

# THE ROLE OF THE MILITARY IN WORLD AFFAIRS IN THE NEXT FIVE YEARS

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**ADMIRAL WILLIAM OWENS (RETIRED)** CEO AND CHAIRMAN, TELEDESIC LLC  
*hosted by Mark Anderson, President, Strategic News Service*

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**Mark Anderson:** If I could have your attention: it is my great, good luck to be able to announce this evening that, as you know, Bill Owens is joining us. I'm going to tell you a little bit about Bill. You probably have already read this in your biography book, but I'm going to tell you a little bit more that's not in there.

Bill is CEO of Teledesic and chairman, and he holds the same offices with Teledesic Holdings. Prior to this – if you're a local person, you probably are well aware of this – Bill was president, COO, and vice chairman of SAIC, which is an amazing company, a long story of its own. And he is a director at Nortel, Telstra, Symantec, Polycom, IDT, Cray, and elsewhere.

I'm going to actually read this next part, because I want to get it exactly right, and every time I read it, I'm impressed myself.

“Bill was formerly vice chairman of the Joint Chiefs of Staff, and the second-ranking military officer in the United States, with responsibilities to reorganize and restructure the armed forces in the post–Cold War era. Widely recognized for bringing commercial high technology into the Department of Defense for military applications, Bill was the architect of the revolution in military affairs, the most significant change in approach to the system of requirements budgets and technology for the armed forces since World War II. Bill was the deputy chief of naval operations for resources, warfare requirements, and assessments from 1991 to 1993. He served as commander of the U.S. 6th fleet in '90 and '91. In 1988–1991 he served as senior military assistant to Secretaries of Defense Frank Carlucci and Dick Cheney, the senior military position in that office. In 1987 he served as commander of the navy's largest submarine group, with 20 strategic ballistic missile submarines, 45 nuclear attack submarines, and more than 15,000 men and women. He has written more than 50 articles on national security and authored the books *High Seas* and *Lifting the Fog of War*,” which I personally highly recommend to you to read.

Well, that's Bill on paper. Bill the person is even more interesting. Although I've not known him for a *long* time, the few years that I've had so far to know Bill have allowed me a few chances to sit with him, talk with him, and I can tell you – and I'm sure you'll see this quickly as you see him this evening – Bill is a generous person. He's generous of spirit, he's generous with his time.

There have been a couple of times when I've needed something from Bill, and he never does anything other than stop whatever he's doing and we'll have lunch together. We once met in a hotel lobby and I spent an hour with him pulling names out of a hat on how to help the Orca whales, and so forth. For a guy who is as busy, and as important, and as in the middle of things as Bill is, he is also one of those people who finds it apparently effortless to be generous of time and heart and do the right thing.

When we do these sit-downs, I inevitably find myself thinking that this soft-spoken, smart, interesting fellow is the same guy who was running the 6th fleet during Gulf War I. And when we're talking about these things, I'll be watching Bill, and we're having crab salad or something, and I can't help but thinking: Yeah, but this is also the same guy who I think holds the world record for sitting under the ice in a submarine during the Cold War.

So he's a very, very interesting guy. He's not necessarily what he appears, and I highly recommend him to you. If I had my druthers, this is the kind of person I'd like to have running our military. Thank you.

**William Owens, Teledesic:** Thanks, Mark, and ladies and gentlemen. It's a real pleasure to be here with you tonight. Somebody said, "You've had a lot of experience speaking to navy drunken parties." That's true. *[Laughter]* And that's where the comment ends, you see.

