

TED^x EdwardsAFB

TEDxEdwardsAFB 2022
Inspiring the Airmen of 2030 in Cyber, Space, and AI

Brigadier General Matthew W. Higer
Commander, 412th Test Wing

Friday, the twenty-second of April
8:00 AM - 4:00 PM

Hangar 1600
300 East Yeager Boulevard
Edwards Air Force Base, California 93524

TEDxEdwardsAFB is “Inspiring the Airmen of 2030 in Cyber, Space, and AI.”
We have 21 speakers, that are champions of their respective field, speaking towards our
theme of Cyber, Space, and AI to an audience of over 700 aspiring professionals. A
majority of our TEDx speakers will be highlighting projects that are within the Antelope
Valley--or soon to be known as the greater Aerospace Valley--by sharing their
knowledge on Supersonics, Stealth, Testing, Hypersonics, and Hydrogen.

TEDx Organizer: Jared Thomas
TEDx Co-Organizer: Britney Westerfield Reed

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Jared Thomas MPA, MA

IT Specialist / Project Manager,
412th Communications Squadron

TEDx Organizer,
Edwards AFB

Ask me about

Social Innovation, Critical Thinking, Entrepreneurship

I'm passionate about

inspiring and assisting others in finding passion and perspective

[linkedin.com/in/thomasjared](https://www.linkedin.com/in/thomasjared)

“Inspiring Innovation in the AV for 2030”

With the help Edwards 412 Test Wing Innovation Spark Cell, SparkED, we decided to host a TEDxEdwardsAFB event to **“Inspire the Airmen of 2030 in Cyber, Space, and AI”**. While emphasizing this TEDx theme, we’d also like to represent the rich history and current ecosystem of Edwards AFB in **Stealth, Hypersonics, and Testing**. I believe that the Airmen of 2030 are currently students so we actively worked with K-12 stakeholders, such as AVUHSD, to find ways in facilitating students to attend the event. Given that I myself grew up in Lancaster (LNHS 06’ and AVC 09’) I’m excited to host such a rare networking opportunity to inspire local youth here with the largest employer of the Antelope Valley (AV)—Edwards AFB.

Throughout high school and my early college career in the AV, I found it difficult to find opportunities to network with professionals that could help provide guidance, mentorship, and much needed inspiration. One of the major obstacles is how geographically isolated the AV is from the convenient relationships and networking opportunities afforded to those who happen to live closer to Los Angeles. This notion of a “Networking Desert” has been compounded over the last 2 years due to the COVID-19 pandemic as local youths are encouraged to isolate while developing an over reliance on social networking platforms to interact with the world, which in turn, has greatly impacted everyone’s development of the necessary soft skills needed to effectively network with other professionals.

I believe TEDxEdwardsAFB will not only provide a unique networking opportunity to the youth of the greater AV area, I also believe that it will help break up the many networking silo’s found throughout the AV and within Edwards AFB. By highlighting our chosen themes we will be able to demystify Edwards, highlight the rich aviation history of the AV, and showcase the many amazing projects that are currently happening throughout the Antelope Valley to a point that I believe it’s appropriate to call the greater region **Aerospace Valley**.

Innovation’s biggest obstacle is culture, culture’s biggest obstacle is perspective. The aim of TEDxEdwardsAFB 2022 is to facilitate an opportunity to spark curiosities and broaden people’s view of the AV through highlighting the many truly incredible efforts happening throughout the local aerospace ecosystem. We’re beyond excited and honored to have brought together such a unique event, not just because we’re eager to hear from our amazing speakers, but rather we know this event is a testament to how ecstatic this entire professional community is to inspire the next generation.



Britney Westerfield Reed

**Chief Innovation Officer,
412th Test Wing**

**TEDx Co-Organizer,
Edwards AFB**

Ask me about

Kentucky Derby, the Makerspace Movement, and Innovation lesson learned

I'm passionate about

creating a community of problem solvers and using innovation to advocate for military families

“The future is ours to Invent”

“I have always been a huge fan of TED Talks, so I am so proud to see how today’s event has grown since SparkED’s original TEDxEdwardsAFB in ‘19. The 412th Test Wing Mission is important to the local area as its largest employer and to the National Defense Strategy of the United States. By definition, flight test requires us to be innovative daily and innovation is a mindset. TED’s motto of ideas worth spreading, helps us demystify topics that the Airman of 2030 will need to understand to compete in environments we’ve never seen before. I hope today’s speakers help us remember that although our mission is serious, in order to grow, we must go about it with a desire to learn, a diverse group of people, a shared purpose, an open mind and a curious heart. This is my home and this is my family, so we all should feel empowered to learn our part in the mission.”

Britney has over 14 years of professional experience and a career in 7 unique Air Force organizations. She currently serves as the 412th Test Wing’s Chief Innovation Officer for Edwards Air Force Base, CA where she leads SparkED, a diverse team of problem solvers that represent Airman Innovation initiatives, education, and culture change.

Britney graduated from NKU Chase College of Law and began her career in Family/Employment Law in Charleston, SC. It was there she met her spouse, Duncan, an active duty C-17 pilot and moved to Edwards AFB for him to attend USAF TPS. Britney’s first job on base was at Edwards’ Youth Services teaching art. Britney also worked as the Command Secretary for the 412th Operations Group. In 2015, she took her first Meyers/Briggs Personality Test and switched careers after almost 10 years pursuing law. She continued her career as the Office Manager for Global Vigilance and as the Supervisory Executive Officer for F-35 supervising over 50 command support duties. In 2018, she continued her work as a Range Control Specialist for the 412th Range Squadron assessing the technical adequacy of range resources to meet data collection requirements for flight Test. Here, she joined SparkED, connecting her love of military family and country to her advocacy skills as a voice for Airman and spouses. In the fall of 2020, Britney became the Wing Process Manager developing the continuous process improvement and innovation programs. In January of 2022, her passion for innovation led her to accept the position as the first-ever, Chief Innovation Officer for the 412th Test Wing.

Outside of her professional life, Britney is a proud military spouse to Duncan and mother to Briggs (4) Piper (1) and Ollie (Dog). She loves karaoke, making things for her children, camping, good conversation, and reading. Britney and her family currently reside in Rosamond, CA.



Wendy Peterson

Director

**812th Test Support Squadron,
Edwards AFB**

Ask me about

Skydiving, being a single mom and leader in a technical workforce, what I'm currently learning, and how I'm cultivating my dream life.

I'm passionate about

the future of space exploration, integrating neurotechnology into DoD and Space operations, breaking barriers for women in the workforce, work-life integration, mindfulness.

Twitter @Spacekitten021

IG @spacekitten21

linkedin.com/in/petersonwendy

"Impossible is just an opinion"

Wendy has over 15 years of flight test experience in the 412th Test Wing at Edwards Air Force Base, CA. She currently serves as the Director for the 812th Test Support Squadron where she leads five diverse teams provide Workforce Education and Development, Statistical Methods Application, Software Tool Development and Automation, Improvement and Modernization Program Management, and Technical Library Resources.

Wendy began her career as a Weapons Integration Engineer for the F-16 fighter and B-1B bomber, testing both US and Foreign Military Sales programs. She continued her career in the roles of Engineering Lead, Technical Expert, and Chief of the Weapons Integration Flight where she had the opportunity to contribute to nearly every aircraft and weapon system tested at Edwards AFB. Wendy also spent 2 years in a career broadening assignment under the 412th Operations Group, where she was an F-16 Flight Test Engineer and the F-15 Saudi Advanced Flight Sciences Ship Lead. In these roles, she led High Risk Flutter testing and High Angle-of-Attack Flight Sciences testing as the Test Conductor and Test Director. She also obtained aeronautical orders, where she regularly flew in the backseat of F-16s conducting engineering tasks. In this role, she paved the way for non-TPS graduate civilians to obtain aeronautical orders at the 416th Flight Test Squadron and perform flight test engineering duties in the backseat of F-16s for programs across the 412th Test Wing.

Throughout her career, Wendy has been passionate about breaking barriers for women in the workforce and developing and inspiring the current and next generation of professionals through STEM outreach, professional mentorship, formal innovation efforts, teaching leadership courses, and as an Alumni Ambassador for her alma maters.

Wendy is a yoga and meditation enthusiast, licensed skydiver, certified scuba diver, runner and hiker, with a passion for reading, photography, music, and human capital development--particularly in the cognitive neuroscience field. Wendy and her three children, Zachary (9), Nolan (7), and Zoe (5) currently reside in Palmdale, CA.

