

Insights on Federally Funded Research and Development Centers

IDA Ideas guest Gen. Norton “Norty” A. Schwartz speaks about the nature of federally funded research and development centers (FFRDCs) and what makes IDA a standout organization. Norty serves as President of IDA, where he directs the activities of more than 1,000 scientists and technologists. He has a long and prestigious career of service and leadership that spans over five decades. Prior to retiring from the U.S. Air Force, he served as the 19th Chief of Staff of the U.S. Air Force from 2008 to 2012. He previously held senior joint positions as Director of the Joint Staff and as Commander of the U.S. Transportation Command.

[Begin transcript]

Rhett Moeller: Hello listeners. I’m Rhett Moeller and I’m the host of IDA Ideas, a podcast hosted by the Institute for Defense Analyses. You can find out more about us at www.ida.org. Welcome to another episode of IDA Ideas. Today, it is my absolute pleasure to introduce Norty Schwartz, retired Air Force general and president of the Institute for Defense Analyses. Norty has joined me to talk about a foundational topic, the nature of federally funded research and development centers, or FFRDCs. It’s an important thing to discuss, and I’m glad you’re here to share your insight, Norty.

Norty Schwartz: Rhett, thanks. A privilege to be with you on a topic we both share a great interest in.

Rhett: Absolutely. Well, to get things started, it probably makes sense to begin right here where we are at the Institute for Defense Analyses. What can you tell us about IDA?

Norty: It’s an institution of significant history, and it actually began in World War II during a period when scientists and engineers and analysts made great contributions to the successful outcome, obviously, of World War II. And in 1947, as a result of the experiences from World War II, we had the National Security Act, which, among other things, established the Department of Defense, the secretary in the department, the Air Force and the intelligence community among other things. But what occurred in 1948 was that the then-Secretary of Defense acknowledged that what had occurred during the war needed a — what I would call an analog within the department — a dedicated analytical capability that was equal to that which evolved during the war. And so, in 1955 the then-Secretary Wilson asked MIT [Massachusetts Institute of Technology], the foremost university in the country, to take over what they had created in-house, which was known as the Weapons

Systems Evaluation Group, or WSEG for short. And for a number of years that continued in that format. What had started internally to the Department of Defense became a sponsored activity of MIT and 11 other universities. A curious fact is that the president of MIT at the time, Dr. [James Rhyne] Killian, ultimately became a trustee at IDA later in his career. And over the years, the department asked IDA to perform many technology assessments, support to the intelligence community and so on. But in 1968, IDA broke away from the universities and became an independent, nonprofit corporation which we still know today. And it was that migration from the very first analytical shop, WSEG, to what we have today. And what that suggests to me, Rhett, is that we here are performing a profoundly important mission...

Rhett: Yes.

Norty: ...which is enabling those who make decisions, those who currently carry the burden of public service in the national security community, to make the best possible choices based on facts and data. And that's what we're about.

Rhett: Well, we've mentioned this peculiar sort of organization, the FFRDC, several times now. Let's get deeper into this topic. What makes a federally funded research and development center what it is?

Norty: An FFRDC is established in law, actually, and in DOD policy known as the Federal Acquisition Regulation. Maybe the best way to explain this is what then-Under Secretary of Defense for Acquisition, Technology and Logistics Ash[ton B.] Carter said about FFRDCs. He basically argued that the analytic, engineering and research capabilities that reside in the FFRDCs could not be replicated on the government side for reasons of recruiting and retention and so on. But fundamentally that the depth and breadth of that cohort would not be able to be sustained within the Department of Defense. And so, he indicated that the country relies on the FFRDC network to provide that depth and breadth of scientific, technical and analytic expertise. But even more important in my mind is what Secretary Carter said, and I quote, "They operate in the public interest free from conflict of interest." That is what distinguishes us from others.

Rhett: Yes.

Norty: We operate in the public interest.

Rhett: Norty in your comments just now you mentioned how we are amongst FFRDCs as peers. Can you tell us a little bit about how we might differ in our own structure as compared to our peers?

Norty: Sure, as I implied earlier, we're a nonprofit, independent company and we supervise three subordinate FFRDCs. The first is the Systems and Analyses Center here in Alexandria, Virginia. The second is an entity [the Center for Communications and Computing (CCC)] which supports the intelligence community at three locations in the

country: Princeton, New Jersey; Bowie, Maryland; and La Jolla, California. And interestingly, the Systems and Analyses Center was created in the [1956] time frame and the centers [CCC] which support the intelligence community, just a very few years after, actually. But the most recent FFRDC is the Science [and] Technology Policy Institute, which supports the Office of Science and Technology Policy in the White House. So, in short, you could consider IDA headquarters as a holding company for three FFRDCs: SAC (the Systems and Analyses Center), the folks that support the intelligence community [CCC], and then, of course STPI, or the Science and Technology Policy Institute.

Rhett: Well, as a company that has this unique relationship with the government, IDA is able to take on some very interesting work, some neat things that we've done through the years and we have on the horizon. Can you share with our audience some of the things we get to do on behalf of the nation?

Norty: Sure, a couple of, I think, very good examples. Two from the 2023 timeframe, in fact. One was an 18-month effort to support the congressionally mandated Strategic Posture Commission [Congressional Commission on the Strategic Posture of the United States]. And given the developments globally regarding possession of nuclear capability, it was time for a very carefully done assessment of the nuclear posture which America currently enjoys and that which we are planning to field. That commission of at least 12 members, if I recall correctly, all of whom had reputations and experience in this discipline, came together and we provided — we were sort of the back shop for the commission. Eighteen months of hard work amongst very bright and determined people produced a unanimous report that I think will be instrumental in making sure that America's nuclear posture will be properly configured for, not the past and not the single adversary we faced with the Soviet Union and Russia, but now a second peer nuclear adversary with China.

