more clear.

I consider myself part of NSA now, but my cultural background is a bit different. So my instincts weren't along those lines. I quote to the work force something I think it was Colin Powell said, "When I've got about enough information to have a 40-percent probability of making the right decision, I'll start thinking about making the decision. And if I've got enough information that I have something approaching 70-percent probability of certainty, I've overworked the staff." So I've tried to impress on the Agency the need to start moving. The
100-days approach allowed me to do that and to reinforce the process of change, day by day, action by action, through a series of "Directorgrams"--DIRGRAMs--pointing to specific actions.

The alternative to that was to go to the mountaintop, get everyone together, get the whole package sewn up, and then come down in one great expository leap saying, "Here's the future." I don't think we would ever have gotten the ribbon tied, and the institution itself couldn't have digested either the information or all the actions that are enclosed in such a grandiose thing. So we're moving it out one day at a time. I have a pretty good idea of where we're going. The downside is that it does come out piecemeal. So I'm expecting the work force to make a creative act in taking this shard of glass and putting it appropriately with others in what will become a mosaic.

But you're dealing with a work force that's been jostled a lot, one that has been on a downslope like the rest of DoD. They know, for example that we may privatize or outsource the information technology backbone—that's 3,000 or 4,000 jobs, and lots of other things, many of which are very unsettling. They hear me saying, "We're going to change, and button your chinstraps, because here we go," but then we come out with these changes one bit at a time. It's like Chinese water torture to some portions of the work force, and that's unfortunate.

I talk to the work force a lot, and about every two weeks, I'll stop and say, "You see how the picture's developing here with one of the DIRGRAMs?" The first one after the [December] holidays focused on trying to fit individual actions into a pattern, divided up into about five general areas, and on how each action fits under those general areas. The longer we go, the easier it is for the work force to accept that. I did it this way because it seemed the best way at the time. It imposes an urgency. It makes you go ahead and do something each day, even though the DIRGRAM was almost never just right; there seldom was total agreement on the language as it existed when it just came time to pull the lanyard. In that sense, it's worked. I received a lot of responses saying, "I don't understand where we're going,"--but the longer we go, the fewer of those I get, and those are in the forms of e-mails, 7,000 to 8,000 e-mails from the work force. Just hit return on any DIRGRAM that comes out, and it comes to my machine. So I get a lot of feedback.

Is the pace of this 100-day program going the way you had envisioned it, and where are you? (U/FOUO)

It is going the way I envisioned it. There is a portion of the work force that is a bit fragile. I was trying to characterize in my own mind what is causing this flurry of e-mails I'm getting—600 a day early on. By and large, they've been positive. We're talking 80 to 90 percent. But there was a stretch where there were some that were almost venomous in their cynicism. And we've attempted to deal with that. Let me cite one example. We took the flags off the badges of the seniors. These badges, which for the Pentagon are just badges, are symbols of rank for NSAers. Everybody in the Senior Executive Service (SES) at NSA had flags on their badges. One of the five major themes, and the first theme we hit in all this, was communications. As a way to enhance communications, I accepted the recommendation to take this artificial distinguisher off what really should just be an identification to get in the door. A lot of e-mails I received about that step regarded it as trivial. "I thought you were going to make big changes, and now I get this," and so on. When I laid the groundwork for this, there were a lot of people who thought that on Day One there would be heads on pikes as you entered our
compound, and that would symbolize great change. When that didn't happen, there was a fair amount of skepticism. My only tool for overcoming this skepticism was to be absolutely relentless. Every day, you'd get more of these. I am trying to bring the work force along, but I'm not above being sharp edged. (U//FOUO)

Right after the Seymour Hersh article in The New Yorker , I was on one TV call-in show, and I was prepared for a lot of "softballs." But I wasn't given the opportunity to say what I wanted to say. At the end, I said, "I realize the process we're going through is tough. We're in the press a lot more, and there's some public criticism of us. We have to get over it. This is what it takes to be what we have to be in the 21st century." (U//FOUO)

