

**SECRETARY OF DEFENSE ASH CARTER**  
**“BUILDING THE FIRST LINK TO THE FORCE OF THE FUTURE”**  
**GEORGE WASHINGTON UNIVERSITY ELLIOTT SCHOOL OF**  
**INTERNATIONAL AFFAIRS, WASHINGTON, D.C.**  
**WEDNESDAY, NOVEMBER 18, 2015**

Thank you, President Knapp, for that introduction. It’s a pleasure to come to George Washington University, and particularly the Elliot School, to speak to so many current and future contributors to America’s national security.

Friday’s terrorist attacks in Paris tell us, as our thoughts and prayers go out to the victims and their families, that this tragedy also steels our resolve. We need to – and will – deal a lasting defeat to this evil organization.

Times like these have always inspired Americans to action. Whether it’s an attack like Pearl Harbor or 9/11, or a natural disaster that strikes on the other side of the world, it’s never been our nature to stand still in a crisis. And whether it’s pulling on a flight suit to fight a foreign enemy, or pulling on hospital scrubs to help fight Ebola, Americans have a long history of stepping in and stepping up to contribute to the greater good.

But as you sit at home or in your dorm room, watching inhuman images unfolding on your screen, it’s easy to stop and think to yourself, what can I do? How can I possibly make a difference?

Today I’d like to offer some answers to those questions, because one of my core commitments as Secretary of Defense is to help more of our fellow citizens make that difference in the world, and in as many ways as possible. I know not everyone wants to serve in uniform, and that’s okay – though I do want more Americans to be exposed to that possibility. Not everyone’s going to want to contribute to public service for their entire career, either – some may do so only for a time, or on and off over the years. That’s okay too. You don’t often hear these thoughts from a Secretary of Defense, but they’re all critical to building what I call our force of the future – the kind of Defense Department, both military and civilian, that some of you right here today, or watching online, might choose to serve in or work with during your careers.

***Our Force of Today Is Great***

When I talk about the force of the future, I always start with one critical point – our force of today is great. And we’ve been great for a long time, going back 240 years to when the namesake of this university, George Washington, launched what has arguably become the most successful startup in world history: the United States military. It secured freedom from an empire and sustained our union. It vanquished fascism, fought for freedom around the globe, won the Cold War, and went after the terrorists who attacked us on 9/11. And it drove forward technological innovations that have benefitted not only our security, but our entire society – helping create the Internet, GPS, and in an earlier era, spaceflight and the jet engine. In so many ways, it’s shaped all of our lives.

Of course, a lot’s changed since Washington’s time. And our military has changed, too – in recent decades, shifting from a draft to an all-volunteer force, reforming so the Army, Navy, Air Force, and Marine Corps could work together more effectively, and adapting to counter terrorism in Iraq and Afghanistan. And our institution has also evolved, to draw strength from our entire pool of population, and on a voluntary basis. Throughout all this, the one constant has been that our military’s people have always mastered change excellently...continuing to defend

our country and help make a better world. And together, they've helped make the U.S. military of today, as I always say, the finest fighting force the world has ever known.

***Our Force of the Future Has To Be Great***

But that excellence is not a birthright. It's not guaranteed. And we can't take it for granted in the 21<sup>st</sup> century. We live in a changing and competitive world, and we have to earn that excellence again and again. Because our force of the future has to be just as great, if not even better, than our outstanding force of today. Our security depends on it.

Take technology as one example. When I began my career, most technology of consequence originated in America, and much of that was sponsored by government, especially DoD. Today, much more technology is commercial. And as many of you know, the competition is global. Lots of other countries are trying to catch up with advances we've enjoyed for decades in areas like stealth, cyber, and space.

But as we innovate to stay ahead of those threats, we also have to make sure we keep bringing in the best people, because they're our military's most enduring advantage. Nations like Russia and China can try to shrink the technology gap, and terrorists can try to sow fear, as they did last week in Paris and Beirut...but none of them will ever match the strength and ingenuity of the American spirit. And as long as our military continues to harness the best talent America has to offer, we will always come out ahead.