Another example. If you are going to Abbottabad [in Pakistan] to take down [Osama] bin Laden, it doesn't matter what it costs, but there's a whole lot of what happens in the Department of Defense that is business. And so, we also took on the responsibility of being the support entity for the Defense Management Institute [DMI]. And the point I'm making is that if you have an \$886 billion enterprise, as is the Department of Defense, there's a fair amount of management expertise required to have that organization perform at the level the American people expect. The purpose of the institute is not only to perform research on management best practice, but to identify those areas perhaps in the past where the department has underperformed so history is not repeated.

Rhett: I see.

Norty: This is the genius of the DMI. It is a privilege for us to be a part of that. And the last thing I'll mention, just talk about, systems of course. But we have a current project on space cargo. As many in our audience are no doubt aware that the space launch business has been transformed by commercial entities. Part of that, of course, is launching smaller

satellites in large constellations for both commercial and military/national security purposes. But the notion of using rocketry to transport cargo is a piece of imagination. Now, you wouldn't want to do that routinely, but for very special circumstances or very special cargo, to be able to use rocketry to move something around the globe is really quite a remarkable capability, if it in fact is viable. And my intuition is, given that at least one commercial provider that we're all familiar with has successfully recovered their launch vehicles on dozens of occasions now, it is not so far-fetched to think that you could recover a launch vehicle that also carried cargo. So, little bit of imagination that people in our company, thankfully, have the astronautics, the aeronautics, the logistics expertise to help the department determine whether in fact this is a viable concept which they should pursue.

Rhett: Well, this is exactly the kind of thing that makes me excited to be a member of IDA — getting to work with people who are taking on these challenges, these difficult questions, and trying to make a difference — and I appreciate being able to be a part of that.

Norty: You bet.

Rhett: Norty, you've had a long and distinguished career as an Air Force general and now as the president of IDA. So, you've been on both sides of the fence when it comes to working with FFRDCs. So, I'm wondering if you're willing to share with us your perceptions of FFRDCs from both sides.

Norty: You know, it was really serendipitous that naturally I ended up here. But the bottom line is that IDA's had that reputation of being a truth teller and certainly it was, that was known to be the case in the Pentagon when I was there. But I think the key thing is that those who serve in decision-making positions in the national security enterprise have lots on their plate. Sometimes you experience a situation where a decision is required and you do not have all of the data and analysis that you would prefer to have to make the most considered decision. So, what does one do? You apply your judgment and best instincts and decide, because when you have to decide, you decide. But the beauty of what an institution like what IDA is and does is that we provide decision-quality analysis (the facts and data) to those who currently serve, with which they can make the most informed decision. Now, in this town sometimes facts don't matter. But that ain't all the time. And so, when decision makers have the opportunity and the latitude to consider the best analysis and to have that enter into their decision process, it might not be conclusive but it certainly will help inform the outcome. That's what we do. That's why we're important. And the other thing is, Secretary Ash Carter said way back when, our advice is trusted and it is without conflict of interest. That's why we're trusted.

Rhett: Great. I appreciate the insight and the analysis.

Norty: Sure.

Rhett: If you were to perhaps summarize the spirit of FFRDCs and of IDA in particular in a sentence or two, how would you categorize us?

Norty: We are truth tellers whose mission is to combine extraordinary scientific, technical and analytic expertise to enable those who serve in decision-making positions currently, and in the near future, to make the best possible choices on behalf of the American people. That is both on a capability basis and on an economically sound, financial basis. And we are able to do those in combination to an extent that it differentiates [us from] our peers in the ecosystem, I think. We have the scientific, the technical expertise and the economic know-how to help people make well-rounded choices if they have that opportunity.

Rhett: Well, Norty, thank you very much for your time today. I've really appreciated the chance to talk with you about this, our history and our peers. It's been great to consider these things and it's really good for me to hear this all laid out so neatly to be reminded of the important role that we play and that other FFRDCs share in supporting the work of the nation's government. It's been most illuminating.

Norty: Thanks, Rhett, very much. And again, to those in our workforce who might have the opportunity to hear this, and importantly to others who might have an aspiration perhaps to pursue public service as a way to contribute to the country, certainly IDA is a[n] attractive workplace with a great mission, with good people and the potential to do very good things that serve the nation.

Rhett: Thank you Norty. As always, if you want more information on IDA and its ongoing work, please do check us out at ida.org. We also have a presence on X [formerly Twitter] at [IDA_org](https://twitter.com/IDA_org), and we have a channel on YouTube. The show is hosted by the Institute for Defense Analyses, a nonprofit organization based in the Washington, D.C., area. Once more, you can find out more about us and the work we do at ida.org. Thank you for tuning in, and we hope you'll join us again next time as we discuss another big idea here at IDA Ideas.

Show Notes

Learn more about the topics discussed in this episode via the links below.

About IDA. Accessed April 1, 2024. <https://www.ida.org/about-ida>.

Center for Communications and Computing. Accessed April 1, 2024.

<https://www.ida.org/ida-ffrdcs/center-for-communications-and-computing/about-ccc>.

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Defense Management Institute. Accessed April 1, 2024. <https://www.dmi-ida.org/>.

Science and Technology Policy Institute. Accessed April 1, 2024.

<https://www.ida.org/ida-ffrdcs/science-and-technology-policy-institute/about-stpi>.

Systems and Analyses Center. Accessed April 1, 2024. [https://www.ida.org/ida-](https://www.ida.org/ida-ffrdcs/systems-and-analyses-center/about-sac)

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What Are FFRDCs? Accessed April 1, 2024. <https://www.ida.org/ida-ffrdcs>.