EDUCATION

2006, Bachelor of Science in Aerospace Engineering, University of California, San Diego

2016, Master of Science in Systems Architecting and Engineering, University of Southern California

ASSIGNMENTS

2005 - 2006, F-22 Mechanical Engineer Intern, Northrop Grumman Corporation, Rancho Bernardo, CA

2006 - 2007, F-16 Weapon Systems Integration Engineer, 416th Flight Test Squadron, Edwards AFB, CA

2007 - 2010, B-1B Weapon Systems Integration Engineer, 419th Flight Test Squadron, Edwards AFB, CA

2010 - 2013, F-16 Weapon Systems Integration Lead, 416th Flight Test Squadron, Edwards AFB, CA

2013 - 2015, F-15SA Flight Sciences Aircraft Lead, 416th Flight Test Squadron, Edwards AFB, CA

2016 - 2017, Weapon Systems Integration Technical Expert, 775th Test Squadron, Edwards AFB, CA

2017 - 2020, Weapon Systems Integration Flight Chief, 775th Test Squadron, Edwards AFB, CA

2020 - present, Director, 812th Test Support Squadron, Edwards AFB, CA

AWARDS

2008, 412 TENG Annual Director's Award

2008, 775 TS Notable Achievement Award

2008, 419 FLTS Test Team Award 2008, 775 TS Test Team Award

2008, 775 TS Time-Off Award 2008, 412 TW 2nd Quarter Test Team Award

2009, 419 FLTS Performer of the Month Award

2009, 419 FLTS 3rd Quarter Discipline Engineer Award

2009, 419 FLTS 3rd Quarter Test Team Award

2011, 416 FLTS 4th Quarter Scientist/Engineer Award

2011, 412 TENG 4th Quarter Supervision/Management Award

2012, 412 TW Air Force Outstanding Unit Award

2013, 416 FLTS 4th Quarter Test Engineer Award

2013, 416 FLTS 4th Quarter Test Team Award

2014, 416 FLTS 2nd Quarter Test Team Award

2014, 416 FLTS Time-Off Award

2015, AFLCMC Acquisition Team Award

2017, 775 TS Time-Off Award

2017, 412 Test Wing Test Team of the Year Award

2018, 775 TS 1st Quarter Team Award

2018, AFTC Science, Engineering, & Technical Management Team Award

2019, Engineers' Council Distinguished Engineering Project Achievement Award (F-35 JSF Weapons Team)

2019, Engineers' Council Distinguished Engineering Project Achievement Award (Weapons Integration Team)

2019, Engineers' Council Distinguished Engineering Educator Award

2019, Air Force Brigadier General Wilma Vaught Visionary Leadership Award

2021, International Test & Evaluation Association Energizer Award



Brigadier General Matthew W. Higer

Commander
412th Test Wing,
Edwards AFB

Ask me about

Aussies, Alaska, and Aviation

I'm passionate about

inspiring kids ages 5 to 65 toward a passion for STEM

“Compete! | TCOTATU”

Brig. Gen. Matthew W. Higer is the Commander, 412th Test Wing, Edwards Air Force Base, California. He leads a wing of nearly 8,000 personnel in the developmental test and evaluation of the KC-46, KC-135, KC-10, C-17, C-5, F-35, F-22, F-16, B-21, B-1, B-2, B-52, eT-7A, RQ-4 and emerging technologies. Additionally, Brig. Gen. Higer is the Installation Commander responsible for base operations support for more than 19,500 active duty, Reserve, civil service and defense industrial base contractors at Edwards AFB, the second largest base in the U.S. Air Force, and Air Force Plant 42 in Palmdale, California.

Brig. Gen. Higer earned his commission in 1993 from the Air Force Reserve Officer Training Corps at the University of Southern California. He is a Distinguished Graduate of the United States Army War College, the United States Naval Postgraduate School, the United States Air Force Squadron Officer School, and the Air Force Reserve Officer Training Corps. He holds a Level 3 Acquisition Professional Development Program certification in Program Management and Test and Evaluation. Brig. Gen. Higer was previously the Commandant of the United States Air Force Test Pilot School, Vice Commander of the 96th Test Wing and commanded two squadrons.

Brig. Gen. Higer is a command pilot with more than 3,000 military flight hours in 40 aircraft types as an experimental test pilot, instructor pilot, and evaluator pilot. His military flight experience includes combat missions during Operation Southern Watch.

EDUCATION

1993 Bachelor of Science, Aerospace Engineering, University of Southern California, Los Angeles
1994 Master of Science, Aerospace Engineering, University of Southern California, Los Angeles
2007 Master of Business Administration, United States Naval Postgraduate School, Monterey, Calif.
2015 Master of Strategic Studies, United States Army War College, Carlisle Barracks, Pa.

ASSIGNMENTS

1. June 1994–August 1995, Student, Euro-NATO Joint Jet Pilot Training, Sheppard Air Force Base, Texas
2. August 1995–August 1996, Student, F-16 Flying Training Unit, Luke AFB, Ariz.
3. October 1996–April 1998, F-16 Flight Lead, 36th Fighter Squadron, Osan Air Base, South Korea
4. April 1998–January 2001, F-16 Evaluator Pilot, 18th Fighter Squadron, Eielson AFB, Alaska
5. February 2001–December 2002, Flight Commander, 310th Fighter Squadron, Luke AFB, Ariz.
6. January 2003–December 2003, Student, U.S. Air Force Test Pilot School, Edwards AFB, Calif.
7. January 2004–June 2006, Assistant Director of Operations, 40th Flight Test Squadron, Eglin AFB, Fla.
8. July 2006–December 2007, Student, U.S. Naval Postgraduate School, Monterey, Calif.
9. November 2009–July 2014, various duties (data masked)
10. July 2014–June 2015, Student, United States Army War College, Carlisle Barracks, Pa.
11. July 2015–July 2017, Vice Commander, 96th Test Wing, Eglin AFB, Fla.
12. July 2017–July 2018, Commandant, U.S. Air Force Test Pilot School, Edwards AFB, Calif.
13. July 2018–February 2020, various duties (data masked)
14. February 2020–present, Commander, 412th Test Wing, Edwards AFB, Calif.

SUMMARY OF JOINT ASSIGNMENTS

1. December 2007–October 2009, U.S. Air Force Requirements Officer, F-35 Joint Program Office, Arlington, Va. as a lieutenant colonel

FLIGHT INFORMATION

Rating: command pilot

Flight hours: more than 3,000 hours

Aircraft flown: F-35A, F-16 A/C/CM, C-12, SGS-2-33, T-38, T-37 and 35 other aircraft

MAJOR AWARDS AND DECORATIONS

Legion of Merit with oak leaf cluster

Defense Meritorious Service Medal

Meritorious Service Medal with two oak leaf clusters

Aerial Achievement Medal with three oak leaf clusters

Air Force Commendation Medal with two oak leaf clusters

Army Commendation Medal

Air Force Achievement Medal with oak leaf cluster

EFFECTIVE DATES OF PROMOTION

Second Lieutenant May 7, 1993

First Lieutenant Dec. 2, 1995

Captain Dec. 2, 1997

Major March 1, 2004

Lieutenant Colonel Feb. 1, 2009

Colonel May 1, 2015

Brigadier General Dec. 2, 2020



Jason Caudle

**City Manager,
City of Lancaster**

Ask me about

Hydrogen, Lancaster, and Clean Energy.

I'm passionate about

creating a sustainable future.

“Lancaster: The Hydrogen City”

Jason Caudle has been with the City of Lancaster since 2008, and was appointed City Manager in December 2018. Having served as the City's Deputy City Manager for more than ten years, Mr. Caudle has championed many key initiatives, most notably the City's groundbreaking alternative energy efforts, playing an integral role in the creation of Lancaster Choice Energy, the Lancaster Power Authority, and the California Choice Energy Authority.

As City Manager, Mr. Caudle has set his sights on leading City staff to implement a number of innovative projects, from Smart City initiatives to public improvements. He aims to strategically incorporate new technology and innovation throughout the City's foundation to keep Lancaster on the cutting edge, continuing its legacy as a “City of firsts.”

Mr. Caudle's successes have been predicated on his wealth of knowledge forged by previous roles, including being the Vice President of Public Finance for an investment banking firm and serving as the City Manager of the City of Tehachapi for nearly a decade. The latter merited him as one of the youngest city managers in the State of California.

Mr. Caudle holds a bachelor's degree in Political Science and a Master's degree in Public Policy and Administration, both from California State University Bakersfield.

A family man, Mr. Caudle values spending time with his wife Leslie and their two children, Jackson and Kennedy. He also enjoys fishing, skiing, golf, and anything outdoors.



Colonel Randel (Laz) Gordon

Vice Commander

412th Test Wing,

Edwards AFB

Ask me about

Leadership, Innovation, Aerospace

I'm passionate about

Human Performance and Self-Improvement

“Explore People, Places, and Ideas”

Col Randel “Laz” Gordon is the Vice Commander, 412th Test Wing, Edwards Air Force Base (AFB), California. He leads a wing of 9,500 personnel in the developmental test and evaluation of KC-46, KC-135, KC-10, C-17, C-5, F-35, F-22, F-16, B-1, B-2, B-52, T-7A, RQ-4 and emerging technologies.