I never use first-person, singular pronouns. It's always first-person, plural. I'm not a guy who comes in on horseback and says, "Forty-seven years of error is long enough. Aren't you glad I'm here?" Because that's not true. (U//FOUO)

This is not an Agency that's failed. This is not an Agency recovering from a Desert One. This is an Agency that is intimately successful today. We're talking about being successful in 2005 and 2010. And that's a positive message, but the hard edge of that message that is equally important is that we're going to do what we have to do. I briefed the work force in October 1999 on the internal and the external teams that I'd commissioned to look at what NSA was doing. I talked about the need for our personnel system to be tougher. For example, we don't direct people to do anything. "I need you to go work in the Pentagon." "I don't want to go." "Oh, okay. How about you?" That's the NSA personnel system. We've got to stop that. The overwhelming result of behavior of that kind is that we come to believe that there are things more important than the mission. (U//FOUO)

During my October briefing, I got a question from the floor asking if I would consider a Reduction in Force (RIF). I said that I would. Something like that has never been done at NSA. We've reduced the size of the Agency by one-third, and no one has left involuntarily. But what you end up with is a work force of the size you want with an average age of 43 years and not the right balance of the skill sets you need. So we're going to get a harder edge to our personnel practices. Someone I really trust sent me an e-mail almost immediately after the briefing and said that he sensed "a great disturbance in the force." And I accept that. The only virtue I can bring to smooth that turbulence is being "semi-right" about the direction we're going, and I feel comfortable about that. We'll "adjust fire" as necessary. It's the right direction. I'll be relentless, and I'm willing to go ahead and just do it. That's what I'm bringing to the game. The specifics about what we're doing inside there, the broad direction of NSA. (U//FOUO)

There's this unwritten folklore about NSA that folks at the top come in wearing uniforms, but that they come and go. And so all the permanent structure really needs to do is wait you out. How do you deal with that? (U//FOUO)

One of my predecessors told me, "They want to treat you like Pharaoh. To carry you around on a sedan chair and let you have the occasional lunch with a visiting foreign delegation but to keep you away from anything else that goes on at NSA." I'm willing to get my hands dirty. I try to watch my time. I try to be available to the work force. I try to eat lunch in the cafeteria. I try to run in the gym. I try to have town meetings. I try to walk into offices unannounced. There are those who think this period of change is so important that they have begun to suggest that this DIRNSA is going to stay longer than three years. I have avoided
any view on that subject, but I find the rumors useful. (U//FOUO)

When you came in, you had an internal team and an external team look at the Agency, and one of the things I found most striking in the external team report—and it may touch a little bit on that cynicism that you’re talking about—is that the external team said, in effect, people have been here before you, and have given wonderful sets of recommendations that have not been implemented. What’s different this time? (U//FOUO)

The doing. An example: until recently, NSA used to promote people to GS-14/15 from Agency-wide boards. If you picture the process, a shop provides candidates for promotion. They have a little miniboard, and it goes up from the office level to another board at the directorate level, to the branch level, to the group level. And then to the key component level. Then these names pour in, and you have a board at the Agency level. To be fair, however, the Agency does a zero-based review at each level. (U//FOUO)

I can find no prima facie case that doing that at the key component level makes you any less good in the quality of people you select than doing it at the corporate level. So one of the recommendations from both teams was to push 14/15 promotions down into key components. Unfortunately, the existing process has almost nothing to do with fairness. It’s about making a sufficiently large pool, with sufficiently good people, that you have good chances of picking SESs out of it. That’s what this is all about. I did a little sanity test with some of my predecessors. They’re all convinced that that pool is big enough, that even if the key components were a little less effective at picking the right people, you’ve still got a big enough pool to do it. If we didn’t award any 14/15 promotions in any one year, we’d save $1.2 million in our payroll. What is the cumulative pay for the seniors sitting on those boards for the period of time I’ve just described? It is $1.6 million. So I think the two studies are right—we ought to cancel these. There were quite a few antibodies that said, "I think I agree with you objectively, but you can’t do this until we have put in a human resources system that gives the proper support in terms of mentoring, career development, EEO considerations, and so forth. Put those in place, and this decision is absolutely golden." I said 47 years has been long enough. Too late. We pushed that down on the key components. That’s the difference. That’s my small value added. I’m willing to say, "Tough," and move on. (U//FOUO)