I spent a lot of years in the navy. Those were enjoyable years, and I had this enormous good fortune to be advanced, and, as Mark said, I wound up as an admiral in the navy. Then when I left the navy, I was trying very hard to no longer be an admiral, because I thought I'd try to leave the navy early enough so that I'd still have a shot at being a businessman. So I was trying desperately to shed that title of Admiral or General, or – you know, people who haven't been in the military call me "General," and that's bad enough. *[Laughter]* But I was trying to shed the title "Admiral." And so one evening – I have this little friend; Jennifer is her name. She's 3 years old. And Jennifer's mom said to Jennifer, "Jennifer, say hello to Admiral Owens." And Jennifer looked up at me and she said, "Hi, Animal!" *[Laughter]* It's not bad to be 60 and be an animal.

It's especially nice to be here with my SNS friends. I'm #113, SNS t-shirt. *[Applause]*

It was really nothing; you just have to have a network to get a low number, you see.

I take a lot of pride in being together with a group of people who I think are as bright as any group you could find in this country. And I salute Mark for the newsletter and for the efforts to network us all and to make some things happen, from national security to new ideas in business. I can tell you that some of the senior businesspeople with whom I am acquainted read that newsletter as though it is a prescription for the future. It's a little scary when 10 years from now we're doing exactly what Mark told us to do. But it has a lot of credibility, and its reputation is remarkable, and it's nice to be here talking to you tonight.

I want to talk just a little bit about the military, in the United States primarily, and where it is today, because I think it's an interesting time of dramatic, maybe distortional, change that has taken place in the last 20 years. We are a military – and regrettably still are in the United States – a military put together by Napoleon. We're organized that way. I mean, he had army divisions organized in particular ways; we're still organized that way. It doesn't matter what kind of technology comes along; we're going to stay organized that way because "that's the way you organize an army," or a navy, or an air force.

The challenge we have today is both cultural and technical. But let me just talk about the technical. One of the measures of this is to look at bombing.

Nothing, by the way, sobers one more than having a bomb dropped on your adjacent tank or ship. If you haven't been shot at before, you quickly get focused about what the stuff of war is about. I suspect that's what happened to the republican guards around Baghdad when all of a sudden there were 3,000 armored vehicles, and the adjacent armored vehicles were somehow disappearing.

They weren't disappearing from tank fire; they were disappearing just because somehow, some *thing* in the air dropped a bomb on them from 20 miles away, and all of a sudden they were going away. Getting shot at like that is scary, and it causes you to exit your tank, take off your uniform, and go back to the city to sell vegetables. It is a very sobering thing.

Let me just tell you about some of the kinds of technical change we've seen in the last 15 years in the U.S. military. In Desert Storm I – as Mark said, I was the 6th fleet commander – we had six aircraft carriers. They each had about 90 airplanes on them, and they flew about seven sorties each day. So about 500 sorties from each carrier, six carriers, 3,000 sorties, airplanes taking off and doing what they needed to do and then coming back to the carrier.

During Desert Storm I, we allocated 10 bombs per target. In other words, if you wanted to destroy one target you needed to apply 10 bombs to it. That's because, you know, you drop a bomb and it lands a mile away, or they're not very "smart"; you need to make sure if you want to kill that target, to drop 10 bombs. By 1995, with the advent of very smart technology, GPS, or what we call "differential GPS" – the ability for a very dumb weapon to know precisely where it was, plus or minus a few inches – we had gotten down to about five bombs per target when we went to do some bombing in Bosnia and Kosovo.

This campaign, we used 1.1 bomb per target. It's hard to drop .1 bomb, I'll grant you, but we used 1.1 bomb per target as a ratio of accuracy. So when you think of it, it took 10 times less bombs per target than it did 10 years ago. The nature of that is profound when you look at it: so how many airplanes do you need anymore, if your airplanes are 10 times more effective? The typical person who buys airplanes will say, "Well, you need just as many" – or submarines, or whatever. *[Laughter]*

But in fact, the smart person would say, "Wait a minute, don't you need one-tenth the number of airplanes, since they're 10 times more effective?" And the answer is, Absolutely true. You need a smaller military because you're taking advantage of all the wonderful technologies that many of you represent, in this room.

