

United States Air Force



Presentation

Before the House Appropriations
Committee, Subcommittee Defense

U.S. Military Service Academies Overview

Witness Statement of
Lieutenant General Jay Silveria
Superintendent
United States Air Force Academy

February 13, 2019



BIOGRAPHY



UNITED STATES AIR FORCE

LIEUTENANT GENERAL JAY B. SILVERIA

Lt. Gen. Jay B. Silveria is the Superintendent, U.S. Air Force Academy, Colorado Springs, Colorado. He directs a four-year regimen of military training, academics, athletic and character development programs leading to a Bachelor of Science degree and a commission as a second lieutenant.

Prior to assuming his current position, General Silveria served as the Deputy Commander, U.S. Air Forces Central Command, and Deputy Commander, Combined Air Force Air Component, U.S. Central Command, Southwest Asia. As Deputy Commander, he was responsible for the command and control of air operations in a 20-nation area of responsibility covering Central and Southwest Asia, to include operations Resolute Support in Afghanistan, and Inherent Resolve in Iraq and Syria. He has previously served as Commander, U.S. Air Force Warfare Center, Nellis Air Force Base, Nevada, and Vice Commander, 14th Air Force, Air Forces Strategic at Vandenberg AFB, California, as well as Director, Security Assistance in the Office of Security Cooperation-Iraq.



General Silveria grew up in an Air Force family and is a 1985 graduate of the U.S. Air Force Academy. He completed undergraduate pilot training in 1986. He is a command pilot with more than 3,900 hours in the T-37, T-38, F-15C/E, HH-60 and F-35A aircraft. He has flown combat sorties over the Balkans and Iraq and served as Vice Commander at Bagram Air Base in Afghanistan.

EDUCATION

1985 Bachelor of Science degree, U.S. Air Force Academy, Colorado Springs, Colo.

1992 Squadron Officer School, Maxwell AFB, Ala.

1996 Air Command and Staff College, Maxwell AFB, Ala.

1997 Master of Social Science degree, Syracuse University, N.Y.

2005 National War College, Fort Lesley J. McNair, Washington, D.C.

2009 Senior Executive Fellow, Harvard University, Cambridge, Mass.

2017 The Harvard Seminar for New Presidents, Harvard Graduate School of Education, Cambridge, Mass.

ASSIGNMENTS

1. August 1985–August 1986, student, undergraduate pilot training, 82nd Student Training Squadron, Williams AFB, Ariz.
2. January 1987–May 1990, T-37 instructor pilot, 96th Flying Training Squadron, Williams AFB, Ariz.
3. June 1990–March 1991, student, F-15E Replacement Training Unit, 550th Tactical Fighter Training Squadron, Luke AFB, Ariz.
4. April 1991–June 1995, F-15E instructor pilot, 334th Fighter Squadron, Seymour Johnson AFB, N.C.
5. July 1995–November 1997, F-15E Chief of Standardization and Evaluation, 48th Wing, RAF Lakenheath, England
6. December 1997–July 1999, aide-de-camp, to the Supreme Allied Commander Europe and Commander, U.S. European Command, Supreme Headquarters Allied Powers Europe, Mons, Belgium
7. August 1999–June 2000, student, Air Command and Staff College, Maxwell AFB, Ala.
8. July 2000–July 2004, Director of Operations, 48th Operations Support Squadron; Commander, 492nd Fighter Squadron; Deputy Commander, 48th Mission Support Group, RAF Lakenheath, England
9. July 2004–June 2005, student, National War College, Fort Lesley J. McNair, Washington, D.C.
10. June 2005–January 2006, Commander, 32nd Air and Space Operations Center, Ramstein Air Base, Germany
11. January 2006–July 2007, Vice Commander, 48th Fighter Wing, RAF Lakenheath, England
12. July 2007–August 2008, special assistant to the Commander, U.S. European Command, SHAPE, Mons, Belgium
13. August 2008–June 2010, Commander, 48th Fighter Wing, RAF Lakenheath, England
14. July 2010–March 2012, Inspector General, Headquarters ACC, Langley AFB, Va.
15. March 2012–March 2013, Director, Security Assistance in the Office of Security Cooperation-Iraq
16. April 2013–February 2014, Vice Commander, 14th Air Force, Air Forces Strategic, Vandenberg AFB, Calif.
17. February 2014–April 2016, Commander, U.S. Air Force Warfare Center, Nellis AFB, Nev.
18. April 2016–May 2017 Deputy Commander, U.S. Air Forces Central Command; Deputy Commander, Combined Air Force Component, U.S. Central Command, Southwest Asia
19. August 2017–present, Superintendent, U.S. Air Force Academy, Colorado Springs, Colo.