Personally, this is not an easy position for me to be in, and this sounds like I’m taking credit. But you asked me what the difference is, so this is the best description I can give you. In the past, we’d have studied that again. We need to move forward on the 14/15 boards. How do we need to restructure to do that? Just do it. With the stroke of the pen, it’s done. Now somebody else is going to have to go back and sweep up some broken china on EEO things. (U//FOUO)

By the way, a few days before we announced that that change, a DIRGRAM was issued on equal opportunity, and that one also had almost nothing to do with fairness. It talked about EEO purely in terms of mission effectiveness. And, again, the work force reaction was "You know, I thought he was going to make some significant change, and I get this." You should see some of the e-mails on how they would describe it. It was essential step to set the stage for doing something I actually thought was pretty necessary. (U//FOUO)

Earlier, you characterized NSA as an organization which was impressively methodical and deliberate in its decisionmaking. At a time of exploding technical growth and challenge that may be a prescription for failure, if not disaster.
Later, you characterized the performance of the Agency as a success. How do these two fit together? (U/FOUO)

That's a great question. I've got a long presentation that I actually use often with the work force, again to avoid conveying the impression that, "You're wrong, I'm right, and I'm here to fix you." That's bad technique, and it's also incorrect. But then I have to explain why we need the change, and I go through this fairly long explanation. I note that we're an Agency that grew up in an age in which there was a threat to national survival, so money kept flowing. We knew who the enemy was, and, although he was ugly, he wasn't technologically agile. We were always technologically superior. So we built habits of thought and behavior that were optimized for an environment in which the stream of money was steady, the target was focused, and technology was our ally. Now, however, the money is at best intermittent. I can't tell you what the target will be next week. And our technological adversary is not a nation state but the global telecommunications industry. I then say that on a good day, technology for us is a two-edged sword. NIMA, DIA, and DoD generally use technology to cut the corners on the common problems of less money and demands that are far less focused than they used to be. That is not true for NSA, and that is what makes us unique. Technology is part of our problem set. It can be part of our solution set. But it begins life as part of our problem set. (U/FOUO)

Now I realize doesn't quite look that way, but over time it will. It will move in that direction, and we have got to look like our target. Our technology has to mirror our target's technology. That's really hard to do because of the limited funding that's coming down.

I am part of an Agency that has to somewhat look like the global telecommunications industry in order to work. So that's the kind of change that we're not feeling yet, but, as the global telecommunication industry rushes into this kind of technology, we either have to look like that or we slowly begin to lose. So, we've got to make this fundamental change in direction. It's not that hard if somebody says, "Here's another But it's really hard when you're working on the margins, and you topline with just minor adjustments. Because you can't go do the new stuff, unless you're intellectually agile and you have the ability to take decisive actions to change direction. The reality is we can't do new things until we reach agreement to stop doing some of our traditional business. And when you say, "Let's stop doing some of the old stuff," everyone goes, "Yeah, you're right." But when you got to the next level and propose specific cuts, the response tends to be a chorus of "Oh, no, not that." Every choice begins to look like "Sophie's Choice." But since last summer, some things we had traditionally done did not show up in our budget. They would be in our overguidance. Pick a system. (U/FOUO)

No one's made these decisions yet, but something like this is eventually going to happen, and probably soon. Take, for example, It's not going to be in the NSA budget. It's going to be
in the NSA overbudget. If somebody wants it, send money, because we've got to do a range of new things, deal with new technologies, issues, and encryption in a world in which we have just raised the level of global encryption by changing US export policy.