One of the most profound things that's happened in the military in the last 10 years is that for the first time in the history of man, you can *see* a battlefield. We don't see it very clearly yet; we could do it a lot better than we do today. But it's possible with these satellites, with unmanned aerial vehicles – the UAVs, we call them. They are little airplanes, they take off – one of them about three months ago took off from Camp Pendleton, just up the road here, flew across the Pacific by itself, and landed in Australia. Unrefueled. No men involved; just did it. Unmanned.

We had some of those overhead in Baghdad during this conflict. They fly at 70,000 feet, they stay there for 40 hours, they have sensors on them so you can look down and see the battlefield. And my view is that today it's not a technical jump, it's a cultural jump – because remember the comments about Napoleon and the way we're organized.

It's not a technical jump to say you can see a very large battlefield, the size of Iraq for example, 24 hours a day, real time, all weather. See everything that goes on in that battlefield all the time. That is, a vehicle moving down the road, Saddam Hussein escaping to Crete and then into Syria. It means you can hear every one of the cellular phones and who is on it and what they're saying. You could see the whole battlefield or hear the whole battlefield all the time, 24 hours a day, through the clouds, through the sandstorms.

Now, we don't do that, but that's because, you know, real men like real machines. *[Laughter]*

We like our nuclear submarines and our bombers and our tanks, and we're not very keen on this business of knowledge warfare. Knowledge warfare: the kind of things that if we were able to deputize you all as generals and admirals, you would surely put #1 on the list, because it is the Western democracy's great strength. It's not the mass of tanks or bombers or submarines; it is indeed the knowledge with which you can approach a battlefield.

If you can see a battlefield that way, a large battlefield, and the enemy can't... you win. You have to have a few good bombs, you have to have a few good airplanes, but frankly, some of your executive jets, with the right kind of bombs under the wings, are just as good as that B-2. *[Laughter]* The only difference is the B-2 is a little over \$1 billion an airplane, and your executive jet is a little cheaper than that.

So we have a long ways to go in terms of realizing the efficiency of the military. And remember, we don't spend enough money on it, right? *Five hundred billion dollars* we're getting ready to spend. Four hundred now. The last military that Bill Clinton funded was \$230 billion. Historically, about \$200 billion in real dollars is what the United States has spent since the end of the Second World War.

Now we're up to \$390 billion, going to \$500 billion next year. That is so we can buy enough of those "real men's" toys. We're also getting smarter as we do this, but in fact, one has to wonder, what are we going to do with that military? What is it going to be like when we have it all in its full-up form, its \$500 billion form? Remember, the war we just fought was a war that was fought with the Clinton military. You don't see the Bush military for another three or four years. That doesn't come yet. You ain't seen nothin' yet.

For some of us, I would say, there must be a better way to spend that money. And I don't understand why *you* citizens, why *I*, don't take a stronger stand about why we're spending so much money to build this military that is getting more and more efficient.

You saw what happened with a couple hundred thousand soldiers. My estimate on this Desert Storm was way off. I thought this was going to be over in about seven days. With this kind of a bombing campaign around Baghdad, with the kinds of people we had manning the republican guard in the Iraqi military, I thought that this would take no longer than about 7 to 10 days. But I was wrong.

We didn't come in from Turkey; that made a big difference. But in fact, we did have a lot of brave people in that republican guard. They gave up very quickly. America's military is now getting to be extremely large and very efficient and very capable. We might say that's good, we need it, and some people would make that point, but I'm not quite sure what it is that we're going to use it for when we get the full impact of President Bush's military.

Maybe \$50 billion going to American education would do a lot; maybe \$50 billion going to Africa would make a real change. Maybe some of that would be more important to our national security than building another bomber or nuclear submarine. That's not to say I'm anti-military. And I'm unpopular enough in the military now, so please don't pass that on. *[Laughter]* But I do think that there is a greater good here that has to do with national security and terrorism than the way we're spending our money in today's military.