Col Gordon was born in Poughkeepsie, New York and received his commission in 1998 from the United States Air Force Academy. Prior to this assignment, he was the initial cadre director for the Secretary of the Air Force’s Artificial Intelligence Accelerator with the Massachusetts Institute of Technology (MIT). He also served as initial cadre for the Secretary of the Air Force’s AFWERX technology innovation team with private sector business and academia. Col Gordon is a Presidential Fellow, Harvard Business School Alumnus, Defense Advanced Projects Research Agency (DARPA) Fellow, MIT Fellow, and holds a doctorate from the US Air Force’s School of Advanced Air and Space Studies.

He served the F-22 Combined Test Force as its commander and has additional flight test pilot experience in the F-15C/E, A-10A/C, F-16A/C, Bombardier BD-700 Global Express business jet, and 70 other military and civilian aircraft.

EDUCATION

1998 Bachelor of Science, Aeronautical Engineering, Minor in Mathematics, Air Force Academy, Colorado Springs, Colo.

2006 Master of Science, Aeronautical Engineering/Systems Engineering, Air Force Institute of Technology, Wright-Patterson AFB, Ohio

2010 Master of Philosophy/Strategy, School of Advanced Air and Space Studies, Maxwell AFB, Ala.

2013 Doctorate of Philosophy, Strategy, School of Advanced Air and Space Studies, Maxwell AFB, Ala.

2018 Harvard Business School Alumnus, Harvard University, Cambridge, Mass.

ASSIGNMENTS

August 1998-August 1999, Student, Specialized Undergraduate Pilot Training, Laughlin AFB, Texas

October 1999-December 1999, Student, Introduction to Fighter Fundamentals, Columbus AFB, Mass.

January 2000-June 2000, Student, F-15C Replacement Training Unit, 95th Fighter Squadron, Tyndall AFB, Fla.

July 2000-December 2003, F-15C Fighter Pilot/Flight Lead, 19th Fighter Squadron, Elmendorf AFB, Alaska

February 2004-June 2005, Student, Air Force Institute of Technology, Wright-Patterson AFB, Ohio

July 2000-December 2003, F-15C Fighter Pilot/Flight Lead, 19th Fighter Squadron, Elmendorf AFB, Alaska
February 2004-June 2005, Student, Air Force Institute of Technology, Wright-Patterson AFB, Ohio
July 2005-July 2006, Student, Air Force Test Pilot School, Edwards AFB, Calif.
September 2006-June 2010, F-15C/E Instructor, A-10A/C, BD-700 Experimental Test Pilot and Chief of Flight Safety, 40th Flight test Squadron and Air Armament Center, Eglin AFB, Fla.
June 2010-June 2011, Student, Air Force School of Advanced Air and Space Studies, Maxwell AFB, Ala.
July 2011-June 2014, DARPA Fellow, Future Capabilities, Joint Innovation & Experimentation, US Pacific Command (USPACOM), Camp Smith, Hawaii
July 2014-June 2017, F-22 Commander/Director of Operations, 411th Flight Test Squadron, Edwards AFB, Cali.
July 2017-August 2018, Fellow, Harvard Business School and Massachusetts Institute of Technology, Cambridge, Mass.
June 2018-June 2019, Test and Evaluation Lead, AFWERX Initial Cadre, Cambridge, Mass.
June 2019-June 2020, Director, USAF/MIT Artificial Intelligence Accelerator Initial Cadre, Cambridge, Mass.
July 2020 - Present, Vice Commander, 412th Test Wing, Edwards AFB, Calif.

FLIGHT INFORMATION

Rating: Command pilot

Hours Flown: More than 3,000

Aircraft Flown: F-22A, F-15C/E, A-10A/A+/C, BD-700 (E-11 BACN), F-16A/C, and 70 others

MAJOR AWARDS AND DECORATIONS

Defense Meritorious Service Medal

Meritorious Service Medal with 1 Oak Leaf Cluster

Air Medal

Aerial Achievement Medal with 5 Oak Leaf Clusters

Joint Service Commendation Medal with 1 Oak Leaf Cluster

Air Force Commendation Medal

Joint Meritorious Unit Award

Air Force Outstanding Unit Award with 4 Oak Leaf Clusters

Combat Readiness Medal

Air Force Recognition Ribbon

National Defense Service Medal

Armed Forces Expeditionary Medal

Afghanistan Campaign Medal with 1 Oak Leaf Cluster

Global War on Terrorism Service Medal

Air Force Overseas Ribbon Long

Air Force Expeditionary Service Ribbon with Gold Border

Air Force Longevity Service with 5 Oak Leaf Clusters

Small Arms Expert Marksmanship Ribbon

Air Force Training Ribbon

NATO Medal

EFFECTIVE DATES OF PROMOTION

Second Lieutenant May 27, 1998

First Lieutenant May 27, 2000

Captain May 27, 2002

Major Oct 1, 2007

Lieutenant Colonel Feb 1, 2013

Colonel May 1, 2019



Art B. Chmielewski

Program Manager

Inner Planets,

NASA/Jet Propulsion Laboratory (JPL)

Ask me about

Space Academy, Mars Helicopter, Alien Life

I'm passionate about

studying other planets to learn about ours

[linkedin.com/in/art-chmielewski-551a8023/](https://www.linkedin.com/in/art-chmielewski-551a8023/)

“Teaching young people about building space missions”

Art Chmielewski is a manager at the Jet Propulsion Laboratory (JPL) - a NASA Center in Pasadena, California. He participated in 15 space missions and held almost every possible space job at NASA. He built space instruments for Mars rovers, installed nuclear generators on deep space spacecraft, designed billion-dollar space missions to the most unique objects of our solar system, developed new technologies, and organized a lab to build a space telescope the size of a football stadium. He managed the missions which traveled to the Sun, Mars, Jupiter, Saturn and landed on comets. He worked on getting images of cryo-volcanoes, black holes and extrasolar planets and worked on software and hardware.

Artur was a consultant to Hollywood movies, designed space sculptures and gave lectures at some of the most prestigious colleges around the world. He is a recipient of 5 NASA medals and 7 JPL awards and numerous Polish awards. He has just published a bestselling book “Cosmic Challenges.”



Dr. Shawn Phillips

**Mission Director / USSF Guardian
Air Force Research Laboratory (AFRL/RQR),
Edwards AFB**

Ask me about

how science fiction shapes the direction of our travel to and in space

I'm passionate about

growing the future leaders that will change how we travel to and operate in space

[linkedin.com/in/dr-shawn-phillips-bb4751a](https://www.linkedin.com/in/dr-shawn-phillips-bb4751a)

“The stand-up of the United States Space Force and the exponential explosion of commercial space investments have upended what it means to be a rocket scientist.”

Dr. Shawn H. Phillips is Chief of the Rocket Propulsion Division within the Air Force Research Laboratory (AFRL/RQR) at Edwards AFB, CA. He oversees all research, development and testing at the \$10.2B AFRL Rocket Lab, encompassing over 65-sq miles, 19 major rocket test stands, 440+ personnel and 136 buildings. Research efforts encompass Space Access, In-Space Propulsion, and solid rocket motors for Strategic, Tactical and Hypersonic Boosters. Dr. Phillips has 24 years of government service (all spent at the AFRL Rocket Lab), holding 10 patents and more than 28 publications in R&D and applied technology fields. He is also the author of 4 sci-fi/fantasy novels.

Dr. Phillips entered the Department of Defense Civil Service in May 1998 after employment as a Co-Team Lead for New Adipic Acid Routes and performing synthetic chemistry in the Nylon Intermediates and Specialty Division for DuPont, DuPont Nylon ESL. While at Edwards AFB, he has directed the polymer working group, the Materials Application Branch, the Liquid Rocket Engines Branch, and served as the Deputy Chief of the Rocket Propulsion Division.

