Dr. Robert V. Gates – Podcast 3
1970 - 2007

Introduction	MUSIC Welcome to the Dahlgren Centennial Celebration – A Century of Innovation. We hope that this and our many other products, events and offerings will showcase what Dahlgren has accomplished during its last 100 years. Throughout our history, we've interviewed some of the most prominent minds, leaders and innovators that worked here, and we're opening up the vault to share them with you this year. Today we are honored to listen to the story of Dr. Robert V. Gates, whose significant work at Dahlgren spanned from 1970 to 2007. His podcast will focus on his contributions to Submarine Launched Ballistic Missile Program and the work environment at Dahlgren in the 1990s.
Rife	This is side two of the interview with Robert Gates. Rob, the next question I want to ask you is, during the nineties, as you stated earlier, you went into corporate staff. so you definitely got some administrative experience. What kind of outside influences affected Dahlgren as well as your department or you personally, internal management challenges, and the BRACs? It was a turbulent period, so give me a sense of what was going on during that period.
Gates	During the early part of the nineties, I was on K-40 staff doing various and sundry future systems kinds of things and was sitting up near the department office and got drafted to be the strategic systems BRAC guy starting in '93. So I got to help the corporate staff at the time-the two or three people who were doing this-to pull together the data calls. I was responding for K, primarily, but since White Oak was one of the issues and the wind tunnels at White Oak were one of the issues, K was very involved in some of them, so I helped do all the data calls for K We did it in '93 and I did it again in '95. It turned out, as we were doing it, people who were doing it on staff weren't necessarily very technical people, and I sort of got-I can't remember if I volunteered or got shanghaied, but one or the other, I wound up sort of being a technical advisor to them on a number of things informally, especially since one of the main questions, in '95, in particular, had to do with the wind tunnel, I wound up having to write the stuff for the wind tunnel. I was supposed to go to a conference in Monterey in November, and we were expecting the questions to come back on the wind tunnel, where we were expecting follow-up questions, and I had to go to a conference in Monterey and then to a meeting at Lockheed in Sunnyvale, and the captain told me I couldn't go to the conference. So I flew out to the meeting in Sunnyvale. I flew out late one afternoon, went

	to the meeting the next day, and flew home on the red-eye so I could be here when the questions came. Like always happens when you do that, they never came. So I did that, and that got me over on corporate staff in 196. That plus the NAVSEA IG, the command performance inspection. And the one they did in '96 was the first one where they tried to apply the Malcolm Baldrige criteria, and I got to be the leader for one of the main sections, the business results section, for the first version. Then when I went up over on staff, I wound up writing the implementation plan for the Baldrige stuff and doing all the follow-up tracking and planning for that and all the other stuff that came along, like Vision 21, which was the sort of BRAC follow-on in the late nineties, when the DOD realized that when they had gone through the four rounds of BRACs, they had been really focused on the services and not so much at the joint level. They also, by their view, had affected much more strongly the operational bases than they had RDT&E places like Dahlgren RDT&E, so in Vision 21 that was written into congressional language, basically required DOD to go back and look at the R&D and T&E sites across the services and find some way to compare them and then look and see, if there's duplication, which service maybe ought to get out in favor of another, so that you could save money and you could also maybe close some sites that way and not duplicate them service by service. So I was the Dahlgren lead for the Vision 21 stuff. And that was a very complicated thing, because when you look at Navy Labs being-well, we are working capital fund places. There was a GAO report on this, and I forget which one it was, but, basically, the Air Force labs are not industrially funded, and the Army labs-the Army has a very full lab system with the Corps of Engineers and other things, and some are and some aren't, so they sort of fall somewhere in the middle. So if you try to go functionally and figure out what it costs to do a particular function at a particular place, we always thought, for the working capital fund places, at Dahlgren we had a very good answer. You could look at our rate and you could see what it cost to do a given function, but you couldn't do that with the other labs. So they had KPMG put together a process of data calls where you had a humongous taxonomy. You had to characterize everything you did, then you had to break down all your financials into those technical areas, and they had a way they were going to compute what it costs to do a given function.
Rife	Essentially, tum everything into numbers.
Gates	And they were going to take the personnel things, the facilities things, the equipment, the whole deal, and they had a way that once you broke down everything you did into their bins and then characterized all your financials into those same bins, they could rack them and stack them and put them together any way they want and, in theory, you could compare the difference service labs because you were starting from a fundamental level on all of them.