SUMMARY OF JOINT ASSIGNMENTS

1. December 1997–July 1999, aide-de-camp, to the Supreme Allied Commander Europe and Commander, U.S. European Command, Supreme Headquarters Allied Powers Europe, Mons, Belgium, as a major
2. July 2007–August 2008, special assistant to the Commander, U.S. European Command, SHAPE, Mons, Belgium, as a colonel
3. March 2012–March 2013, Director, Security Assistance in the Office of Security Cooperation-Iraq, as a brigadier general
4. April 2016–May 2017 Deputy Commander, U.S. Air Forces Central Command; Deputy Commander, Combined Air Force Component, U.S. Central Command, Southwest Asia, as a major general

FLIGHT INFORMATION

Rating: Command pilot

Flight hours: More than 3,900

Aircraft flown: T-37, T-38, AT-38B, HH-60, F-15C/E, F-35A

MAJOR AWARDS AND DECORATIONS

Distinguished Service Medal

Defense Superior Service Medal with oak leaf cluster

Legion of Merit with three oak leaf clusters

Bronze Star Medal

Meritorious Service Medal with three oak leaf clusters

Air Medal with two oak leaf clusters

Aerial Achievement Medal with oak leaf cluster

Air Force Commendation Medal

NATO Medal (Former Republic of Yugoslavia)

EFFECTIVE DATES OF PROMOTION

Second Lieutenant May 29, 1985

First Lieutenant May 29, 1987

Captain May 29, 1989

Major Feb. 1, 1997

Lieutenant Colonel May 1, 2000

Colonel July 1, 2005

Brigadier General Sept. 2, 2010

Major General June 16, 2014

Lieutenant General Aug. 11, 2017

(Current as of October 2017)

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Introduction

Mr. Chairman, Ranking Member Calvert, and other distinguished members of the committee, thank you for the opportunity today to provide you all with some updates on the current events, successes and challenges at the United States Air Force Academy. I appreciate your interest in our Military Service Academies – institutions that I think all three of the Superintendents here today would agree play a vital role in reinforcing the strength and effectiveness of our respective services, and in shaping the future of our military and the modern profession of arms.

As the Superintendent of the United States Air Force Academy, I appear before you today on behalf of our 4,281 cadets and 203 Preparatory School cadet candidates, as well as the faculty and staff that are working hard to develop them into a new generation of high-character leaders and innovative warrior-scholars. As a 1985 graduate of the Academy, it is truly an honor to now lead my alma mater. In the more than 33 years I have had the privilege to wear this uniform since my graduation, our Academy and our military have changed quite a bit. We are now training to fight different enemies and employing transformed technologies in a rapidly changing geopolitical landscape that is completely different and vastly more complex than when I was a cadet. Back then, cyberspace as a defense concern was more the stuff of science fiction than today's current reality. Space hadn't yet evolved into the crucial strategic warfighting domain that it has become. I spent much of my career as a pilot in the F-15, an incredibly powerful and capable aircraft. But more recently, I've had the opportunity to qualify in the F-35, a flying information platform, revolutionary in how it makes us think differently about employing data to our missions and battlespaces. In the differences between these aircraft I see an analogy for the passing of the torch between generations: from the F-15, a product of the late industrial age, to the F-35, a machine entirely of the information age. I can tell you from firsthand experience – as both a father of two and as the Superintendent of the Air Force Academy – that developing this generation does not come without its challenges. But on the whole I am incredibly impressed by our cadets on a daily basis. Like the F-35, they are capable of processing incredible amounts of information. They think differently, they learn differently, and they represent a generation that can take our Air Force to even greater heights of discovery and accomplishment.