So I have a project that I call the Force of the Future, which is about staying the best when it comes to our people. The force of the future isn't meant to address every issue in the military regarding our people. And it's separate from our determined focus on a host of matters of urgent importance to the force of today, which I'm also committed to – like caring for our wounded warriors and families of the fallen; eliminating sexual assault in the military; supporting our military spouses and families; and helping veterans find good jobs where they can keep making a difference.

While those issues are critically important, and will always be a top priority, I am equally committed to making sure that our force of the future will still be the best in the world.

***How We Got Here, and the Military as a Profession of Arms***

I made this commitment to President Obama when he asked me to serve as Secretary of Defense, and so shortly after I was sworn in, I visited my old high school in Abington, Pennsylvania, to outline my vision for the force of the future. And I talked about how, in the face of generational, technological, and labor market changes, we in the Pentagon must think outside our five-sided box and try to make ourselves even better at attracting talent from new generations of Americans. In the months that followed, I went to places like Silicon Valley and St. Louis, and heard from companies like Facebook, Boeing, and LinkedIn about what they're doing to compete for talent in the 21<sup>st</sup> century.

Throughout this process, we've always been mindful that the military is a profession of arms. It's not a business. We're responsible for defending this country – for providing the security that allows all of you and your parents and your friends and your fellow citizens to go to school, go to work, live your lives, dream your dreams, and give the next generation a better future.

The key to doing this successfully is leveraging tradition and change. While the military cannot and should not replicate all aspects of the private sector, we can and should borrow best practices, technologies, and personnel management techniques in commonsense ways that work

for us...so that in future generations, we'll keep attracting people of the same high caliber we have today – people that will meet the same high standards of performance, leadership, ethics, honor, and trust we hold our force to today.

**Announcing the First Link to Building the Force of the Future**

So with that in mind, let me tell you here today about the first link we're building to the force of the future...which is intended to make our future Defense Department better connected with 21<sup>st</sup> century talent.

**On-Ramps for People on the Outside**

For starters, let's take people – maybe some of you – who aren't now involved with DoD at all, but think they might want to give it a try. For them, we're going to create what we call on-ramps to make it easier to contribute to our mission. This is important, because today less than 1% of our population serves in uniform, which means fewer people are connected to those who do. For my generation and my parents' generation, 3-in-4 had a family member who served in the military; for your generation, it's only 1-in-3. This trend is likely to continue, so we want to provide more opportunities for those outside DoD to get to know us and contribute to our mission, even if only for a time.

And it starts with what we're doing for students like you, to improve and enhance our internship programs. With more young Americans pursuing internships today – including 9-out-of-10 GW undergrads – this is imperative for attracting future civilian talent. That's why we're making our internship programs better managed, and also more effective at transitioning promising and successful interns into permanent employees – so that if you intern with us and do great work, we do better at connecting you with job openings. We offer internships in all sorts of areas – at our Army and Air Force research labs, for example, and also at the Pentagon. If you want to apply or learn more, you can go to the Defense Department's LinkedIn page – to get there fast, just go to [defense.gov/linkedin](http://defense.gov/linkedin). And since many college students don't even realize what kinds of civilian job opportunities we offer, we're going to do better at getting the word out on campuses, too.

We're also going to be bringing in more of America's best and most innovative talent in their fields – because when you consider doing something with DoD, I want you to think of us as a place where America's top talent come to work.

That's why we're creating the Defense Digital Service, which will bring in talent from America's technology community to work for a specific period of time, or for a specific project, to apply a more innovative and agile approach to solving DoD's complex IT problems. It will be led by Chris Lynch, a serial entrepreneur in the tech world. And Chris is not only sitting in the audience; it's also his first day on the job. He flew out here from the West Coast just yesterday. Welcome to the team, Chris.

Also, to make sure we benefit from innovative entrepreneurs who aren't technologists but have advanced skills we need, we're going to bring in resident entrepreneurs, who will work with senior leaders on some of our most challenging projects for two years at a time. And we're also going to hire a chief recruiting officer, who'll serve as a headhunter to help bring in some of America's best qualified executives for stints in top civilian leadership roles throughout the department. DoD has been a place where top executives like Dave Packard, the founder of HP, came to serve for a time, and while today, former military officers run some of America's largest companies – like Johnson & Johnson, FedEx, and Verizon – we want to be able to benefit from

doing that the other way around. And hopefully that infusion of innovative, entrepreneurial spirit will rub off on us.