	I was the Dahlgren person doing that, and what we did with NSWC is all of the divisions got together with the NSWC staff and we strategized how we were going to respond as laboratories so we would be responding consistently. A lot of the issues in the data call, we brought up a lot of common issues. We didn't understand what they were asking, and NSWC either made judgments on or got readings on, and passed it to all of us. So all within NSWC, all had the same understanding, and it was still a real mess. And we went through that process. We arranged for people to come down and spend a couple of months with us on a couple of occasions to do interviews and data-gathering later on to validate what we had turned in. I don't think it ever went anywhere, as best I can tell. It was a very, very complicated thing, and I'm not sure that they ever got to the answers that they were looking to get at. I think you see, again, with the BRAC they're talking about doing down the road in a couple of years, they're looking at the same kind of questions again that Vision 21 was supposed to get at back in the late nineties. So it'll be interesting to see how they go about doing that this time, since it was such a mess.
Rife	The first time around.
Gates	It's an extremely complicated problem, and it was a very extremely complicated data- gathering thing to try to go at getting the answer. Hopefully, they'll find a better way of doing it this time. It was kind of interesting that when the office that KPMG had, where they were doing this for DOD, it was as tightly guarded as any compartmentalized program I've ever worked in. You couldn't get into the room or you couldn't see any of the stuff. What they were doing and the data they were getting was extremely closely held. So when they wrote general instructions and general data calls, trying to interpret it in our particular context and then get answers was a very tough thing to do, since you couldn't actually talk to anybody much. That was a very complicated data-gathering process, but it's what's been going on---I mean, of the things I've read, you can go back in the fifties when Dr. Bramble and Dr. Lyddane- I mean, Dr. Bramble especially, saw that what Dahlgren was known for, which was testing guns and armor, we were going to be out of business, potentially, after the Korean War, that they didn't need a place like this. He, reading the environment, started moving us in ways that probably Thompson had already started . . .
Rife	Toward the weapons lab concept.
Gates	Away from being a proving ground to being a weapons lab. Getting the SLBM work that started in the late fifties through the sixties and seventies, made a change for us in actually developing stuff, working at a systems level on stuff

	So you can see that what Dr. Lyddane and Dr. Bramble did, what Barney Smith followed on, and what Colvard in some ways brought to a point with Aegis back in the seventies, it was a way that they all looked at the environment and realized that what we were known for was not something that the Navy was going to need much of anymore. Now, it turned out, when I got here in 1970, and lived just off of base, during Vietnam, they did need us to do that again. I mean, the guns were firing all the time . . .
Rife	Shore bombardments.
Gates	There was a whole lot of gun work, range work, back in the early sixties and seventies, on proof and acceptance.
Rife	Yes. There was a test on heart also, with Dr. Bull, and we run into . . .
Gates	And so while they thought that we were going to go out of business in the fifties as being a gun-testing place, there was actually an awful lot of it came back again during Vietnam. But by then we were significantly different, and as somebody pointed out to me one day, you could tell how different we are by realizing, when you stop to listen, that you don't hear the guns very often anymore.
Rife	I've been down to Dahlgren quite a bit doing the research, and I only hear a gun go off sporadically. The last couple of times I've been here, I haven't heard a gun off, so that says a lot.
Gates	And then one of the things, you start talking to Colvard a lot, and Colvard is-I've had him as a professor in a couple of courses, he's on my dissertation committee, so we've talked a lot about one thing and another-and being on staff with Tom Clare and we've talked a lot, seen a lot of this as we went through the strategic planning process in the late nineties, that there's been a continual discussion that we've put ourselves in, we've inserted our opinions in over the years. There's been a continuing discussion going back to the fifties and sixties as to what is it that the Navy needs from places like Dahlgren. I think you look at people like Barney Smith and Jim Colvard and Tom Clare and some others, have really been at the forefront of trying to shape that discussion, and it's based on a very strong belief that the Navy needs places like Dahlgren. I was reading a thing yesterday, Robert Hillyer giving a speech in the late seventies out on the West Coast some place. He was the technical director at China Lake, I guess, at the time. He was saying- he made the comment then, and you see these words all the way back into the sixties and before-that the Navy needs places like Dahlgren to be a smart buyer, that you're going to go to contractors, you're going to go to industry to get things made, but that's usually