EDUCATION

1992 Hope College, Holland, MI; B.S., Chemistry, May 1992
1996 U of California, Irvine; Ph.D., Organometallic/Inorganic Chemistry
2008 Air War College with Strategic Leadership Focus
2019 Federal Executive Institute, Senior Leadership Course
APDP SPRDE Level III certified
APDP Science & Technical Management Level III certified

ASSIGNMENTS

1. May 1998-Present Edwards Air Force Base (AFRL/RQR)

- Chief, Rocket Propulsion Division 12/15-present: Oversees RDT&E portfolio for solid rocket motors, space access, and in-space propulsion at the AFRL Rocket Lab with an annual budget of >\$100M/yr
- Deputy Chief, Rocket Propulsion Division AFRL/RQR, 10/08-12/15: Chief Operations Officer for 440+ personnel at the Air Force Research Laboratory's \$10.2B, 65 square-mile rocket propulsion facility.
- Chief, Liquid Rocket Engines Branch AFRL/RZSE, 1/05- 9/08: Directed \$20M/yr R&D liquid rocket engine portfolio for near-term and long-term efforts on boost/upper stage engines, to include space access efforts
- Chief, Material Applications Branch AFRL/RZSM, 08/01-1/05: Led 3 research groups (>30 people, 20 S&Es) and >\$5.25M/yr effort in the development and application of new materials for rocket propulsion technology
- Project Leader and Research Scientist of Polymeric Materials Group, 5/98 – 08/01

2. January 1997- May 1998 DuPont, DuPont Nylon ESL, 1/97 - 5/98

MAJOR AWARDS AND DECORATIONS

- 2013 AFRL Organization Diversification Award; long-standing leader & member of diversity panels
- 2012 AFRL/RQ Military Reservist Supervisor of the Year Award
- 2008 SAB best presentation award in directorate's semi-annual review
- 2007 Edwards AFB Contracting Team of the Year Award – led \$109M procurement
- 2002 & 2004 World Class Ranking for Materials R&D by Air Force's SAB
- 2003 US Air Force Nominee for Arthur S. Flemming Award for excellence in research
- 2001 Air Force Exemplary Civilian Service Award
- 2000 AFRL Propulsion Directorate Program Manager of the Year
- 2000 AFOSR Star Team - given to the top 3% of Air Force basic research groups



Dr. Yevgeniya (Jane) Pinelis

Chief, AI Assurance
Department of Defense Joint
Artificial Intelligence Center (JAIC)

Chief, AI Engineer
Applied Information Science Branch
Johns Hopkins University Applied
Physics Laboratory (JHUAPL)

Ask me about

gender integration in combat arms, role of statistics in test and evaluation, how is AI assurance different from traditional T&E

I'm passionate about

bringing scientific rigor into everything I do for the DoD

[linkedin.com/in/yevgeniya-jane-pinelis-ph-d-b319632](https://www.linkedin.com/in/yevgeniya-jane-pinelis-ph-d-b319632)

“The DoD will not use technology that hasn’t been tested or assured; it is the job of the test community to provide justified confidence in these new AI systems, to the warfighter, the commander, the taxpayer, and to the international community”

Dr. Jane Pinelis is the Chief of AI Assurance at the Department of Defense Joint Artificial Intelligence Center (JAIC). She leads a diverse team of testers and analysts in rigorous test and evaluation (T&E) as well as Responsible AI (RAI) implementation for JAIC capabilities, as well as development of AI Assurance products and standards that will support testing of AI-enabled systems across the DoD.

Prior to joining the JAIC, Dr. Pinelis served as the Director of Test and Evaluation for USDI’s Algorithmic Warfare Cross-Functional Team, better known as Project Maven. She directed the developmental testing for the AI models, including computer vision, machine translation, facial recognition and natural language processing. Her team developed metrics at various levels of testing for AI capabilities and provided leadership empirically-based recommendations for model fielding. Additionally, she oversaw operational and human-machine teaming testing, and conducted research and outreach to establish standards in T&E of systems using artificial intelligence.

Dr. Pinelis has spent over 10 years working predominantly in the area of defense and national security. She has largely focused on operational test and evaluation, both in support of the service operational testing commands and also at the OSD level. In her previous job as the Test Science Lead at the Institute of Defense Analyses, she managed an interdisciplinary team of scientists supporting the Director and the Chief Scientist of the Department of Operational Test and Evaluation on integration of statistical test design and analysis and data-driven assessments into test and evaluation practice. Before, that, in her assignment at the Marine Corps Operational Test and Evaluation Activity, Dr. Pinelis led the design and analysis of the widely publicized study on the effects of integrating women into combat roles in the Marine Corps. Based on this experience, she co-authored a book, titled “The Experiment of a Lifetime: Doing Science in the Wild for the United States Marine Corps.”

In addition to T&E, Dr. Pinelis has several years of experience leading analyses for the DoD in the areas of wargaming, precision medicine, warfighter mental health, nuclear non-proliferation, and military recruiting and manpower planning.

Her areas of statistical expertise include design and analysis of experiments, quasi-experiments, and observational studies, causal inference, and propensity score methods.

Dr. Pinelis holds a BS in Statistics, Economics, and Mathematics, an MA in Statistics, and a PhD in Statistics, all from the University of Michigan, Ann Arbor.



Colonel Tucker (Cinco) Hamilton

Experimental Fighter Test Pilot
Director, Department of the Air Force
MIT Artificial Intelligence Accelerator

Ask me about

ARC, JetSuits, Space

I'm passionate about

engaging with life's journey -- sharing love with those around me while advancing technology to make a safer and more value filled society.

Instagram - @cincohamilton

LinkedIn – Tucker “Cinco” Hamilton

“Airmen and Guardians in an Artificial Intelligence Era”

Col Tucker "Cinco" Hamilton is an Experimental Fighter Test Pilot and currently the Director of the Department of the Air Force – MIT Artificial Intelligence Accelerator. He has served his nation as an operational F-15C pilot, Air Liaison Officer, initial cadre of the MC-12 Intelligence gathering aircraft, F-35 program manager, F-35 test pilot/commander, and Director of the only dedicated Artificial Intelligence unit in the Department of the Air Force. He has more than 2,000 flying hours in the F-35A/B/C, F-15C/D/E, MC-12W, F-18, F-16, A-10, T-38A/C, T-34, T-6, and 20 additional aircraft. In addition to his military service he is the founder and CEO of a 501(c)3 non-profit that runs a national high-school robotics competition called the Aerospace Robotics Competition. He currently lives near Cambridge, MA with his wife and four children. You can find Cinco on Instagram: @CincoHamilton.

Education

B.S. Aerospace Engineering, University of Colorado, 2002
M.S. Aerospace Engineering, University of Tennessee, 2009
M.S. Flight Test Engineering, USAF Test Pilot School, 2012
Strategic Studies Military Fellow, MIT, 2019
Program for Leadership Development, Harvard Business School, 2021

Notable Achievements

National Aeronautics Association Collier Trophy Recipient, 2019
Society of Experimental Test Pilots Annual Herman Salmon Award, 2017
USAF STEM Contributor of the Year, 2016
Ten Outstanding Young American Award, 2015
USAF ISR Officer Contributor of the Year, 2010
University of Colorado Thomas Jefferson Award, 2002



Scott S. Shyne

**Chief, Information Warfare Division,
Information Directorate,
Air Force Research Laboratory**

Ask me about

Digital exhaust, Social Dilemma (Netflix), Convergence

I'm passionate about

recruiting the best and the brightest to work on our Air Force team!

[linkedin.com/in/scott-shyne-1151513/](https://www.linkedin.com/in/scott-shyne-1151513/)

“Imperatives of understanding Information Warfare”

Mr. Shyne is the Chief of the Information Warfare Division at the Air Force Research Laboratory's Information Directorate located in Rome, NY. He has worked at AFRL for 32 years and the experience has been inspiring and ever changing. In his current role, he oversees a total workforce of 735 individuals (110 gov't and 625 contractor) with an annual budget exceeding \$700M. Branches within his Division address Information Assurance, Information Operations, Information Exploitation and Information Convergence. Mr. Shyne has a B.S. and M.S. in computer science from SUNY Institute of Technology, completed Air War College in 2012. His professional domain experience includes Branch and Division supervision, cyber portfolio management (OCO, DCO, ISR), special programs, automatic target recognition, software programmable radios, intelligent transportation systems, networking/communications, cross domain information sharing and full spectrum cyber operations. “What gets me to work every day is the knowledge that what I'm doing makes a difference and has a positive impact on the Air Force and for the country. I love my job and the opportunity to serve my country AND work in the fastest changing and coolest technology area around is more out of a career than I could've hoped for!!!”.

Specialties: Program management/supervisor, problem solving, product transition, intelligent systems, hypervisor technology, and S&T aspects of cyber research.



Colonel Jennifer M. Krolikowski

Director, Chief Information Officer

Space Systems Command / Chief Information Office

Los Angeles Air Force Base

Ask me about

Software, Space, Technology

I'm passionate about

helping to make people's lives easier by bringing in tech to solve problems they care about

"Space is already here, in your everyday lives"

Colonel Jennifer Krolikowski is the Director, Chief Information Office (CIO) for Space Systems Command, Los Angeles Air Force Base. Col Krolikowski graduated from the University of Dayton in 1996 with a Bachelor's in Mechanical Engineering and commissioned from ROTC that same year. She has led at the Materiel Leader and Senior Materiel Leader levels and has served in a variety of acquisition and flight test positions. As lead engineer for various operational B-52 Stratofortress flight tests, she accumulated 50-plus flight hours and earned her Nonrated Aircrew Officer Wings. Colonel Krolikowski has served in staff assignments at Headquarters United States Air Force, the Joint Staff, and Office of the Secretary of Defense. Prior to her current assignment, she served as the Senior Materiel Leader for Space Command and Control (C2). She transitioned to the United States Space Force in July 2021. Col Jennifer Krolikowski is mother to Logan Benjamin and Seth Andrew Krolikowski and is married to Andrew Stamer.