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I tell our cadets that we don't need them to be a better F-15 pilot than I ever was. Instead, we need them to be more creative, innovative and inquisitive leaders of character and leaders of Airmen than those that came before them. We need them to look at the application of airpower differently, and to broaden that consideration of capability with their rapidly advancing knowledge in space operations, cyber operations, remotely piloted aircraft, and beyond. In the near future they will graduate and stand beside my peers and me in uniform, but soon they will replace us, and it will be their responsibility to guide our Air Force into an uncertain future. It is our responsibility – the dedicated leaders, faculty and staff at the Academy – to prepare them. Through that lens, I believe what we do at our service academies is an incredibly important investment in the future of our national security.

Successes

In nearly every interaction I have with our cadets, I am struck by their ambition, their intellect, and their drive to become outstanding leaders. I would encourage each of you to visit our Air Force Academy. I am confident you will find that you agree they are nothing short of incredible – truly some of the most promising young scholars, athletes and leaders our nation has to offer. I'd like to share a few examples with you:

Just several months ago, we learned that two of our cadets were chosen as this year's recipients of the prestigious Rhodes Scholarship, among 32 scholars selected nationwide. Following our 39th last year, they make our 40th and 41st cadets to receive this honor:

- Cadet Madison Tung, from Santa Monica, California, majors in mathematics and humanities and with a minor in Chinese. She conducts research in the use of artificial intelligence and mathematical techniques to develop tools for decision makers. She is a six-time All-American, a high school national champion in women's wrestling, and holds a black belt in hapkido. At Oxford, Cadet Tung intends to pursue a master's degrees in computer science.
- Cadet James Brahm, from Huntsville, Alabama, majors in computer science, with minors in Chinese as well as nuclear weapons and strategy. He conducts research at the intersection of cybersecurity and computer science, and has a computer science-related

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patent pending with the U.S. Patent Office. He commands the Wing Information Services Team, which is responsible for ensuring IT support to over 4,000 cadets, and has worked extensively in cybersecurity, including as an intern at the National Security Agency where he engineered reusable software to support U.S. intelligence efforts. At Oxford, he will pursue a master's degree in computer science.

Another of our young leaders, Cadet Kyle Haak, is a two-time Academic All American, and is one of the captains of our highly successful hockey team. He majors in physics with a minor in nuclear weapons and strategy, and is currently our number one ranked cadet in overall academic performance. His research is in energy and desalinization, and he was just honored as the U.S. Air Force Cadet of the Year for 2018, an honor given to one cadet among the Academy, Air Force Reserve Officer Training Corps and Officer Training School cadets nationwide. These cadets I've mentioned are certainly exceptional, but at our Academy they're not unusual – I could go on talking about our cadets all day.

I recently attended our undergraduate research awards where cadets and faculty were honored for their accomplishments in some of the impressive research they are doing. We are the number one funded undergraduate research institution in the country, and our cadets are conducting research at an undergraduate level that is unmatched at most other institutions at the graduate and postdoctoral level. This not only provides practical value to our Air Force and the Department of Defense in the research they provide, it sends these future officers out into our Air Force with the valuable and uncommon experience derived from hands-on participation in cutting edge research.

We put great stock in giving our cadets experiences that can't be found at any other institution in the country. In our program, our cadets design, build, test, and fly operational satellites. This past December, our FalconSAT-6 was successfully launched aboard a Space X rocket. Our cadets jumped right into action, commissioning the satellite and bringing it into normal operations in the following weeks. It was joined on the launch by an Academy-developed science sensor, flying as a payload on the Space Test Program (STP-5) satellite. By next year,

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two more academy satellites will join a growing collection of Academy space assets, and our Air Force Academy will have more operational satellites in orbit than most countries.