	on the basis of a contract. So you need somebody to help write the requirements right for the contract, you need somebody to help you know that you've got what you paid for.
Rife	That's exactly right, because what I found in the research in preparing our World War II chapter is in the development of the armor and projectile laboratory, what had happened was, it was Thompson's idea, because he saw this corning. Between World War I, in which armor projectile development and evaluation was at its peak, and World War II, when it was just recovering, during the twenties and thirties, a lot of knowledge had been lost in industry because of the merchants of death as well asjust no gun testing going on. So what the Navy found in the late thirties, going into World War II, was that the quality was just really awful on these, and that's one of the reasons they built the armor and projectile laboratory, so it's another case of history repeating itself.
Gates	And one of the things that you see all along, and I did some stuff years ago, looking at some technology things back in the early nineties, I guess, late eighties and early nineties, looking at what is it government's supposed to be doing, and Navy Labs in particular, supposed to be doing with technology, and obviously we're not going to be a huge center of mass on any deep technical area. On the other hand, we have individuals who can have good ideas, and we have people who know what the Navy's needs are better than maybe some people do in academia. So that we have people who can have good ideas, who can push good ideas, who can work on good ideas, and when it becomes clear that they're good ideas, then maybe we can't do the magnitude or the level of the research, but we've got a concept to a point that academia or maybe multiple people will pick up and run with or maybe industry will. So you very quickly come down to the idea, when you look at technology, there's stuff that you don't know what it's going to be good for and it may wind up being commercial, it may wind up being military. There are some areas, like high explosives for ordnance, that are very particularly for military. Well, that first category, when you don't know what they're going to wind up being in the end, you get a much better chance of getting academia or industry interested in doing that. We get involved because we may bring a different spin to it. Some of those other areas, the special areas, that are military only, almost, sometimes, if you're smart- and I think that ONR was set up to do this, historically-by putting money out, you can interest people in doing research in areas where you need research done. Sometimes, as we've discovered, there just isn't enough money to get people interested in looking at certain things, so then the government has to step in. So places like Dahlgren can be very helpful in some of those areas that industry is just not interested in looking at anymore. And one of the places that's been in recent years-there was a study done in DOD in the late eighties, looking at

	some of the strategic systems technology areas, and one of the ones that was dropping off rapidly was reentry systems. The Navy and the Air Force haven't done a reentry system development since the Navy did the reentry body for the Trident II that was developed during the eighties, and so a lot of the wind-tunnel testing and the conceptual kind of things were done in the fairly early eighties. There hasn't been a development like that since then, and the reentry stuff is different than the space shuttle. It's not tiles, it's ablative material. It used to be there were times when there was big overlap between what you were doing with the space program and what you were doing with reentry, but the Apollo thing having ablative shields and things . . . But now, the tiles is a much different technology, so there's not that much going on that's common. But then you wind up-what you found out is that a lot of the technical expertise was in the government, a lot of the test data was in the government. Colleges weren't even very interested so they weren't graduating Ph.D.'s who had studied reentry physics, because there was no market for it.
Rife	The cold war was over why do you need it?
Gates	The research that was going on, that you'd wind up doing dissertation work on, was not that anymore. So it became obvious that a lot of what was left of that technology, as people retired and whatever, that was in the government. So there has actually been some work to actually get a little funding for the Navy and the Air Force to actually get some real work done in reentry systems, and a lot of that's come to Dahlgren, and Dahlgren has been able to work with people who make these kind of materials and things and keep a little bit of work going. But it's a very difficult thing in some of these areas when the interest moves on. That's when we sort of have to stay around. I've wandered kind of far afield, but if you look at what the environment-I mean. I can go back and find examples all the way along, back to Dr. Bramble and all the way up to the present, where Dahlgren. whether given individuals like Bramble and Lyddane and Barney Smith and Colvard, or whether as a group-some of the things Jim Colvard put together in terms of the planning with the senior department heads and people like that-what went on through the eighties and nineties and we did when I was over on staff in the late nineties, trying to figure out where is it the needs are for the Navy, where do we need to go as Dahlgren to support those needs, and we've actually taken the lead in getting into various things. When you go back to the seventies, moving into systems engineering with Aegis, where the Navy needed somebody to move away from the component level that we had always been at, and the testing level we had always been at, somebody to help design systems and integrate bigger systems and do that sort of stuff, and on through the nineties and up to the present, we started to think,