So we're seeing some dramatic changes in technology as we go forward. We're seeing the new softwares, softwares that integrate business enterprise solutions that could just as readily integrate

military data links. It is the key to how we could work closely with our allies – with the British and the Germans and the French – yes, the French *[laughter]* – and others around the world. Because their data links are digital, but there is no way we'll ever get them integrated other than – C++, Java, the new breeds of software can be the key to that. Do we do that in the military today? No, we don't. Should we? Absolutely.

And we're going to see a world of photonics and dendrimers that will change the nature of radar arrays and radio arrays, that will allow us to do dramatically important things with high-bandwidth communications, maybe laser communications, that will change this military even more and make it considerably more effective, so that 10 years from now I would predict a quantum times more efficiency than what we have now.

So we have a very exciting future with the military. We're going to need very strong voter participation in how we spend the dollars towards it, and we're going to need serious civilian leadership over a military that is built from armies, navies, air force, and marines. That's how we get the money, right? I mean, you don't have somebody who says "We're going to spend the money all in a coordinated way." Do you think Mr. Rumsfeld does that? That's not true. That doesn't happen. Or the chairman of the Joint Chiefs? Doesn't happen. Or the Congress, or OMB.

The integration of those services doesn't happen, and I have given speeches to say that doesn't make any sense. If you were going to do a zero-based review of this trivial \$500 billion defense budget, you would certainly not start with an army, a navy, an air force, and a marines. You wouldn't have them!

I mean, I looked really good in my navy uniform, and the army-navy game is really important. But besides that and Napoleon, you wouldn't have those four services.

You might have one service that looked at the battlefield, you might have another service that struck targets in the battlefield, you might have another service that provided smart logistics, and you might have another service that was kind of a high-maneuver force, like the light army, marine corps, special forces, etc., but you *certainly* wouldn't have a navy, army, air force, marine corps.

We need leadership here, because it has to do with how we as a nation spend our money. And it has a lot to do with how we take up this position as a superpower in the world, or more important, as a super partner. So let me just conclude by saying I think that our greatest offering in the future comes from the kinds of companies that are in this room. It is the kinds of companies that are developing the softwares, the telecom systems, the CDMA, the WiFi hotspots – I mean, this is the stuff of which new military capability can be dramatically enhanced, and we wouldn't be what we are today without commercial industry.

So who are the defense contractors of the future? They may be Microsoft. They may be Intel. They may be those kinds of companies – not the ones that you take as a given of being the defense contractors of today. And finally, I'll just say that for our country, we need to have priorities as far as what we do around the world. Any one of you who runs a company today has your list of priorities, your business plan, and you put those in order and then you apply resources to them. I wonder if America has its list of most important countries.

I ask all of you to ask yourselves, what are the five most important countries in the world today? Surely the United States must have that list. I'm sure they include France and Germany, right? Pardon me to our German friends. *[Laughter]* But we should have a list of the priority countries,

because if you had such a list you'd apply resources. You'd have people-to-people programs, you'd have special diplomacy, you'd have foreign aid, etc.

I wonder if we have such a list. I don't think so. And therefore we react tactically, as opposed to providing ourselves with an overarching strategic plan that lays out a future for your children that will be safer, more secure.

My top four countries are Turkey, Saudi Arabia, Pakistan, and Indonesia. Not China. Not Russia. Maybe Europe, if you could put it as a whole, and that would be my fifth – Europe as a whole. But those are very important countries. I think they're the most important countries for my son and his family. I think they're the most important countries in terms of the kinds of things that will happen to us in the next 10 years. What will we do with our military in those kinds of places, what kinds of things will we do with this dramatic new capability with the Bush military? How will we handle this? I think it's a range of questions that are before us, and the answers are to be determined.

Let me conclude with two stories. One: I was the 6th fleet commander, as Mark said, in the first Desert Storm. Just after Desert Storm, we were, as the 6th fleet, making the first official American visit to Bulgaria.