*Off-Ramps for People on the Inside*

In addition to on-ramps for people coming into DoD, we're also going to create short-term off-ramps for those already serving to connect with ideas and innovators outside the Pentagon. Because we want to make it easier for more of our people to gain new skills, experiences, and perspectives – whether in the private sector, in academia, or elsewhere – that they can then bring back into the military to help keep us strong, creative, and forward-thinking. And there's added value in that offering these kinds of opportunities will make us more attractive to future generations, too.

It might surprise you that we're actually pretty good at offering a variety of experiences. Some of you might think of the military as a career path that's like an escalator, where you have to get on at the bottom and wait your turn before being able to get more responsibility or try something new. But that's not entirely the case. In fact, there's a young woman who works at the Pentagon, a lieutenant, who's been to more countries than the number of years she's been alive. No other job lets you have so many diverse experiences. And we also send our people to top-notch graduate programs, like civil engineering at M.I.T., medical school at Stanford, business school at Syracuse, and also the Kennedy School at Harvard.

But to make ourselves even better at this, we're going to expand fellowships and sabbatical programs so more of our servicemembers can spend time in America's top industrial, governmental, and academic institutions, and bring back what they learned to help keep us on the cutting edge.

One of these is the Secretary of Defense Corporate Fellowship. Some of this year's fellows are here today, like Marine Corps Lieutenant Colonel Vasilios Pappas, who's at the cloud computing company EMC, and Air Force Lieutenant Colonel Clint ZumBrunnen, who's at the consulting company Accenture. One fellow who couldn't be here – but she really wanted to be – is Army Lieutenant Colonel Maria Schneider. She's an acquisitions professional embedded at Amazon, and along with finding new ways DoD can partner with them, one thing she's learning there is how they collect, define, and leverage metrics. And like the other fellows this year, who are at companies ranging from Intel to SpaceX, she'll put that and so much more into practice when she returns to DoD next year. We've also got some alumni here, like Navy Captain Michael Abreu, who did his fellowship at Google and now manages the Navy's largest IT program. Another former fellow – one who will be with me in the Pentagon tomorrow, when our highest leaders all meet – is Air Force four-star General Darren McDew. He was at Sun Microsystems, and now serves in one of the top positions in our military's chain-of-command. I want more people to have these kinds of broadening opportunities – to be able to get off the escalator for a time, and get back on – without hurting their career, but instead helping it, which makes sense after all! So we're going to expand this program by doubling the size of it; by opening it up to qualified senior enlisted leaders; and by offering not just tours in industry, but also in state and local government.

Another program is our Career Intermission Program, which lets people take a sabbatical from their military service for a few years while they're getting a degree, learning a new skill, or starting a family. There's a young Navy couple that did this a few years ago. They were both aviators, flying F-18 fighter jets off aircraft carriers, but they found it difficult to reconcile their desire to start a family and go to grad school with their desire to keep serving in the fleet. They

both considered leaving active duty and finding other ways to serve – effectively turning in their wings, which was a hard decision for each of them. But then they heard about this program. And they both not only used it, but their gain became our benefit. He got an MBA from Dartmouth, and after another flying tour, he's now a top aide to the Secretary of the Navy. She got a Masters' in Public Administration from Harvard's Kennedy School, and will soon be working in the Navy's public affairs office. And they were able to have two children, too.

Their story is clearly a success, but it didn't come easy. Because this was a new, experimental program, lots of people discouraged them from trying it, saying it might hurt their path for promotion...even though since then, it's only helped them, and because of that, their desire to continue serving has only intensified. They're proof that you don't have to choose between getting ahead in the military and gaining a valuable experience that will help you get ahead in life – that is and always should be a false choice. That's why we intend to work with Congress to make this program permanent.