	well, you know, building a shipboard system is one thing, that was very important, but now ships don't operate by themselves anymore. They don't only operate with other ships either; they operate with the other services, they operate with satellites . . .
Rife	Satellites and aircraft.
Gates	. . . with other countries. So we've sort of had a push going on through the nineties to the present, when we set up the new T Department, was basically looking at how do you do systems engineering at a theater level, so that you can go back and start saying, okay, I'm still in the business primarily of designing weapons systems and combat control systems, but now they not only have to work on the ship with this particular system, they probably have to work with a higher-level system or maybe be that higher level system, and they have to work in a much different environment than it was before. So I think you've seen Dahlgren shift over the years from being a test place to doing components, whether it was bombsight testing or whether it was developing armor, or whether it was developing weapons or whatever, to actually moving into system work and moving beyond, I'll say simple systems, into much more complicated shipboard systems, into theater systems, and we've even come around to the way of thinking-and Gene Gallaher probably told Rodney some of this when they talked-is that we also realized that a lot of the stuff that we do has interest and an application beyond the Navy one that we saw for it. So we even had in our strategic plan, in our core equities and things, a thing called national needs, which sort of reflects the idea that a lot of the things we develop as technical solutions for the Navy, there's no reason that they can't be used other places in the government. And some of those things have found homes, whether it's the Customs Service or whoever, a lot of the technologies, most of those places don't have the technology people in the government to support their needs in technical. They have to depend on what gets developed by industry, and maybe not even funding it sometimes, just being able to pick up good ideas as they've been developed. So it'd be kind of a shame not to take advantage of a place like us and the things we do that should be available to the government at large, so we've had sort of a sideline in some of the things we've done. Some of the things we've done, whether it's been terrorism- related, some of the chemical-biological defense things that we've done basically for shipboard, and as we've gotten into things, our technology that are more broadly based for all the services, we found a lot of the detectors and things we've come up with, a lot of that sort of stuff has been of particular interest now outside of the strictly-outside of the military interest as we worry much more about terrorists and homeland defense. We've got some pushes going with force protection, which is a very specific