EDUCATION

1996 Bachelor of Mechanical Engineering, University of Dayton, Ohio

1999 Master of Aeronautical Engineering, Air Force Institute of Technology, Wright-Patterson AFB, Ohio

2009 Master of Military Operational Art & Science, Air Command & Staff College, Maxwell AFB, Ala.

2016 Master of Strategic Studies, Air War College, Maxwell AFB, AL

ASSIGNMENTS

1. July 1996 – August 1999: Developmental Engineer, Manufacturing & Materials Directorate, Air Force Research Laboratory, Wright-Patterson AFB, Ohio

2. September 1999 – June 2001: Advanced Weapons Lead Engineer, 49th Test & Evaluation Squadron, Barksdale AFB, La.

3. June 2001 – May 2002: Lead Engineer NDS Space Segment, GPS Program Office, Space & Missiles System Center, Los Angeles AFB, Calif.

4. May 2002 – May 2003: Executive Officer, GPS Program Office, Space & Missiles System Center, Los Angeles AFB, Calif.

5. June 2003 – July 2004: GPS III Acquisition Integration Branch, GPS Program Office, Space & Missiles System Center, Los Angeles AFB, Calif.

6. July 2004 – April 2005: PEO Staff Director for GPS, Space & Missiles System Center, Los Angeles AFB, Calif.

7. May 2005 – April 2007: Course Director, NAVOPS Advanced Course, National Security Space Institute, Colorado Springs, Colo.
8. April 2007 – October 2007: Deputy Director Mission Support, National Security Space Institute, Colorado Springs, Colo.
9. October 2007 – August 2008: Chief, SBIRS Requirements, Headquarters AFSPC, Peterson AFB, Colo.
10. August 2008 – June 2009: Air Command and Staff College Student, Maxwell AFB, Ala.
11. June 2009 – November 2010: Tactical Data Network PEM, SAF/AQIZ, Pentagon, Washington, DC
12. November 2010 – October 2011: Deputy, Command and Control Division, SAF/AQID, Pentagon, Washington, DC
13. October 2011 – August 2012: Chief, Executive Action Group, SAF/AQE, Pentagon, Washington, DC

15. July 2015 – May 2016: Air War College Student, Maxwell AFB, Ala.
16. May 2016 – May 2017: Chief, IAMD Global Requirements Branch, J8/JIAMDO, Joint Staff, Pentagon, Washington D.C.
17. May 2017 – July 2018: Chief of Staff/Military Assistant, Space, Strategic, and Intelligence Systems, DASD/SSI, OSD, Pentagon, Washington D.C.
18. July 2018 – January 2022: Senior Materiel Leader, Space C2, Space Systems Command, Los Angeles AFB, Calif.
19. January 2022 – present: Director, Chief Information Office (CIO), Space Systems Command, Los Angeles AFB, Calif.

FLIGHT INFORMATION

50+ Flight Hours in the B-52

SUMMARY OF JOINT ASSIGNMENTS

May 2016 – May 2017: Chief, IAMD Global Requirements Branch, J8/JIAMDO, Joint Staff, Pentagon, Washington D.C.

May 2017 – July 2018: Chief of Staff/Military Assistant, Space, Strategic, and Intelligence Systems, DASD/SSI, OSD, Pentagon, Washington D.C.

MAJOR AWARDS AND DECORATIONS

Defense Superior Service Medal

Meritorious Service Medal with 2 Oak Leaf Clusters

Joint Service Commendation Medal

Air Force Commendation Medal with 3 Oak Leaf Clusters

Air Force Outstanding Unit Award

Air Force Organizational Excellence Award with 5 Oak Leaf Clusters

National Defense Service Medal

Global War on Terrorism Service Medal

John J. Welsh, Jr Award for Excellence in Acquisition Leadership, 2009

Wing Outstanding Air Force Acquisition Staff Officer of the Year, 2010

Assistant Secretary of the Air Force Team Innovation Award, 2010

PEO Outstanding Air Force Program Manager of the Year, ACAT I, 2013, 2014, & 2015

PEO Outstanding System Program Office of the Year, 2013

AFLCMC Should Cost Innovation Award, 2014

Federal Gears of the Government Award, 2019

Mission System Team of the Year Award, 2019 (NAF Equivalent Award)

Air Force Software Innovation Individual & Team Awards, 2020

Disruptive Change Agent Award, 2021

Leading for Impact, Women in Leadership Award, 2021

EFFECTIVE DATES OF PROMOTION

Second Lieutenant 29 May 1996

First Lieutenant 29 May 1998

Captain 29 May 2000

Major 1 May 2006

Lieutenant Colonel 1 September 2011

Colonel 1 November 2017



Captain Zach (ZB) Baumann

**Research Analyst,
Air Force Personnel Center Strategic Research
and Assessment Branch (AFPC/DSYX)**

**Co-Founder,
Air Force Gaming**

Ask me about

Gaming, Mental Health, Community Building, Talent Management,
Personnel Selection/Classification

I'm passionate about

making the world a smaller place – one relationship at a time.

**[linkedin.com/in/zjbaumann/](https://www.linkedin.com/in/zjbaumann/)
Twitter @ZjBaumann**

“Bridging the gap between the DoD’s digital ‘immigrants’ (today’s leaders) and digital ‘natives’ (tomorrow’s leaders)”

Zach, Uncle Zach, and Captain Zach, in that order. Zach plays the drums in a band with his best friends and seeks challenges like climbing Mount Rainier and IRONMAN triathlons. Uncle Zach has 6 nieces and nephews scattered across the U.S. Captain Zach is an active-duty USAF Force Support Officer who is on a mission to bridge the gap between the DoD’s digital “immigrants” (today’s leaders) and digital “natives” (tomorrow’s leaders).

In May of 2021, Zach graduated from the University of Colorado – Boulder with an MBA focused on IT business strategy and data analytics. His passions are marketing, storytelling, and leveraging the power of networks to solve problems. During his time as a graduate student, Zach interned for a Colorado-based Cyber security startup, an innovative coffee startup, and Deloitte Consulting. The Deloitte opportunity was a result of Zach’s coordination with HAF/A1 to curate the first ever “mini-Education with Industry” which enabled him to spend 4 months immersing in large scale organizational transformation and change management project teams. During this time, he supported various organizations such as USAID, USAF Air Combat Command, and a Kenyan non-profit. He also co-founded Air Force Gaming, a grassroots movement of gamers which picked up so much momentum that the DAF essentially “acquired” it in the fall of 2020.

Capt Baumann was initially assigned to the 92d Force Support Squadron where he was placed as the leader of a 10-member financial accounting team responsible for 18-unit businesses, a 120 line-item budget, and \$16M worth of accounts. He then became the Chief of Readiness & Plans, where he took responsibility of unit deployments, operations, and readiness. During this time his team was recognized as the best operations team across the entire Air Force.

Wrapping up his time in the Northwest, Capt Baumann then served as the Chief of Military Personnel, where he led a 28-member team and advised senior leadership on all things personnel and policy. Finally, Capt Baumann served at the Headquarters, U.S. Forces Korea and United Nations Command, as a Policy and Programs Officer. During this one-year remote tour, he provided analysis and sustainment of 25 joint policies & programs.

2021 SPEAKING:

TEDxLackland, TEDxDAU, JBSA Innovation Summit, AFSA 2021, DEF2021, Serious Play Conf (Panel), I/ITSEC

EDUCATION

2021 Masters of Business Administration, University of Colorado – Boulder

2014 Bachelor of Science, Environmental Economics & Policy, University of Illinois at Urbana-Champaign

ASSIGNMENTS

1. May 2015 - June 2016, Deputy Resource Manager, 92nd Force Support Squadron, Fairchild Air Force Base, WA.
2. June 2016 - June 2017, Chief, Readiness & Plans, 92nd Force Support Squadron, Fairchild Air Force Base, WA.
3. June 2017 - June 2018, Chief, Military Personnel, 92nd Force Support Squadron, Fairchild Air Force Base, WA.
4. June 2018 - July 2019, Policy & Programs Officer, HQ, U.S. Forces Korea and U.N. Command, U.S.A.G. Humphreys, Pyeongtaek-si, Republic of Korea.
5. July 2019 – May 2021, MBA Candidate, University of Colorado, Boulder, CO.
6. June 2021 – Present, Personnel Research Analyst, Air Force Personnel Center, San Antonio, TX.