When they're not flying satellites, our cadets are participating in other clubs and activities, often competing at the national and international levels. Over the holiday break our forensics team was in South Africa competing in the world championships, and our Wings of Blue parachute team competed in the intercollegiate championships, where they took 14 medals in 8 events. Over the past year our mock trial team has won consistently in both individual and team competitions at events across the country. We don't have a law school, or any other graduate degree programs, but these cadets are regularly competing against and beating students from some of the best law schools in the country.

Every cadet at the United States Air Force Academy is an athlete. Whether they are a member of one of our 27 division one intercollegiate athletic teams or our 19 competitive club sports, or they participate in intramurals, athletics are a crucial part of their officer development. The improvement of physical fitness, the lessons learned from competition, and the tenacity developed by taking part in competitive athletics are all integral facets in the training and education of warrior leaders.

Roughly one quarter of our entire cadet population competes in division one athletics – and they hold their own quite well against some of the best athletes in the country. With 17 wins this year, our men's soccer team had its most successful season in program history, boasting two All-Americans on the roster and notching a win in the first round of the NCAA tournament. Our rifle team recently secured a conference championship and our women's tennis team is off to an undefeated, 8-0 start to the season.

Infrastructure

While we are the youngest of the service academies, a good portion of our infrastructure at the Air Force Academy is original and was built more than fifty years ago, and is now all showing its age at the same time. This, as you can imagine, presents a number of challenges for our engineers, facilities managers, and cadets who enjoy hot showers and internet service. A few

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of our more recent, ongoing and soon-to-begin projects fall into this category of overdue infrastructure repairs and updates, and I'll cover two this morning.

Our Cadet Chapel was constructed in 1962 and is the most visited man-made tourist attraction in Colorado with more than 1 million visitors annually. The chapel serves as an all-faith center for worship and can hold services in all of its five worship areas at one time. Unfortunately, "value engineering" during its construction deleted designed interior flashings in favor of 32 miles of caulk that fill and waterproof the seams connecting 100 aluminum tetrahedrons. Over the years, extreme temperature fluctuations and high winds allowed failures in the caulking resulting in extensive damage over time to the interior envelope, organs, and pews. The repairs to the chapel will require complete disassembly of the exterior structure, install a new water diversion system, abate and dispose of hazardous materials, replicate or replace the historical colored glass, replace interior lighting and controls, disassemble and restore pipe organs and pews, and update the fire protection system. This project is expected to take nearly four years to complete.

Similar to our chapel, the IT infrastructure on our campus has been neglected. During the past 10 years, we have invested minimally in our IT infrastructure resulting in a severely antiquated capability – a capability that is of critical mission importance on a college campus. Recent activities to recover from this neglect include an upgraded backbone with 20-times faster performance and multiple redundant paths, activation of a commercial internet circuit, and design of a new "Mission Net" designed to specifically address the IT needs of a college campus.

Sijan Hall, our newest cadet dormitory, was built in 1968 and houses approximately 1,500 cadets in 900 rooms and associated support spaces in 625,000 square feet. The facility serves as the cadets home and 'work space'. Over the years, we have maintained the facility but have never completely restored its infrastructure and systems. Roof leaks and significant wear and tear on mechanical, electrical, and plumbing systems impact cadets and their quality of life. The heating system in the building will typically experience several outages during the year due to failures in heat exchangers tubes. The window wall system in cadet rooms is single pane glass, making it even more difficult to maintain temperatures in the rooms during the winter. The fire

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protection, energy management, and communication systems are outdated and need to be upgraded to modern standards.

In combination with government funding, we have been incredibly privileged to have private donors generously contribute to a number of transformative projects across our campus. This partnership has allowed us to achieve a level of excellence that is directly improving the training and education experience of our cadets. Polaris Hall is the new home of our Center for Character and Leadership Development. It is a \$40 million, 46,500-square-foot building that has been awarded more than 20 national and international architecture awards since its opening in 2016.