Some of us have been working in this particular area, with colleagues at the Fort in the Cryptanalysis Group (Z Group) and in the CIA's Directorate of Operations (DO) throughout the DO, but, particularly in Z Group, in this new encryption environment regime that is threatening to engulf us. Do you have any particular thoughts about how to deal with that problem? (U//FOUO)

What I'll say publicly is what we have done is a fair balancing of a whole bunch of national priorities: security, law enforcement, privacy and commerce. It has the virtue of staying power, the equities are evenly enough balanced so that we shouldn't have to visit this in 60, 90, 120 days and start worrying about bit length again. We debate all this bit length, and we're always sucked into the argument. This has staying power. That's really good. (U//FOUO)

Have you yet had the opportunity to think in depth about the relationship between NSA and the CIA? (U//FOUO)

Yes. Let me give you a longer answer, because there's another point I need to make that's tied to something that's gone earlier, and then I'll come directly to what you just said. If you look at the changes we're making, they're in two areas. One I'll call ethos, and the other I'll call mission. Ethos comes back to fixing our basics, getting back to mission, making mission the most important thing, getting rid of nonessentials, cutting duplication on programs, and setting up processes that force you to make decisions. The mission's got to change. As the target, I mean, we have to look like our target--and for us that means a target that's still evolving, not the Cold War target set we know so well and got so comfortable with. (U//FOUO)

In the future, our target will increasingly be It inevitably will lead us in the direction of different kinds of partnerships. In the telecommunications world of the last 40 years, the gravitational pull between NSA and the NRO was irresistible. As that world is replaced by one based on newer technologies, some partnerships rise and others decrease a bit in importance. And so the partnership of NSA with industry; in fact, the DCI is fond of saying, That's exactly right. That is a real "industry" and our ADDO--Rich Taylor's deputy--is a CIA officer.

I've used that phrase myself in talking with CIA DDS&T Joanne Isham, likening the Intelligence Community budget to the last bastion of Soviet-style central planning.

(U//FOUO)

Central planning. Almost a five-year plan? (U//FOUO)

People used to joke that NSA looked very much like the adversary. A Group was the evil empire, B Group was inscrutable, and G Group behaved like the Third World. And there really was some truth to that
And I'll go one further. Everything's secret. I mean, I got an e-mail saying, "Merry Christmas." It carried a Top Secret NSA classification marking. The easy option is to classify everything. This is an Agency that for most of its existence was well served by not having a public image. When the nation felt its existence was threatened, it was willing to cut agencies like NSA quite a bit of slack. But as that threat perception decreases, there is a natural tendency to say, "Now, tell me again what those guys do?" And, therefore, the absence of a public image seems to be less useful today than it was 25 years ago. I don't think we can survive without a public image. (U/FOUO)

The nation still expects us to keep information secrets--that's what NSA's all about. I'm certain there are many things about us that we can show to the public. We have got to put a human face on the Agency, and, hence, you saw my name, my quotes, and my picture in this whole raft of newspaper articles beginning late last fall. We're countercrunching now. Traditionally, NSA would have responded, "We do not comment on operational matters." We had already had in the wings a plan saying that we needed to be more proactive with our public affairs approach. Not surprisingly, that got wrapped up within the NSA graveyard of decisionmaking called "out for staffing." And it was stuck there for about three months. The principles imbedded in that plan, however, were the ones that helped us work our way through Seymour Hersh and all the other folks that we met. (U/FOUO)

On balance, when you extract some of the really nasty ad hominem attacks out of a couple of the articles, a couple of areas that seemed to get to close to truly classified information, and a couple areas of fact, the articles are fairly accurate, and, for my purposes, pretty useful. So that's a good thing, but that's a different approach for NSA. And there's going to be more of that.

(U/FOUO)

 NSA has had the reputation of "You call, we haul." You have alluded to the possibility that there are some things that you might not be able to do. In the context of the NSA customer--the policymaker, the war fighter, and the law enforcement community, and perhaps other communities--how are you approaching the balance that you want to bring to servicing those customers?  