	military application of the antiterrorist thing, but a lot of the things we do there also have broader application outside of just protecting Navy bases and Navy ships. So that's something that's becoming more widely recognized, that, in general, a lot of the things we've developed for the Navy, but not just us, a lot of the military things, if you look at them right, have got technology that could be of great use outside of the military.
Rife	For the civilian sector.
Gates	For the civilian sector and for homeland defense. So some of that is still sort of in kind of a birthing stage in DOD as to how DOD is going to play with homeland security, so that eventually will come down to how we can support those kind of places. We've done it for years at one level. As things sort themselves out, it may reach another level a higher level, getting technology much more efficiently transferred. And I think we've always done things, I mean, go to Panama City and Dahlgren has done the same thing, but we always have had worked with the state, and Panama City has done things with state and county folks, using some of their underwater detection things for local sheriff's departments . . .
Rife	Swamps.
Gates	Yes, help search lakes and swamps and things. So we've always had ways of trying to get our technology to other places. The thing you find out, being a working capital fund place, most of those folks don't have too much money, so you've got to find a way you can transfer what you're doing to them for a very few and maybe no bucks. So that can be a challenge. We have a lot of good technology that can be of use to people. And I think as you get into some of the Desert Storm and what happened recently and all in between, you see Tomahawks are being used extensively, some of the driving force for what we've been doing in the new mission and planning for Tomahawk came out of those experiences. There have been a lot of technology things developed on very short notice, especially in Desert Storm, in J Department to meet some very specific needs. When Tomahawk came to be used, we tended to find out a little after the fact, because the planning is done outside of Dahlgren. The system is used by the military, and so we get the feedback in the lessons learned. If there were problems, we certainly would have heard about them, and the fact we didn't is probably a good thing. So that when Tomahawk-we sort of were stood up and prepared to support that. During the operational situation we weren't called on, to my knowledge, very much to support Tomahawk, but on the other hand, the lessons learned and some of the things that came back certainly fed into changes and improvements later on. So took those lessons and folded them in operationally.

	It was an operational system. We're not an operational place in that context.
Rife	Early nineties. In one of our interviews with one of the former commanders, he talked about the hiring freeze as well as downsizing, and according to him, it created both a technological and a management chasm-that's the term that he used. What can you say about that? Because I imagine in the early nineties that you were caught square in the middle of that. You go back, as I said, with the dissertation research I've been doing, you go back and you read some of the same stuff over and over again. There has always been an up-and- down process on personnel ceilings, how many people we could have, how many high- grades you can have, whether you can hire. There have always been ups and downs on that, and all through my career I've seen that. I mean, there was a high-grade freeze through the last two or three years of the seventies, and a bunch of us who were on the verge of being thirteens got hung up for a couple of three years. There were some hiring freezes during the eighties. There were some hiring freezes during the nineties. You go back and look at-if you plot experience, you see these dips that equate to hiring in certain parts of the eighties and certain parts of the nineties. You can almost think of it like the British after World War I. There's some generations that were lost at Dahlgren that there were hiring freezes of a year or two or whatever, and you see these dips. And as those categories of people reached the time they're supposed to be stepping up to the leadership positions, and some of the ones, you go back twenty years, you start looking at people who should be the branch heads and division heads and program managers, you go back to those folks who should have been hired in the mid-eighties. We did a study, in fact, when I was on staff, Jim Obrasky led it and he called it Project Ezra. But he went back and did a look at length of service, where people were, when people were going to retire, where the people were who ought to be in the pipeline, and that got us, back in '98 or '99, looking ahead and saying, jeez, in four or five years, it's theoretically possible that all the department heads could be retired, all the division heads could be retired, and a good number of the branch heads, most of the senior program managers. Now, it turns out those were looking at the minimum thresholds for retiring, and government people tend not to retire then, so it's not as bad as it seems. A lot of them, I mean fifty-nine or sixty seems to be the average, not fifty-five. But whatever it is, what you saw was that starting in 2004, 2005, the next four or five years, there was going to be a need for people to step up into those senior positions, and you go back and look at where those people were who were going to do that and some of them weren't. I mean, we had never hired them. There were gaps where the people who would have been at that time in their career naturally. And we started thinking, jeez, we've got to look at the people who should be coming along. We got to help these people accelerate.