MAJOR AWARDS AND DECORATIONS

Defense Meritorious Service Medal

Air Force Commendation Medal

Joint Service Achievement Medal

Republic of Korea Letter of Commendation

PACOM's A1 Staff Company Grade Officer of the Year

EFFECTIVE DATES OF PROMOTION

Second Lieutenant May 18, 2014

First Lieutenant Nov. 18, 2016

Captain Nov. 18, 2018



Ethan Wagner

Lead Aerial Photographer

Media Fusion, Inc.

Edwards AFB

Ask me about

Photography, Videography, Drums

I'm passionate about

aviation, photo and video

[linkedin.com/in/ethan-wagner-5a5a011a1](https://www.linkedin.com/in/ethan-wagner-5a5a011a1)

IG: [ethan.wagner.photo](https://www.instagram.com/ethan.wagner.photo)

“Aerial Photographer with 10 years of Flight Test experience support missions for the Air Force Test Center”

Ethan Wagner is the Deputy Project Manager and Lead Aerial Photographer at Media Fusion Inc., operating out of Edwards Air Force Base. His Photography and Videography have helped capture critical flight test data for the development and fielding of war winning capabilities. His career began in the administrative office of the Edwards Photo Lab, facilitating requests and maintaining the multimedia team's schedule. He then cross trained as a photographer, supporting ground test missions as well as general photography for the public affairs office.

After working as a “ground” photographer for 6 years, Ethan began training to become an aerial flight test photographer, flying and capturing photos and videos of test missions from the backseat of high performance aircraft like the F-16. For the last 5 years Ethan has had the privilege to fly in 11 different airframes, supporting the Air Force, NASA, DARPA, Boeing, Lockheed and Northrop Grumman as well as the Air National Guard. His work has been featured in Forbes, Insider and Air Forces Monthly. Ethan is married to an incredible woman and has two beautiful daughters who mean the world to him. In his spare time he enjoys playing drums, cooking, hiking, video gaming and spending time with his family.



Carrie Hernandez

CEO and Co-Founder

Rebel Space Technologies, Inc.

Ask me about

Artificial Intelligence, Space Launch, Cybersecurity

I'm passionate about

Applying intelligent communications solutions designed for deep space operations to solve the most complex security and connectivity challenges on Earth.

[linkedin.com/in/carriehz/](https://www.linkedin.com/in/carriehz/)

“Securing humanity’s hyper-connected infrastructure anywhere from Earth to deep space.”

Carrie Hernandez is the co-founder and Chief Executive Officer of Rebel Space Technologies, a software company enabling secure connectivity through the power of distributed sensing and scalable intelligence. Carrie has more than twenty years of experience developing innovative solutions for some of the most demanding problems in space technology and cybersecurity. Prior to founding Rebel Space, she applied her obsession with Artificial Intelligence and intelligent communications to solve challenging problems at SpaceX, Slingshot Aerospace, and the Department of Defense. She served in the US Air Force from 1992-1997 as a Far-East Cryptolinguist (1N3), and again from 2003 - 2011 as a Developmental Engineer. Carrie has earned a BS in Electrical Engineering from the University of Wyoming and an MS in Electrical Engineering from the University of Colorado at Colorado Springs.



Gabe Mounce

Deputy Director, SPACEWERX

Air Force Research Lab-New Mexico

Ask me about

US Space Force, Space Sustainability, Innovation Culture

I'm passionate about

growing diverse ecosystems and connecting loose confederations of skunkworks

Twitter @GabeMounce

“The importance of Space Sustainability and Space Force”

Mr. Mounce is the Deputy Director of SpaceWERX, the Space component of AFWERX, the Department of the Air Force’s Commercial Innovation office. In this role, he oversees the execution of the entire SpaceWERX portfolio to include direct oversight of the SpaceWERX Accelerators *Hyperspace Challenge* (Albuquerque) and *Catalyst Space Accelerator* (Colorado Springs) focused on connecting the entrepreneurial start-up community to the US Space Force enterprise. He also leads the SpaceWERX *Orbital Prime* initiative on behalf of Space Systems Command (SSC) and the Air Force Research Lab (AFRL) aimed at accelerating the market for On-orbit Servicing, Assembly and Manufacturing (OSAM) toward Active Debris Remediation. He is also the Technology Commercialization Lead for AFRL in New Mexico where he oversees technology transfer, community engagement & outreach, congressional interactions, and marketing & publicity for Directed Energy and Space Vehicle technology.

Prior to this, Mr. Mounce served as the Program Manager for the Air Force Research Lab’s Space Electronics Program where he oversaw Air Force & DoD technology research focused on increasing the reliability, survivability and performance of the microelectronics used in US Air Force and DoD space systems.

Mr. Mounce is also a Colonel in the USAF Reserve where he serves as the Senior Reservist to the Chief of Staff, Combined Forces Space Component Command (USSPACECOM) at Vandenberg Space Force Base. He previously served as Senior Reservist to the USSF SSC’s Innovation & Prototyping Directorate in New Mexico and as the AFRL Cyber liaison to the Air Force Operational Test & Evaluation Center where he led a team to win the *Reserve Team of the Year* for conducting cyber vulnerability analysis on the entire Air Force weapon system inventory.

Mr. Mounce previously served on active duty in several roles to include interim Director for the Missile Defense Agency’s Airborne Laser Advanced Capabilities Office, Assistant Director of Operations for an Air Force unit conducting Electronic Warfare and Space testing, and Lead Engineer on the F-35 Joint Strike Fighter Antenna Evaluation Program.

Mr. Mounce has degrees from New Mexico State University and the Air Force Institute of Technology (AFIT) in Electrical Engineering. He is passionate about New Mexico and showcasing it as a great place to live and work.

Education

Air War College (Air Force), May 2020
New Mexico Leadership Development Program (US Office of Personnel Mgt), Abq, NM, 2013
Air Command and Staff College (Air Force), 2010
Squadron Officer School (Air Force), 2003
MS in Electrical Engineering, Air Force Institute of Technology, Dayton, Ohio
BS in Electrical Engineering, New Mexico State University, Las Cruces, New Mexico

Publications

DoD Partnerships with Startups Drive Innovation in Space Technology, Op-Ed, [Spacenews](#), Dec 2020
Measuring Power Usage & Sensitivity...for Event-Based Cameras, [IEEE Sensors](#), Oct 2020
The AFRL Space Vehicles Directorate loves a good Space Accelerator, [FedScoop](#), Oct 2018
Chiplet Based Approach for Heterogeneous Processing &.....Architectures, IEEE Aerospace Conf, Mar 2016
A Framework to Analyze Processor Architectures....Space Computing, [IEEE Aerospace Conference](#), Mar 2014
Next Gen Flight Computing: A Joint Investment of NASA & AFRL, [2013 Workshop on Spaceflight Software](#), 2013
FIST vs the Incredible Inevitable, [Defense AT&L Magazine](#), July-August 2010
Twitter is Mission Critical, [SIGNAL](#) magazine, AFCEA International, October 2009
On Failure, [Defense AT&L Magazine](#), May-June 2009
Metaphors are Mindfunnels, [Defense AT&L Magazine](#), Nov-Dec 2008
The Truth About Process Lost Cost, [Defense AT&L Magazine](#), Sept-Oct 2008
Diversity and Freaks, [Defense AT&L Magazine](#), May- June 2008
Post Modern Program Management, [Defense AT&L Magazine](#), May-June 2008
Krog's New Weapon, [Defense AT&L Magazine](#), March-April 2008
The Danger of Caution, [Defense AT&L Magazine](#), Nov-Dec 2007
The Process Cycle, [Defense AT&L Magazine](#), July-August 2007
To Speed it Up, Size it Down, [Defense AT&L Magazine](#), May-June 2006
The Fast Inexpensive Simple Tiny (FIST) Comic, [Defense AT&L Magazine](#), March-April 2006
F-35 Antenna Measurement Program, [AFRL Technology Horizons](#), Oct 05
[Building Blocks for Time-Resolved Laser Emission....](#), AFIT, Air University, 25 march 2003

Significant Awards/Recognitions

AFRL Space Vehicles Director's Cup Award, 2019, 2020
AFRL Space Vehicles Tech Transfer Team Award, 2019
Air Force Reserve Team of the Year for Information Operations, 2016
Sparky Baird Award, AFCEA, best article published in SIGNAL magazine during 2009
Joint Service Commendation Medal, Jan 2012
Air Force Meritorious Service Medal, Jun 2016 (3 oak leaf clusters)
Air Force Commendation Medal, Aug 01
Air Force Organizational Excellence Award (2 oak leaf cluster)
National Defense Service Medal (1 device)
Global War on Terrorism Service Medal

Professional and Honorary Distinctions

Board Member, New Mexico Governor's Technology Research Council, present
Senior Member *Institute of Electrical and Electronics Engineers*, September 2012
Member *Sociedad de Ingenieros* of New Mexico State University, inducted 1999
Tau Beta Pi National Engineering Honor Society, inducted 1998
Eta Kappa Nu National Electrical Eng. Honor Society, inducted 1998 (VP of AFIT chapter)



Captain Tyler (Kode) Brown

**F-15E/EX Experimental Test Weapon Systems Officer (WSO),
40th Flight Test School (FTS),
Eglin AFB, FL**

Ask me about

Autonomy, Flying, Life & Service

I'm passionate about

the opportunity to serve this great country while pursuing my dream career of flying fast jets and conducting cutting edge research, while being excited for the future of U.S. national defense and technology.