(U/FOUO)

First, let me give you a box score. We actually did this in great detail within the last year, and we get good marks across the board. As I said earlier, NSA is not dealing with recovery from failure. This is a very successful organization. I flew to Mons [Belgium] at the height of the bombing of Kosovo and talked to General Wes Clark [CINC Europe]. He was generous in his praise. NSA did quite well in gaining and protecting information. Yesterday, I got a briefing from J-8 on the Joint Staff as part of the Defense Support Agency review which is required by law every two years. We're doing fine. Good marks.

(U/FOUO)

We did a study of our customers. We get better grades from our nonmilitary customer than we do from our military customer. A pretty constant criticism that I hear from senior leaders is, "You know, you've got people out there who are depending on you who don't wear military uniforms." You've got the policymakers, and so on. So I think the broad perception is that NSA is very DoD-centric in what it does. That's probably not true. I think we're pretty well balanced. Otherwise, I'd probably try to change it. As I said, the military customer gives us a bit lower grades than our nonmilitary. I don't quite know what to attribute that to. Maybe

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demands are higher when you're being shot at. Maybe the military knows us better and expects more of us. (U//FOUO)

We got universally good grades for that first report. But the grades faltered badly when customers need amplification of a report, and then we don't do well. And that's wrong. If you're been at the Fort, you know why. Now put yourself in Stuttgart, Germany, as a captain in the J-2. You have a question on an NSA report. You need to ask the Fort. When the question comes back, however, we are almost impermeable. That is something we'd better work on. A final point I'd make is that, as an Agency, we do not have the ability to say no. And I think it's a skill we have to develop very quickly. If I say, "I know that's important to you, I know you've got to have it, and we'll do everything we can," you can stretch the US SIGINT system beyond its ability. So far, the tears caused by stretching the system have not caused a catastrophic failure, but it's only a matter of time. We can't do everything all the time for everybody. So we have to say, "No. I'm sorry. You're not going to get that anymore." (U//FOUO)

When you're looking at SIGINT requirements, at parcelling them out, how do you make the trade between requirements and affordability and the prioritization requirement. (U//FOUO)

That's a great question because culturally we're inclined to do it just the way you just described. What do you need? Okay. "You got it!" Then that becomes the measure of success or failure. And the expert in whatever discipline we're talking about, be it imagery, HUMINT, SIGINT, ELINT or however you define COMINT, the expert then is tasked with going out and trying to get this list of things, but the list is unconstrained and frequently not prioritized. The people who know SIGINT best have to have a far more creative and decisive role in deciding what the SIGINT system will try to provide. There isn't a CINC in the world who would tell me to go do something that I know is absolutely gold. NSA has to be more sure of what it is we do and what people's expectations are. We have been expected to do many things with national tools at the same time. The services have been badly constrained by budgets. They're going through the same stresses that NSA is. Consequently, one way they've tried to get off the dime is

But back to this question. Can anyone tell me how much money we have invested in putting an ELINT the United States currently has or has planned, compared to ELINT There's an imbalance. To me, that's the great debate that has to take place as we move forward. We have grown up, and we have developed habits with a national SIGINT system that has been really very fungible to go do theater and tactical things. HF is HF

If you look at the first thing we did at NSA, let's talk more about the ethos issue. First, moving past a traditional ethos, then using that changed ethos and the running room it creates for us—in terms of intellectual running room, personnel running room, or financial running room—to begin to change our mission orientation. Mission orientation has to be in the direction of our target As we do that, the next concentric circle that began with ethos and is now at mission is what that does to our Intelligence Community partners. NRO's still important, but not in the same way it used to be. The

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HUMINT services are all really important. More than they used to be. Then the circle outside that is the linkage among what we programatically call the Consolidated Cryptologic Program; the Defense Cryptologic Program; Tactical Intelligence and Related Activities; and the Defense Airborne Reconnaissance Program, and that's just got to change. Because it's got to be different than it is now, and that's a tough sale. But I've raised this to a few of the service chiefs, and they agree.