It was a remarkable time. The Bulgarians had won over the dictator Zhivkov, who had been a terrible man. He had run their country in fear for five decades, and now they were free, and the 6th fleet was making the first American visit of any kind. And I remember the 6th fleet flagship, the Belknap cruiser, pulled into the port of Varna, Bulgaria, on the Black Sea.

The captain of the ship and I were going down the brow of the ship, and out of the corner of our eye we saw an elderly Bulgarian man, I think he was 80 or 85 years old. He was standing there, and he had his hand on the side of this gray ship, our flagship, and the captain said, through an interpreter, "What are you doing to my ship, sir?" And the old man said, "I've been waiting 40 years for this moment. I've lost hundreds of comrades waiting for this to occur, and I wanted to stand here and savor it for them." And I thought to myself: God bless America. God bless NATO and all our allies. We stand for something very special in the eyes of all of the oppressed peoples of the world.

And finally, a story I like to tell about Dick Cheney. You recall back in 1991, America decided to go down and liberate Panama. The Panamanians called it "the invasion," we called it "the liberation," but we were going down to get the bad man Manuel Noriega. You remember we found him at a McDonald's hamburger stand? He was getting a Big Mac, I think, at the time. And a special forces troop captured him and brought him to justice, so I think he's in Leavenworth Prison right now.

But Cheney had decided that we would go down and talk to the troops the morning afterward, so we got in a little airplane and flew down to Panama City. He was talking to a couple of army Littlebird pilots who had participated in the operation the night before, and they were telling the secretary about their mission. Their mission had been to go to Noriega's headquarters – it was called the Commandanzia – and they were to rescue an American who was being held there, get him on the helicopter, and then get the hell out of there. They came in just a little low, and they clipped the top of a skyscraper, and the helicopter rolled over, hit a power line, sparks and metal flew, helicopter rolled over, hit the tarmac, and slid into the side of the Commandanzia.

And the two young guys just kind of checked out their bone structure and verified that they were still in one piece. They saw a Panama defense force soldier who had been observing this little exhibition, and he came running over to the helicopter and he looked at it and he said: "Shit, I'm with you."

And that's the nature of our national security. And that's my wisdom to you for this evening.

But it's especially nice to be with all of you. Thank you for listening attentively, and Mark, thank you for inviting me.

**Anderson:** As with the rest of our time together, this is your chance to talk to Bill. So we have two microphones out there somewhere, and two rovers with those microphones. All you have to do is raise your hand and someone will come and find you, and you can ask or comment, as you wish.

I thought I would just start this while the mechanics get going, with a couple of test questions, Bill. So this is the homework part.

I actually have read *Lifting the Fog of War*. In that book you expressed concern about the number of tasks that the Clinton administration had set for the military, and that it was too many, it seemed. And what I wondered was, there's an awful lot of talk today about the Pax Americana, or of being the world policeman, however you want to describe it. Is this a task that you are personally comfortable with, and if not, can you describe what our role should be?

**Owens:** It has always been a concern of mine that – and we've seen a lot of it in the last two years, with Afghanistan and Iraq, where we send the military off to do a military campaign; they seem to be quite well prepared to do this. It wasn't a surprise in either Afghanistan or Iraq that the bad guys give up fairly quickly. But then the hard part starts.

And our military is not very well trained for that nation-building part of this, the ability to put in place justice systems and police systems and banking systems and reestablish pipelines and power plants, etc. This is not the kind of stuff that we train militaries for. So people say, Well, then we should get somebody else in there. But then the question is, who do you bring in? Who are they? What kinds of folks are these? We tend to default to Bechtel and Halliburton and companies that do this kind of thing, but there aren't many of those kinds of companies out there that can do nation building, and they don't do it very well, either, when it comes to justice systems or training police forces.