“Artificial Intelligence, Flying, Inspiration”

Captain Tyler Brown, callsign “Kode” (born March 24, 1992, Everett, WA) is currently a F-15E Experimental Test Weapon Systems Officer (WSO) at Eglin AFB, FL. He completed his bachelor’s degree in Mechanical Engineering with a focus in Mechatronics at the University of Washington in Seattle, WA, and completed two master’s degrees through the Joint Air Force Institute of Technology (AFIT) - USAF Test Pilot School program in both Electrical & Flight Test Engineering. Kode was mission qualified at RAF Lakenheath, UK, where he served a 6-month deployment in support of Operation Inherent Resolve (OIR). Kode has worked with the Air Force Research Laboratory (AFRL) focusing research on autonomy related areas including flight control systems, artificial intelligence, and guidance and navigation. Kode was the project manager for the Have DUDE test management project (TMP), where artificial intelligence agents were trained to pilot a real jet aircraft to fly in formation with an F-16 jet. Kode has over 1000 military and civilian flight hours in 29 different aircraft.



David Nils Larson

Senior Advisor for Aero Flight Research,
X-59 Project Pilot,
NASA Armstrong Flight Research Center, Edwards AFB

President of the Society of Experimental Test Pilots

Ask me about

Sonic Thump, Future Flight Research Demos, NASA

I'm passionate about

Research Flight Test

“Looking at past flight research and how it’s leading to new opportunities for future Aero Flight Research.”

David Nils Larson is a research test pilot at NASA’s Armstrong Flight Research Center in Edwards, California. He is NASA’s lead pilot for the X-59 Quiet Supersonic Technology (QueSST) aircraft, and is assigned to Armstrong’s F/A-18, F-15, T-34 research and mission support aircraft and DC-8 airborne science aircraft. Larson also serves as senior advisor for NASA aeronautical flight research. In this role, he is a strategic advisor to program directors for agency mission directorates concerning aeronautics flight research planning, execution, aircraft airworthiness and risk management for future flight research projects.

The experimental X-59 aircraft will demonstrate the ability to fly faster than the speed of sound and reduce the loudness and intensity of the sonic boom, typically associated with such speeds. In support of this effort, Larson has flown numerous supersonic research flights in support of NASA’s Commercial Supersonic Technologies project. This has included supersonic flights in California, Florida and Texas, preparing NASA for community overflights of the X-59 starting in 2024.

Prior to joining NASA in 2007, Larson was on active duty with the U.S. Air Force. He has accumulated more than 7,000 hours of military and civilian flight experience in more than 100 fixed- and rotary-winged aircraft.

During his time in the Air Force, Larson served as a first assignment instructor pilot in T-37 trainers; an operational U-2 pilot; a test pilot flying the F-15, T-38C and RU-38; a test pilot instructor on exchange at the U.S. Navy Test Pilot School teaching systems and fixed-wing flight test in the F/A-18, T-2, U-6A and X-26; and as commander of the U-2 flight test detachment and depot in Palmdale, California. He finished his Air Force career as the deputy group commander for the 412th Operations Group at Edwards Air Force Base. He retired from active duty in 2007 with the rank of lieutenant colonel.

At NASA, Larson previously served as Armstrong’s flight crew branch chief, also known as chief pilot, and was responsible for supervision of the pilots, navigators, UAV operators and flight engineers who flew a variety of specialized aeronautical research, operational science and mission support aircraft. Prior to that he served as deputy chief of the flight crew at Dryden (now Armstrong).

He has worked on numerous supersonic projects and the Mars Science Laboratory (MSL) landing radar tests in the F/A-18, the F-16 Automatic Collision Avoidance Technology program, various high speed propulsion projects in the F-15, Intelligent Flight Control projects on the F/A-18 and NF-15B and numerous airborne science missions flown on the ER-2 and DC-8 airborne science aircraft.

Larson earned a Bachelor of Science in astronautical engineering in 1986 from the U.S. Air Force Academy in Colorado Springs, Colorado. He is an associate fellow of the Society of Experimental Test Pilots and a graduate of U.S. Air Force Test Pilot School Class 95A, "The Spin Doctors."



Swami Iyer

**President of Aerospace Systems,
Virgin Galactic**

Ask me about

my favorite airplane

I'm passionate about

Spaceflight

[linkedin.com/in/swamibiyer](https://www.linkedin.com/in/swamibiyer)

“The birth of space tourism in the Antelope Valley”

Swami Iyer is the President of Aerospace Systems for Virgin Galactic Holdings. He is responsible for leading the manufacturing, engineering and program management teams, processes and facilities to support the design and build of our current and future fleet of vehicles. He has over 20 years of experience in commercial and highly classified aerospace, defense and cyber industries.

Prior to joining Virgin Galactic, Swami served as President of GKN Advanced Defense Systems, which provides advanced components and technology to leading military aircrafts and helicopters and, before this, served as Chief Executive Officer of Israel Aerospace Industries North America, which provides systems and intelligence to the aerospace, land, sea, and cyber domains. He was also the President of Ultra Electronics, 3eTI, which specializes application-engineered solutions for the defense, security and critical detection and, prior to that, was Vice President, Defense & Space at Honeywell Aerospace, where he led multiple, multi-billion dollar international and domestic defense programs.

An accomplished U.S. Air Force test pilot, Swami has flown over 3500+ hours in 45 aircraft during his military flying career. He earned Bachelor's and Master's degrees in Aerospace Engineering from the University of Michigan as well as a Master's degree in Flight Test Engineering from the United States Air Force Test Pilot School.



Dr. David (Jester) G. Smith

**Director of Air Force Production and Flight Test Facility,
412th Test Wing Operating
Plant 42**

Ask me about

the unique capabilities and processes of the jewel in the desert called Plant 42

I'm passionate about

Our Airmen and total force warfighters—we must strive every day to support the delivery of the best possible weapon systems so they can deter aggression and defend this great Nation.

“Essential infrastructure and support capabilities providing sustainment to current, and development of highly advanced combat capabilities for the warfighter.”

Doctor David G. Smith is the Director of the multi-billion dollar Air Force Production Facility, Plant 42. Previously he was the Senior Installation Support Director for Edwards Air Force Base, where he champions essential infrastructure and support capabilities directly influencing the flight test mission. He is also retired from the United States Air Force with most recent duties as the Inspector General for Edwards AFB and an Experimental Test Flight Radar Navigator attached to the 419th Flight Test Squadron, supporting the development, evaluation and procurement of new technologies in aircraft, performance, weaponry, and avionics. He is also the Special Assistant to the Commanding General, California Guard, California Military Department, where he as a Brigadier General supports Title 32 actions for the readiness, effectiveness and integration of forces with the California Army and Air National Guard.

Doctor Smith entered the Air Force in 1982, and flew B-52's at multiple locations. He many accomplishments include earning the coveted Fairchild Trophy; an achievement recognized by President Reagan. He was hand-picked from all B-52, B-1 and FB-111 crews to accompany General Chain, CINCSAC, to represent the SAC alert force receiving the David C. Schilling Award for the year's most outstanding contribution to flight. He has also served as a Regimental Air Liaison Officer attached to the elite 11th Armored Cavalry Regiment. He has deployed to combat duty in support of Operation Iraqi Freedom. Doctor Smith is married to the former Denise Cook, and they share six children, a son Damien, and daughters, Daira, Darcie, Avalon, Bailee, and Madyson, along with five grandchildren.

Doctor David G. Smith is the Director of the Production and Flight Test Facility, 412th Test Wing Operating Location-Air Force Plant 42 in Palmdale, California. He leads a multi-functional team that supports over 12,000 contract and government personnel by providing business integration, airfield operations, security and law enforcement, fire protection, communications, logistics, and civil engineer services to a 5,600-acre Government-Owned, Contractor-Operated business campus and industrial complex. Doctor Smith's primary customers are Boeing, Northrop Grumman, and the Lockheed-Martin "Skunkworks" that produce, service, and test B-2, U-2, RQ-4, F-22, and F-35, along with other research and development projects. He also supports NASA's Armstrong Flight Research Center's planetary and earth science missions to include the unique Stratospheric Observatory for Infrared Astronomy (SOFIA) airborne platform.