In addition to these changes, we're also updating and modernizing our retirement benefits. That's probably not something most of you are thinking about yet, but it's really a big deal for us – and it's critical to making sure people like you can give the military a try and still get and take with you the benefits you earned. Right now our troops have to serve 20 years before getting any retirement benefits, but 80 percent don't serve that long, which means they leave with no retirement benefits at all. But we've changed that, and starting in the next few years, we'll be able to offer a portable 401k-like plan, which all who serve can take with them whenever they move on whatever's next in life.

#### *Improvements to Benefit Both Groups*

And for everyone's benefit – whether you're already serving, or you might serve in the future – we're also going to use 21<sup>st</sup> century data and technology approaches to improve and modernize how we manage our talent. We put a lot of effort into staying on the cutting edge with weapons technology, and it's time we did the same in how we manage our people – giving them more transparency and choice in their jobs, and also making sure we're getting the absolute most we can out of the remarkable talent we already have...always balanced with the needs of the military, of course.

For our military personnel, we're going to launch LinkedIn-style pilot programs that help match-up servicemembers looking for their next assignment with units who are looking for qualified people to fill an opening. Think of a soldier logging on, setting up a profile, seeing what they're qualified for, and selecting what they want to do, while the unit looking to bring someone on sees the profiles that fit their criteria, and chooses who they're interested in. And when there's a match, they'd get connected...you may have heard of some apps that perform a similar function. The Army's already tested this with some of their engineering officers, and it was very well received. So we're going to pilot this across all the services, and eventually scale it up for everyone.

We're also going to improve our data-crunching and how we leverage big data to inform our personnel policies. We don't do that very well right now. So we're going to bring in some top data scientists to help fix that. And much like how companies use algorithms and predictive analytics to suggest movies on Netflix, or show you what's trending on Twitter or Facebook, this Office of People Analytics will use similar data-intensive tools and technologies to help measure and chart how servicemembers and civilians are doing every day in all aspects of their job.

## AS PREPARED – EMBARGOED UNTIL DELIVERY

We're also going to fill some gaping holes in our data, starting with exit surveys that ask people who decide to leave why they did so; that way, we can make changes to keep our best. For some reason we've never comprehensively done that before. While there have been studies, articles, and entire books written about how the military is 'bleeding talent,' most of these are anecdotal. And because DoD hasn't been gathering the data, we couldn't quantitatively prove or disprove it, let alone fix it. So while it's much overdue, this small change will make a big difference in how we manage talent going forward.

Meanwhile, in terms of recruiting, we're going to look at ways we can evaluate recruit performance and improve our outcomes – including by potentially rewarding recruiters for bringing in high-performers, so it's not just about making sure we're meeting our numbers, but also that we keep bringing in the best.

We also want to make sure we strive to recruit from the broadest possible pool of talent. If we don't, we risk becoming isolated and insular, and that's not the path to success in today's security environment. That's why I want everyone who's willing and able to serve their country to have the full and equal opportunity to do so. I want everyone in this audience to view the Defense Department as a place where you could see yourselves making a contribution in the course of your careers, and also being treated with the dignity and respect you deserve.

Our military's openness to diversity and inclusion is one of the things that have allowed us to bring in America's best talent and be the best in the world. We have to maintain that strength. Young Americans today are more diverse, open, and tolerant than past generations, and if we're going to attract the best among them to contribute to our mission, we ourselves have to be more diverse, open, and tolerant, too. It's the only way to compete in the 21<sup>st</sup> century.

In some ways, this is one area where we're actually ahead of the private sector. Right now, DoD has a higher percentage of senior women leaders than America's most profitable companies do. And a few years ago, we repealed "Don't Ask, Don't Tell," allowing gay and lesbian Americans to serve their country openly and proudly. But as I've said before, we've got to do better. That's why I recently announced we're supporting the Lean-In Circles that have cropped up across the department, why we're reevaluating our transgender policy, and why we've been opening up ground combat positions to women. And we intend to do more in the months to come.