So I have objected to the fact, first of all, that we don't have organizations in this country that do that, if we're going to go out and reform the world. If you look at all of the contingencies that this nation has done in the last 10 years and ask, Are those places better off today than they were before we went in? You'd have to give it a lot of thought. Panama, Granada, Haiti, Bosnia, Kosovo, Rwanda, Somalia, Afghanistan, Iraq... Those are just a few – but in those places, have we had the staying power to make their systems better?

I believe that we're falling back seriously in Afghanistan today, that the Taliban are coming back in numbers. They're in government, some of them. Al Qaeda are coming back across the border in Pakistan. The Congress is unlikely to appropriate more money, and we are in the aftermath of the, quote, military victory.

So will we have the staying power in Iraq? I hope so. But do we have the ability to do all these missions? I don't think so. Or at least we're presently not assigning them to anyone, and by default the military picks them up. I think it's wrong, we establish the wrong perception in the world, when we don't do it well, and I don't think in that regard that we're doing it especially well, so I am concerned about it.

**Anderson:** Thank you. Do we have questions from the floor?

**Owens:** I sing the North Dakota state song in 11 languages – I just wanted to report that to you in the event that we ran out of questions. That's what comes next! *[Laughter]*

**Anderson:** There's a threat. A *real* threat!

**FiRe Participant 1:** Other than being obviously much bigger, how will the Bush military be different from the Clinton military? Can we say?

**Owens:** You know, in some ways, the militaries progress on technology without regard to who the president is. You find some visionary people who come along. Bill Perry was the secretary of defense under Bill Clinton, and he was a wonderful guy. He brought technologies; he was very keen on the kinds of things that we talk about with all of you in this room. And he dramatically changed a lot of things in the way the military functions.

Don Rumsfeld is a wonderful visionary. It's just that his is a little bit more towards the culture, so you see the special forces soldier on horseback with his laser lasing a target so a B-52 bomber at 40,000 feet can drop a precision bomb on it. But unfortunately, it's just a single event. It's not the flexibility of that huge army, navy, air force, and marines that really is the core of our capability. So, a Bush military is spending a lot of money on ship, and tanks and airplanes – spending a lot of money on readiness, that is, making all of those forces as ready as they can be. Some would question whether that money has to be spent all at one time or if half the force is ready that's enough, because you can get them ready by the time you need to go. But there are a lot of discussions like that. And I think that the military man and woman in Bush's military probably perceives the leadership to be more on their side.

They perceive that the money is being spent. Their pay is being brought up; that's good. I remember when I retired from the military. That same year – I was a four-star – that same year, my son graduated from Harvard Business School, and his first salary was more than my outgoing salary. So we have a long ways to go to pay these people right. They put their lives on the line, and I think the Bush administration is focused on providing better support for those troops.

But in fact, it's a continuum. I think we continue to grow. The issue is the size: how many things we have that we drive – ships, tanks, airplanes. And I think the Bush budget is going to be focused a lot there, and quite a lot on homeland security, although that money hasn't shown up yet, so many of us are wondering where are these billions of dollars of homeland security, when are they going to show on the scene so we can take advantage of them.

**Anderson:** Other questions?

**FiRe Participant 2:** Yes. Specifically with respect to systems like GPS and high-bandwidth transmissions, etc.: a lot of those things are very difficult to develop and expensive, but they're relatively easy to take advantage of once they're there. How sustainable is our advantage over other countries in those kinds of areas?

**Owens:** How sustainable is our lead in those over other countries?

**FiRe Participant 2:** Yeah. For example, we have very effective bomb-targeting technology now. It can't be that difficult to do, because you can rent a car that does it.

**Owens:** You know, I travel a lot now, and I've traveled a lot in my life, and the fact is that this is truly the dominant military for the rest of your lives – let alone my life – for the rest of your lives.

When I came in tonight, the lady at the front desk said... I said, "I need to go to the reception," and she said, "Well, it's downstairs, sir, you'd better take the elevator." [Laughter] My age.