	So we went back to something we had lost in four or five years because of money problems as much as anything else, I guess, and we went back and planned a much more rigorous workforce development program. We got that spun up and put some significant money into it every year, with leadership training and academic training and whatnot, because we realized we had to move these people along, maybe earlier than . . .
Rife	To groom them for greater things later on.
Gates	What we were going to have to call on them sooner than what would have been in the natural progression. And it really also happened-and this is nothing new either, probably, but some people don't find line management all that rewarding. I've been a line manager off and on for twenty-something years, and I guess I've had my days like that, too. But it is really difficult, and it was seeming to be even more difficult at that stretch in the nineties, to even get people who were interested in being group leaders and branch heads, so that not only were just the number of people not there who we had gotten used to having there to draw on as a pool. the people who were there were showing a very strong tendency not to be very interested in line management. They wanted to do technical things, which I can't argue with. And the ones who wanted to manage, wanted to be program managers, which tends to stay away from most of the people problems and stays oriented technically and financially. Yes. Engineers want to do engineering work, and they, unfortunately, were all smart enough to look around and say, "Jeez, these line managers work awful hard. They don't make any more than I do so why should I want that pain? Especially if I think I can get to be a thirteen or a fourteen or now an ND-5 without being a line manager, why would I ever want to be a line manager?" Fortunately, there were always people around who wanted to be line managers, but we needed to really do the leadership training to get more people thinking in terms of that, and try to get some more people, good people, interested in thinking about taking that as a career path. So we've had a concentrated effort to really address-and what Captain Scott said is exactly true. You can look back at my experience. I came here, like I said, in 1970, came to SLBM in '71. I was in a branch with thirteen or fourteen people in it, and there were five branches, so they were all, give or take, that size, so we were probably seventy-five, eighty people strong in the SLBM Program. By 1980, we had broken into two divisions and we were about three hundred people, so we had a great growth in through the seventies, and a number of us got the opportunity to jump into positions because we were there a little ahead of the curve. So we got the opportunity to jump into positions of leadership both in the sense of doing technical projects, which I did, and eventually into branch heads, probably before we knew what we were getting into and probably a little early

	in our lives to have done it, but there wasn't any choice in the matter. When I became branch head in 1982 or something, of the branch I had come into in '71 with fourteen people, I was head of a branch of forty-one or forty-two people. And at that point when I became a branch head, I was probably thirty-six, thirty-five, thirty-six. So I was the head of a group that, by the time I took it over, was three times bigger than it was when I had joined it ten or eleven years before. So there was a lot of stress then, too. A little different-because we were growing so fast in certain areas, getting the leaders was still an issue, but it was a different one than it was later. As time went on, it was really difficult to get people to want to take those leadership positions. Like I said, if you look at the dips in hiring in the eighties and early nineties, it's very obvious that there was an issue. And fortunately, we had people who were smart enough to recognize it was an issue and to commit some of Dahlgren's discretionary overhead dollars to really go put toward it. I know when I had to put some briefs together for Captain Mahaffey at a NSWC BOD, when all of the divisions had to brief NSWC on how were we going to meet the wedge that we had to face, and there were a couple of increments in the wedge, and what were we going to have to do to meet the wedge that was going to be expected of us by 2004 or 2005, and we had to put all that together. And I've got a great deal of respect for Captain Mahaffey. All of the other divisions made their staff people like me stand up and give the brief and take the abuse and the grief Captain Mahaffey said he wanted to do it himself, so he stood up and did it. One thing that came out of that, as he pointed out, he said, "Well, we can meet that wedge. What it means, by '05, we will have to give up all of our discretionary spending, all of our workforce development, all of our investment. So, yes, we can meet it in '05. We'll probably be dead two or three years later, but we can meet it in '05." But the thing I got out of that was all the other divisions sat there and their jaws dropped when Captain Mahaffey showed what we were spending money on in 1999, and how much money we were putting towards technical investment, how much money we were putting towards workforce development and training of people, because none of them were doing it, and they were really impressed that we could actually manage to pull that off, because some of them were in a real bind and couldn't have done it.
Rife	You were thinking ahead; they weren't.
Gates	And they didn't have the money. I mean, we had positioned ourselves over a number of years, and we also were the beneficiary of – I mean, one thing I learned going back and looking at the staff stuff and gathering data for all these things during the nineties and helping plan budgets and things when I was over on staff, is that we were the beneficiary of a lot of really good things. One is, we