In the meantime, because diversity is about much more than race and gender, we're also going to look closely at the geographic and familial diversity of our incoming personnel. This is important, because while it's well-understood that creating the all-volunteer force has led a smaller proportion of Americans to serve in uniform, it's less understood that our recruiting pool is also shrinking geographically, with more and more of our people coming from fewer and fewer states. At the same time, the military is starting to resemble something of a family business, with a willingness to sign up increasingly found disproportionately in those who have a parent that served. That's not necessarily a bad thing – following in the footsteps of one's parents and grandparents is a long and noble tradition in the military. But it could also be a sign of, or lead to, our military's insularity from the rest of society. It might show that we need to do better at exposing our opportunities to kids that don't have a parent or neighbor or coach who served. And for us to make informed decisions about recruiting our force of the future, we as an institution need to understand both these phenomena a lot better.

Also, building the force of the future means DoD has to be more efficient in spending taxpayer dollars, so we spend every dollar where it can do the most good. That's why we're going to make some organizational changes to help implement these initiatives effectively, and

make sure they not only work in concert as intended, but also are continuously improved. And that's also why, for everything I'm announcing today, we intend to figure out how to pay for it using money that's already in our budget. That won't always be possible, but it always has to be what we strive for.

In addition to making sure we keep bringing in the best people, we're doing a lot more to be ready for the future. We're building and rebuilding bridges with America's technology community – opening up a DoD innovation hub in Silicon Valley, and reaching out to the start-up community, as well as some of America's greatest leading businesses. We're pushing the envelope with research into new technologies and innovative ways to apply them, in areas like robotics, cyber defense, biotech, human-machine combinations, and hypersonic engines that can fly over five times the speed of sound. We're coming up with new strategic approaches to preventing and winning conflicts against 21<sup>st</sup> century threats. And we're pushing as many people in the Pentagon as possible to keep thinking outside our five-sided box.

### **Just the Beginning**

While all these changes I've described today are exciting and important, they're just the beginning. So stay tuned in the coming months.

For example, we're taking a serious look at making some commonsense reforms to our officer promotion system. We're also looking at ways to improve how we manage our civilian personnel, working with the government-wide Office of Personnel Management as well as federal employee unions. And we're figuring out how we can do an even better job of meeting our commitments to the health and well-being of our people and their families in the 21<sup>st</sup> century.

The progress we're making is a credit to the teams led by DoD's acting Undersecretary of Defense for Personnel and Readiness, Brad Carson, and by our Deputy Secretary of Defense Bob Work, and Vice Chairman of the Joint Chiefs of Staff General Paul Selva. After putting together a package of bold proposals – building on great work the military services were already doing, and also crafting new ideas – they've been working with and through the services to closely analyze each one. I know Brad and some of his team are here today – thanks to all of you for your hard work.

So there's much more still to come, and a lot of hard work still ahead. I'll be making more announcements in due course, though obviously we're going to take the time to get them right. And I look forward to working with everyone in the Defense Department, in Congress, and across the interagency to do that.

### **Conclusion**

As we pursue these initiatives – maintaining the essential character that's always made our military strong, while also taking steps to remain just as strong, if not stronger, long into the future – we will be guided by the words of our military's first commander-in-chief, and the namesake of this great university.

George Washington once said that “to be prepared for war, is one of the most effectual means of preserving peace.” Those eternal words are etched into the walls outside the Pentagon... and they are, and always will be, the rationale for why we need a force of the future. Not because we seek to make war, but rather because we must preserve peace – today, tomorrow, and for many years to come.

And if you want to help us preserve that peace, we want to give you an opportunity to do so – even if you never thought about it until now.

AS PREPARED – EMBARGOED UNTIL DELIVERY

I myself didn't think much about national security when I was your age. I was focused on physics, history, sports, things like that. That changed a few years later, when I heard a speech about the future of technology in the military. It helped me realize that I could make a contribution to defending this country. As it turned out, that speaker was a man named Bill Perry, who later became my mentor, my friend, and a secretary of defense.

I wouldn't be surprised if there's a future secretary of defense sitting among you today. But I'm 100% confident that you all have something to contribute: the drive to be part of something bigger than yourself. That's where the call to service begins. And that's the beginning of how, together, we'll make a better and a brighter world.

Thank you.

###