But you know, I think it is our *fate* to be dominant. I say that exactly the way I meant. We are going to stay the strongest. Other nations will take advantage of GPS, but integrated systems, this ability to see a battlefield – it all costs a lot of money, but it also takes an enormous contribution of the kinds of companies that are represented in this room, coupled with the traditional defense contractors. I don't think that exists anywhere in the world, nor is it likely to be bought anywhere in the world in our lifetimes. So we will stay dominant in this traditional military sense. Whether we'll stay dominant in the ability in the aftermath of the military victory is a good question. And one has to ask, Where is the next blitzkrieg?

If you'll recall 1939, 1940, the French are dominant in the world. They have very high defense budgets; they have very, very keenly honed military skills, great training. No one thought that the French could be bested. And then the Germans came with the blitzkrieg, and they were in Paris in three weeks.

So we have to ask ourselves, are we setting ourselves up somehow for a blitzkrieg, and what is that about? And I think it is about – if it happens – knowledge warfare. Getting inside our turning circle, if you will, figuring out how to do these things better than we are. I would guess that if all of us were the planning cell for an enemy, we could do some pretty clever things. I mean, you might start with the 250-page ideas about how to thwart the American military knowledge systems, and therein lies a lot of weakness. It has to do with security of the Internet, it has to do with viruses, it has to do with jamming, it has to do with a thousand other things, but we might face, in some sense, a blitzkrieg of a different kind. So we have to be very careful about that. We have to be very aware to make sure that we are truly keeping ourselves secure from that kind of a surprise.

Mark mentioned this book I wrote called *Lifting the Fog of War*. It talks about the technology, commercial technology, tying together what we know to build a strong military. It sold I think about 30,000 books. I just barely eked a little bit of money out of the publisher on it, in this country. It was translated into Chinese, and it sold 200,000 books in China. I didn't make a lot of money on that either [laughter], but it does show that the Chinese care a lot about knowledge warfare and knowledge systems.

So there might be some surprises for us. You know, it's not just a matter of tank against tank in a battlefield. It may be a different kind of blitzkrieg.

**Anderson:** Maybe two more questions?

**Philippe de Gaspé Beaubien III, Telemedia:** What's the role of NATO in this new environment?

**Owens:** Well, NATO was traditionally, during the Cold War years, focused on a common enemy – the Soviet Union, focused on defending Europe, and had a very keenly structured series of bases and a military organization. We have since then added new members to NATO: the Czech Republic, Poland, for example. And NATO is now 19. Soon, with Bulgaria, Romania, and others – Slovenia, etc. – we’re going I think to 26 nations in NATO. There’s a discussion that even perhaps Russia should join NATO in some future NATO.

I don’t *know* what it is. It’s an organization that has quite a lot of money in the form of infrastructure applied to it. Whether it can stay together as an integrated organization with a mission, I don’t know. Could it be an organization that is focused on weapons of mass destruction around the world? Could be; could be something like that. But it’s going to have to break the crystal and have new missions, have a new structure, have perhaps less American leadership and more German and French and British leadership than it’s had in the past. But surely it can’t exist long under its Cold War kind of structure. So I think it’s going to be very interesting to see how this goes. Will it be an organization to fight terror? I don’t know; we don’t know. But it could have other missions than the ones that it’s had over the last 60 years.

**Anderson:** Okay, one more question here?

**FiRe Participant 3:** Yeah, hopefully a quick one here. We just celebrated the 100th anniversary of the Wright Brothers, and it took about 50 years before the U.S. military adapted structurally to adding an air force to that technological reality. You sketched a crisis both as to culture and structure in the military in adapting to new technological realities now. I’d appreciate your extending that a little bit, both in terms of military appetite and aptitude and your perspective for business as well. In a sense, having an IT department is sort of like having an air force.