We are also set to begin construction on a new Cyber Innovation Center that will support both the Academy and the Air Force with novel cyber research needs. Improvements to our Falcon Football Stadium bring the facilities on par with other Division I athletic facilities. All of these enhancements to our campus directly impact the quality of officer development at our Academy.

Mission and Priorities

I've talked a bit about change and improvements this morning, but our mission has not changed, and neither has our enduring dedication to our core values. Our mission at the Air Force Academy is to educate, train, and inspire men and women to become leaders of character, motivated to lead the United States Air Force in service to our nation. Foundational to the Academy experience, cadets remain guided by the Air Force's core values of Integrity First, Service Before Self, and Excellence in All We Do. My priorities as Superintendent reflect a dedication to that mission and our core values, while also acknowledging the need for agility and change. To that end, it must be our priority across the Academy to develop leaders who are innovative, who are rooted in a warrior ethos, and who possess impeccable character. To accomplish this, I have identified three Academy-wide cultural priorities to ensure our mission success:

- 1) A culture of innovation: from how we develop and employ our curriculum, to what we emphasize in research and the infrastructure projects we prioritize. We need every last

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one of our cadets, faculty, staff and leaders to be invested in a culture of innovation. More than anything else, constant innovation is what will keep us a step ahead of our adversaries.

2) A culture of honest and open assessment and feedback: As leaders with a mission to train the next generation of leaders, we must be modeling proper communication and leadership development at all levels. A key part of this is not being afraid to look in the mirror. Creating a culture of honest and open assessment and feedback is crucial to a healthy leadership climate of constant improvement. We have to listen to our people, both up and down the chain of command, and take their feedback to heart.

3) A culture of respect and dignity: And finally, since my first day as Superintendent, I have made it clear that fostering a culture of respect and dignity for everyone on campus is foundational to everything we do at our Academy. In a hearing shortly following this one, we will be discussing some areas of misconduct – sexual harassment and sexual assault – that demonstrate a severe lack of respect and dignity that have no place at our Academies or in our military. As I will elaborate in this afternoon’s hearing, we are committed to addressing these issues head-on across our Academy, and to be the example for the Air Force, the Department of Defense, and society.

Top to bottom, left to right, and regardless of rank, position or job title, we will treat one another with respect and dignity no matter a person’s race, gender, age, religion, ethnicity or sexual orientation. Diversity increases our effectiveness and fighting capability by providing a wealth of perspectives, skills and talents, derived from different backgrounds, experiences and upbringings. By contrast, treating one another with a lack of dignity and respect disables our effectiveness, and destroys our morale. Our society is changing swiftly, and our Academy and military must lead these developments. Our newest class at the Air Force Academy included our highest percentage of women applicants (30.3%), and we expect the Class of 2023 to be even higher. Additionally, this year we accepted the highest number of minority cadets in our history (more than 33.3%) and our junior class includes the highest percentage of women in our Academy’s history (29.9%). We are not done on this front, and will continue to strive to improve these numbers so that our Academy more closely reflects the society it serves and possesses the greatest strengths of that society.

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Conclusion

Our nation has high expectations of our military, our Air Force, and our Air Force Academy. They expect us to succeed in our mission to fight and win in Air, Space and Cyberspace. And they should – a great deal of time, energy and tax dollars are invested in ensuring our success. I came to this role directly from supporting our ongoing operations in the Middle East, where I was commanding the air war against ISIS. I know what an incredibly difficult and complex battlespace our service members operate in, and what will be required of our cadets on day one when they leave our Academy. That is the prism I view my leadership through. I can tell you from personal experience that modern combat is rapidly changing, and will only continue to get more complex. But one of the great privileges of this role I'm in is that I get to see into the future, and I see the future of our Air Force, and our military, in our cadets. They are up to the task, but it is our responsibility to them as leaders – everywhere from our Academies to congressional committees like this – to ensure they are prepared to actively shape that future. The national security of our next generation depends on the investment we are making in these promising young leaders now.

Once again, thank you for the opportunity to speak before this committee, and I look forward to answering any questions you might have.