Knowing where the power lies, can you win that argument as a combat support agency within the DoD? (U//FOUO)

I can paint the issue. We can perform the minimum within these structures. This is not a question of talent. It's a question of money. In conscience, I know only NSA can provide some capabilities, so we've got to move NSA in that direction. Now, other things are going to become uncovered if we go in this direction, but there are other ways of doing them. I mean,

This is a hard one. NSA needs to be the technological engine for a broad range of missions, from strategic to technical. And the decisions we make involve difficult trade-offs. To cite one case,

You mentioned earlier your visit with __________ in which you talked about newer technologies and about going after the target. The implication for processing and exploitation is immense. Are you making commensurate efforts on processing and exploitation? __________

When I talked about the investment needs of the future, access is hard, by which I mean access to communications we need to acquire. We've got to work on that.

We've also got to work on that. But if we're successful in these without making other improvements we'll die in a flood of information. So then we must invest in __________ Even today, and this is instinctive for the Agency, too, if you've got a problem, the first thing you do is try to __________ I think you realize

You alluded to a balance between collection and exploitation of your analysis. How do you see the Tasking, Processing, Exploitation, and Dissemination (TPED) situation from NSA's standpoint? You hear a lot about General King's [Lt. Gen. James King, Director, NIMA] problems with that. How do you see the SIGINT side relate, breaking the stovepipes? (U//FOUO)

It should relate very closely--to the "T and the D" of TPED. We've got our own acronyms; SMM is known as SIGINT Mission Management, and now we use CMM, Cryptologic
Mission Management, but a lot of that should translate to the "T" and the "D" in TPED. Now we need to do a lot more work on that. TPED is so hard and challenging, so large, just for the imagery problem. It's hard to say, and now we need to see how this is going to overlay on SIGINT issues, as well. But you're right. I can draw parabolas here, and unfortunately that's what they look like that show the funding we need in the outyears for these problem sets, you know, access, decryption, SMM, analysis tools. They all get frighteningly high, and so we're going to have to look for economies, and that's one we really should work at. (U//FOUO)

You've touched on what is sort of a trinity of speed, volume, connectivity, and we all deal with it. Connectivity is still a migraine inducer, I think, for the Community. It's what the Intelligence Community Common Operational Network (ICON) folks call the "need to know versus need to share" problem. How do you see the Intelligence Community gaining the efficiencies that we need to work in this information environment and still maintain protection of sources and methods? (U//FOUO)

That's several ridge lines down the battlefield from where we are now. In my old metaphor, these concentric circles, it sits down there several more. It's really important, and we're going to have to face it. I have mentioned the J-8 briefing I received yesterday, giving us a scorecard on our combat support agency role. One of the issues they raised was connectivity. At the same time, we have within the NSA this changing paradigm.

We've experimented with that, and we did a testbed. It was very successful. It requires a lot of training. Actually, it requires some unlearning and then training. Even when this is done, however, it doesn't do us much good if all we do is

So how do we lash up with the Community--and, even more importantly, intelligence consumers? And do it securely? There's a whole bunch of acronyms out there. We've got to figure out the answer, and then we have to build connectivity into it. (U//FOUO)

Picture the typical 24-hour watch center at any of the unified commands, and in there you would see two people who worked for the J-2, and they were doing their part of the watch. And somewhere nearby you would see two people who worked for NSA who had their own systems, their own machines, their own connectivity. Why? Because NSA wouldn't let those other two guys do this. Period. You can pretty that up with a whole bunch of other statements, but NSA wouldn't let them have access to the NSA databases. I'm wondering if maybe letting them have access is not a good idea. But how do you protect sources and methods? (U//FOUO)