	planned our budgets and our rate based on a fairly conservative estimate of how much money we were going to be getting in every year. And because what we were doing was valued and we did it well and it was at the forefront of a lot of what was going on in the nineties, we always, every year, got more money in than we had planned on. So our plan would have given us the overhead to meet our expenses. Everything that came on top of that was gravy. So we went through a number of years through the nineties, of bringing more money in than we ever planned for, so we generated more overhead and had more discretionary money. So we were the beneficiary of good planning, for sure. We were also the beneficiary of doing good work and being in the right place at the right time. I always tell people, when they talk to me about management, I always say, "Don't ever underestimate good luck." You need some of that too, but like I said, we'd done good planning, we were in the right place with the right people with the right kind of background and facilities.
Rife	Everything just fell into place.
Gates	Everything fell into place, so we, because of all that, had the money to invest, and other places were really, really struggling. I'm sure most of them recognized the problem and recognized the need, but didn't have the solution for it. So nobody felt sorry for us after that, when they saw how well we were doing. But that's been one of those things that Tom Pendergraft has taken on for sure in the past couple of years. He's gone up to NSWC and NAVSEA and the comptroller of the Navy, arguing that we need to maintain the ability to do some of those things. We need to maintain the ability to set rates so we can do those kinds of things. Tom Pendergraft has been a very strong advocate of that for us, too, and uptown he knows people. So he's been in front on a lot of that stuff. So fortunately, while it's been a little tighter in recent years, Tom has been out there fighting for every penny, so we still have the opportunity, and we still invest a Jot in workforce development, and we still have discretionary money, not as much as most of us would like, to do investment and technology things. But we're still doing it.
Rife	Dahlgren's come out a lot better than most of the . . .
Gates	And Dahlgren has-and a lot of that is because of planning, but a lot of it is the personalities. you know, going all the way back to Thompson and all the way up to Tom Pendergraft, there've been some very dynamic, and that's probably a bit of an understatement. Some people would say pain in the ass [inaudible], and I think Colvard had that reputation. among others, but we've been the beneficiary over the years of a long series of people with good vision and the

	knowledge and experience and willingness to go fight for things we needed to make the changes we needed to make. Fortunately-I mean, that's what made me feel good doing the BRAC stuff in '93 and '95, and I may just have been foolish, but I always had the feeling at the time that Dahlgren didn't have anything to worry about. We had to respond to the data calls, we had to do a good job of doing the data calls, you had to take it seriously. But just looking around at what we did and the places that needed us to do things and how strong we were, I didn't have any serious fear for Dahlgren Lab. Now, of course, White Oak got closed. Panama City was on the list a couple times in the early nineties, and they've been under the gun for thirty or forty years almost continually, it seems, but I thought that Dahlgren Lab in particular was very strong and very well placed. I knew we had to take it seriously, we had to play the game seriously, but I never had any very serious doubts but that we were going to come out good. And the things we've done over the years before that and since then, I still feel that way. I mean, it probably is helpful when you go into things like BRACs and stuff like that, to have a little bit of trepidation about the outcome, because it sharpens your focus.
Rife	It's always a possibility.
Gates	It sharpens your focus a little bit and you take it much more seriously. But I still feel we're very strongly placed, you know, from the stuff I've looked at over the years, being on staff and doing that stuff over the years, working with the leadership working group at NSWC. NSWC-Bill Cocimano and Mark Deskins and now Ed Stewart, have always used people the head of the corporate staff or some equivalent person at each of the divisions, as sort of their extended strategic staff So when I was over on staff, I worked at the NSWC level a lot with the other divisions, helping NSWC respond to and help shape where NAVSEA was going. One thing I discovered getting off of staff, you never get out of that job, so I still help them from time to time.
Rife	Like the mafia.
Gates	Once they know your name and phone number, you can't ever quite escape. I'm not as involved as I once was, but I still do from time to time. I know we've benefitted from being part of it NSWC, although in a lot of ways, I don't think it's bragging to say we've been among the strongest of the divisions in NSWC. If you go back and look at the technology, if you go back and look at the history, Dahlgren and Carderock have had a lot in common in terms of the kind of people we've hired, the kind of work we've done, much more so than some of the other parts of what the NSWC were. A different kind of place than Dahlgren and Carderock. But it's been a very good relationship in a lot of ways.