**Owens:** You’re right. The military doesn’t adapt very quickly, right? The navy hangs onto its battleships until it’s just inevitable that someone, like the Japanese, are going to be able to fly strikes and hit us from aircraft carriers. And then we change because we have to. We don’t adapt the airplane until we absolutely are driven to make that change. And we’re not incorporating knowledge technologies – software, telecoms, IT kinds of technologies – nearly as fast as I think we should.

We’re not developing that view of the battlefield that I mentioned earlier. That is easily within our capability; you all would be able to do this. If we hired your companies, we would be able to put together that integrated view of the battlefield that would just knock anybody’s socks off. But we’re not doing that yet, because the navy wants to control its airplanes and its sensors, and the army its etc. So we have a long ways to go in terms of culture. But you know, there are some very interesting things that are very readily doable in the short term.

An aircraft carrier costs \$5 billion. It’s a great machine. It’s always great to take reporters out there because they write nice stories... But you have to ask yourself, is that the most cost-effective thing to do with an American taxpayer dollar? Up in Seattle, for those of you who have been to Seattle, we have these two bridges that go across Lake Washington. The bridges – one of them, the Interstate 90 bridge – is the largest floating structure in the world. Every time I drive across that structure, I think of two parallel runways. That bridge cost about \$250 million – remember, a carrier costs \$5 billion.

For those of you who have had a chance to go aboard one of what they call a fourth-generation semi-submersible oil rig, it’s a very interesting thing. They’re 600 feet on a side, four city blocks

in size. They are very stable. They float in very high sea states in the North Sea, in the Gulf of Mexico. There are only four of these in the world. So when the wave heights are 50 feet, the platform pitch and roll is less than one degree. You can buy one of those platforms – remember, four city blocks in size – you can buy one of those platforms for about \$300 million. So I think of those platforms, and I think of the I-90 bridge. Those oil platforms are self-propelled; they only go at 10 knots. An aircraft carrier, for us navy admirals [*flipping his tie over his shoulder; laughter*], it's 30-plus knots. It's a secure number [*laughter*], but they go fast. But you pay a lot of money for those.

I wonder how it would be if we had three or four of those I-90 floating bridges with a 10-knot, self-propelled capability, that cost maybe \$500 million, so you could have a number of those for one aircraft carrier. Each one of those could have 700 fighter airplanes on it, and you could land a 747 on it. You could have a big American flag on it, and you could have one in the Middle East and one in the Mediterranean and one in the Far East. I wonder why that's not a good idea.

But those are the kinds of questions that people asked when they were challenging the battleships, or the tanks, or whatever kind of heavy platform we tend to like because Napoleon liked it. So we have challenges that deal with exactly that in today's military.

Airships make a lot of sense. Airships. You can get airships that can go up to 30,000- or 40,000-foot altitude, and it makes a lot of sense if you're trying to put a high-bandwidth network over San Diego, for example. You can put one up there at high altitude, and you can get a really very high-capable delivery system for TV, high bandwidth, etc. A lot of people have thought about this. You could do a lot with an airship in the military. But no self-respecting military person wants to have an airship. We went through airships before; we remember the history. But they really could do a lot of good, especially for protecting our borders, or drug interdiction – lots of things you could do with airships. But it's a hard sell because they're not a part of the legacy.

So the military's a great place, and I think it will change. But it's slow; it's a bureaucracy. And remember always that it's that Bulgarian man with his hand on the ship that is what we're all about. And in the final analysis, we'll do the right things.

I just want to add that I'm very sorry that nobody asked me to sing the North Dakota state song in French. [*Laughter*]

**Anderson:** Well, *I'm* not going to do it!

**Owens:** Thank you.

**Anderson:** Thank you, Bill.

Well, thank you again, all of you. I look forward to seeing you this week. I hope you have a great, great time here. It's a beautiful place to be. I will see you tomorrow morning at or about 8am sharp, with Ray Ozzie.

Thanks, and good night.