Behind my credenza, I have a gray phone, a STU-III, an STE, and a red phone. NSA has a gray phone because it was ahead of everybody else. But everyone else has caught up. So I actually made the note today to go back and see how much it costs us to sustain these systems. We need to get out of the old models where NSA did things because NSA was the only one who could do them. Now they're commonly available, so why are we continuing to sustain these special things? I'll go one further. It's not my idea. I recently invited Diane Roark, a staff member of the House Permanent Select Committee on Intelligence, to fly to Fort Gordon to see the Regional SIGINT Operations Center. Our most important subject of conversation was reporting at NSA. She asked, "Why is NSA doing reporting?" Although we've been reporting for 47 years, when you step back and think about it, maybe she's right. Why are we issuing SIGINT reports? And then it gets to another question I've already asked myself--serialized products. What's that about? Do you go home and work with serialized
products when you sit in front of your home computer? I don't think so. You go to get the information. How do we adapt that reality to a web-based, analytic community? This is the kind of question that we need to ask as we make these fundamental judgments. (U//FOUO)

It gets back to the point that we did a lot of these things because the technology made you do them. And it's not there any more. The industrial approach. (U//FOUO)

That's right. The data came into Fort Meade. Are you going to type it up, give it to a courier, and run it down to Arlington Hall? No, so you do it at Fort Meade. But now you can make it appear instantaneously on a web, and somebody at the Defense Intelligence Analysis Center can just pull it and repeat it. (U//FOUO)

Do you think Congress is prepared to deal with some of the changes taking place—the way the technical environment is changing, the technical communications environment, because one of the reasons NSA reports is because there are laws in terms of who sees raw SIGINT? (U//FOUO)

I don't know. I think what I described to you is consistent with the laws. Without getting too much into some really sensitive stuff, let's think about conducting operations against a major international terrorist leader. Think about SIGINT and HUMINT sources. Think about two agencies, for illustrative purposes, 35 miles apart, trying to marry the data to get the son of a gun. And each of them saying, "I'll give you my finished reporting, but not my tickets." You cannot tell me that's the correct approach in the first year of the 21st century. We're like two foreign potentates, negotiating a transfer of prisoners, and we're both wrapping ourselves around our own tradecraft. So that's a great question, and it's out there. I don't know if I can get to it on my watch, but somebody has to. (U//FOUO)

As you look ahead at the changing of the work force, what is the next generation like? We are bringing a whole new generation of operations officers and analysts into CIA, and they're great. They have enormous talent. Would you please speak to the topic of the next generation of NSA officers? (U//FOUO)

That is a great and tough question because we don't have a new generation. Remember that one-third downsizing with no RIF that we've experienced in the last 10 years? We have not really hired in any significant way for the better part of a decade. I think the number last year was fewer than 200 in an Agency with a civilian population of 17,000. This year, it's been 600 or so. I want intellectually agile and technologically smart people, which is the way their parents and grandparents were at NSA. The new part that needs to be added is collaborative, which their grandparents were not at NSA. We were very much self contained in our culture. On the other hand, we can't do the mission without that almost overwhelming intellectual power the Agency's always had. The new ingredient we've got to add is this communal spirit, part of a broader Intelligence Community, part of a broader DoD community. Our old message, "I can't show you tech data, you don't know the secret handshake" has to naturally erode. (U//FOUO)

We have to change career models. If we hired two people today, one a Nobel laureate mathematician and the other to run a forklift on our loading dock, the implicit contract with both would be that they're there for 35 years. This worked well for an Agency in which the
cutting edge of practically everything the Agency needed was at Fort Meade. Now we're an
Agency that I've already suggested needs a more public face, and I'd also suggest to you the
cutting edge of most of what the Agency needs is not resident at Fort Meade. It's out there in
private enterprise. So, in addition to perhaps being more communal and collaborative than
their moms and dads and grandparents at NSA, we may see more flowing in and out of the
Agency at multiple levels, so that their career in the Agency may not be defined as from age
22 to 57. It may be that span of eight years from 42 to 50, or pick your combination. But I
think we'll see more of that. I actually laid that out to the work force and got negative vibes
from it on that. I think that may be the salvation.

If you were to define your legacy, what would you like it to be?

That I took a national treasure that was given to me when I took the directorship, handed over
to my successor something that was still a national treasure and with the high probability that
it should also be a national treasure for his successors.