Rife	In closing, what are the most challenging aspects in more recent years, from 2000 onward,
Gates	It seems to me like it's always been more of the same that every few years somebody comes back and wants to say, "We don't need government technical people. We can just outsource everything. We can go to industry for everything." So you go through these cycles of people wanting to do a lot of outsourcing, making requirements for money to go certain ways, making it harder for us to get it. So you go through those cycles, and we're going through it again, and I think what people eventually come back to is that industry has a role and they have a place, and you can't do what the Navy and DOD and the nation need without them. But people eventually come around to the idea you can't do it without us either, because there really are differences. I've always had a problem-and I got this from one of my professors-I always had a problem with the "reinventing government" stuff, when Vice President Gore talked about customers. Well, the citizens of this country aren't customers; they're the stockholders. It's a much different business relationship, and what we need to do--and there are a lot of people you can read, whether it's from Paul Light and Hal Rainey and a lot of people have written about government and about public-private kinds of things over the years. There's an awful lot of literature on that, and there really are differences in what a government institution does. We're driven by different things, theoretically, at least. I mean, as a working capital fund, we're at least partly driven by the same thing business is, but not quite totally. So we have a role and industry has a role, the technology places, whether at the universities or with NRL, which is a different kind of a place than Dahlgren, and ONR. I mean, we all have roles in this sort of thing. So you go through a seemingly-these days, seemingly a continuous kind of a thing of going back and trying to help people understand what our part of that is, why it is we're needed. One of the things that Ted Williams said before he retired as N Department-we were talking about some of these things going through Vision 21 and a lot of the stuff that was going on in the late nineties with some of the acquisition reform stuff, where you get a single prime--one of the things, there was a lot of concern about private industry likes to do things when you can build stuff. I mean, the money is in building stuff Were they still going to be there for the long haul when you had to do the in-service engineering, you had to maintain stuff for the-you were seeing things with life span, they were twenty and thirty and forty years when you get into the fleet. Were they still going to be there for those last twenty years or thirty years of the service life, when it's not as much money?Given their druthers, they would move on to the next version of something or the next . . .

Rife	Next generation.
Gates	Or the next generation. So we've always been the ones, places like us and Crane and other places, have always been the ones that have had to stay around for the long haul to maintain and upgrade ten- and twenty-year-old stuff, when industry didn't want to do it because there wasn't any profit in it anymore and they would move on to developing the next generation of systems. I mean, there's nothing wrong with it it's a very nice progression. a very nice way for the thing to work. So there was a lot of concern with this new acquisition reform. Were they going to be there when the time came? Ted Williams always viewed that our job, our strategic goal-and this is probably paraphrasing Ted---but he said he always expected that we were going to have to find ways just to still be standing five or six years from then when some of these things fell on their butts. So I've thought of our strategic goal as being we have to keep a capability in certain areas, we have to maintain the ranges, we have to maintain a lot of these things that are very critical to the Navy. We have to find ways of doing it, so when they're needed . . .
Rife	The next war.
Gates	The next war, or when they're needed when industry moves on to the next system and they want government to pick up some of these things. Also, just the testing places. You go to China Lake and some of the Air Force places, and even Dahlgren, if you've got places where you can do testing, you've got to hang on to them because they . . .
Rife	They can't be rebuilt overnight.
Gates	They can't be rebuilt. And a lot of the things that people are finding out with the environment, the encroachment at places like that, there just aren't places to rebuild them. I mean, you can't find places out in the middle of nowhere like China Lake and Dahlgren much anymore, where you can go build some of these things.
Conclusion	Thank you for listening to this week's Dahlgren Centennial Podcast, and hopefully you have learned another interesting aspect of what our people accomplish for the Navy and for our nation. We will continue sharing how Dahlgren is a one-of-a-kind location where innovation is heralded as the hallmark of each individual. <u>PAUSE</u> Tune in next week to hear from Neil Cain, an influential early manager in the Aegis program.

	Thank you for celebrating this century of innovation with us at Dahlgren. MUSIC