Doctor Smith entered the Air Force in 1982, commissioned through Officers Training School. He received his flight training at Mather Air Force Base, California. Selected for B-52's, he moved to Castle Air Force Base, California, attending the first Navigator Offensive Avionics Systems class graduating with top honors. His first formal tour was at Ellsworth Air Force Base, South Dakota as a Navigator and Instructor Navigator. Closure of B-52 operations there prompted a move to Fairchild Air Force Base, Washington, as a Navigator, Instructor Navigator, Radar Navigator, Instructor Radar Navigator, Flying Safety Officer, and Assistant Flight Commander. Here he was the lead navigator for the Wing's record setting performance in SAC's 1986 Bombing and Navigation Competition, winning 9 of 11 awards--including the coveted Fairchild Trophy; an achievement recognized by President Reagan. He was hand-picked from all B-52, B-1 and FB-111 crews to accompany General Chain, CINCSAC, to represent the SAC alert force receiving the David C. Schilling Award for the year's most outstanding contribution to flight. Doctor Smith then moved to Andersen Air Force Base, Guam, as an Instructor, Flight Examiner and Standardization and Evaluation branch chief. There he completed the elite PAC ACES (Pacific Air Forces Advanced Combat Employment School) strike force course in the Philippines. Closing B-52 operations there Doctor Smith moved back to Castle Air Force Base as a Combat Crew Training School Instructor Radar Navigator, Flight Examiner, Branch Chief, and Executive Officer. Doctor Smith was instrumental in the complete revision of the B-52 curriculum shifting the focus from nuclear to conventional war fighting. As Castle closed he transferred to Beale Air Force Base where he served as the Assistant Chief Wing Planning Staff, Chief Wing Inspections and Chief Wing Command Post, directly impacting the critical worldwide U-2 and SR-71 reconnaissance mission. He was then individually selected for the unique National Training Center serving as a Regimental Air Liaison Officer attached to the elite 11th Armored Cavalry Regiment, instructing and evaluating the close air support mission in joint operations with the United States Army. Following this assignment he was by-name selected to support the experimental B-52 mission at Edwards Air Force Base, and then became the Deputy Director of the 412th Test Management Group with oversight over all of Edward's flight test and evaluation efforts. He retired from active duty as the Edwards Inspector General.

Transitioning to Civilian Service he became the Edwards AFB Government Flight Representative overseeing all contractor flight and ground operations at Edwards until his appointment to the position of Senior Installation Support Director for Edwards AFB. Here he championed essential infrastructure and support capabilities directly influencing the flight test mission, until selected as the Director of Plant 42. Doctor Smith is a master navigator with over 3000 flying hours and a private pilot. He also serves as a Brigadier General in the Cal Guard. Doctor Smith was born a military dependent in Camp Zama, Japan, and calls Hawaii home. He is married to the former Denise Cook, and they share six children, a son Damien, and daughters, Daira, Darcie, Avalon, Bailee, and Madyson.

EDUCATION

1976 Bachelor degree, General Studies/Chemistry, Chaminade University of Hawaii
1989 Squadron Officers School, in residence, Air University, Maxwell Air Force Base, Alabama 1994 Masters of Aeronautical Science, Embry-Riddle Aeronautical University
1996 Air Command and Staff College, Air University, Maxwell AFB, Alabama
2001 National Test Pilot School, Mojave, California
2002/06 Certified Acquisition Professional, Level 3, Test and Evaluation, Level 3, Project Management 2003 Air War College, Air University, Maxwell AFB, Alabama
2012 Doctor of Business Administration specializing in Aviation, Northcentral University, Arizona

ASSIGNMENTS

1. August 1982 - November 1982, Officers Training School, Lackland AFB, Texas
2. December 1982 - September 1983, Undergraduate Navigator Training, Mather AFB, California
3. September 1983 - June 1984, B-52 Combat Crew training, Castle AFB, California
4. June 1984 - October 1985, B-52 Navigator, and Instructor Navigator, Ellsworth AFB, South Dakota
5. October 1985 - October 1989, B-52 Navigator, Instructor Navigator, Radar Navigator, Instructor Radar Navigator, and Assistant Flight Commander, Fairchild AFB, Washington
6. October 1989 - May 1990, Instructor Radar Navigator, Flight Examiner, and Standardization and Evaluation Branch Chief, Andersen AFB, Guam.
7. May 1990 - August 1995, Executive/Quality Officer, B-52 Combat Crew Training Squadron Instructor Radar Navigator, Flight Examiner, Academic Instructor, Branch Chief, Castle AFB, California
8. August 1995 - September 1998, Assistant Chief Wing Planning Staff, Chief Wing Inspections, Chief Wing Command Post, Beale AFB, California
9. September 1998 - June 2001, Regimental ALO/Flight Commander, Deputy Commander/Executive Officer, Det 2 USAF Air Ground Operations School, National Training Center, Ft Irwin, California
10. June 2001 - December 2010, Chief, B-52 Avionics and Weapons Integration and Experimental Test Flight Radar Navigator; Acting and Deputy Director, Project Management Directorate & Test Management Group; Deployed to Baghdad, Iraq; Installation Inspector General, Edwards AFB, California
11. May 2011 - October 2013, Government Flight Representative, Edwards AFB California
12. October 2013 - present, Installation Support Director, Edwards AFB California
13. June 2011 – June 2014, Commander 163rd Reconnaissance Wing Support Unit, March ARB, California
14. June 2014 – February 2021, Commander, Air Support Command, State of California
15. February 2021– Present, Special Assistant to the Commanding General, Cal Guard

FLIGHT INFORMATION:

Rating: Master Navigator (military), Private Pilot (civilian) Flight Hours: Approximately 3000
Aircraft: B-52G and H; other Aircraft: F-16, T-37, T-43, OH-58, UH-1, UH-60, Cessna 172, Chipmunk (x), Derringer (x), Dove (x), Merlin (x) "x denotes experimental"

AWARDS AND DECORATIONS

Legion of Merit (CA), Meritorious Service Medal with 6 oak leaf clusters Aerial Achievement Medal
Joint Services Commendation Medal, Air Force Commendation Medal, Army Commendation Medal Air Force Achievement Medal with two oak leaf clusters, Army Achievement Medal
Iraqi Campaign Medal
Global War on Terrorism Service Medal Humanitarian Service Medal
Military Outstanding Volunteer Service Medal Combat Readiness Medal with three oak leaf clusters National Defense Service Medal

OTHER ACHIEVEMENTS

15th Air Force Crew of the Year

1986 SAC Bombing and Navigation Competition Lead Navigator, winning the Crumm, Ryan, Lemay, Dougherty, Mathis, and coveted Fairchild Trophies

Represented SAC's alert force with CINCSAC at David C. Schilling award Presentation Honor Graduate, Joint Firepower Controller Course, USAF Battlestaff Training School

EFFECTIVE DATES OF PROMOTION

Second Lieutenant, 4 November 1982 Lieutenant Colonel, 1 May 1999

First Lieutenant, 4 November 1984 Colonel (CA), 5 March 2013

Captain, 4 November 1986 Brigadier General (CA), 1 August 2016

Major, 1 October 1994 (Current as of Oct 2016)

(Current as of June 2021)



Lars Hoffman

**Senior Vice President,
Rocket Lab**

Ask me about

Rocket Lab, SpaceX, Space Industry

I'm passionate about

expanding humanity's presence into space

“From USAF Test Pilot School Commandant to leading the growth of SpaceX and Rocket Lab as world leaders in the global space industry”

As Senior Vice President, Lars is responsible for Rocket Lab's global business and government affairs. With more than 30 years of experience in national security and aerospace, Lars brings a deep knowledge of the global space industry and U.S. Government space requirements.

Before joining Rocket Lab, Lars was an executive at SpaceX, from 2014 to 2018. At SpaceX, Lars facilitated certification of the Falcon 9 and Falcon Heavy launch vehicles and he led the capture of more than \$2 billion of national security space business.

Prior to joining industry, Lars completed a distinguished career in the United States Air Force, as a U-2 reconnaissance pilot, a test pilot, and in senior leadership roles at The Pentagon.

Lars holds advanced engineering degrees from the United States Air Force Academy, U.S. Air Force Institute of Technology, and U.S. Air Force Test Pilot School. Lars also earned national security degrees from MIT, Air University, and National Defense University, and a Master of Business Administration degree from UCLA.

About Rocket Lab:

Founded in 2006, Rocket Lab is an end-to-end space company with an established track record of mission success. We deliver reliable launch services, spacecraft components, satellites and other spacecraft and on-orbit management solutions that make it faster, easier and more affordable to access space. Headquartered in Long Beach, California, Rocket Lab designs and manufactures the Electron small orbital launch vehicle and the Photon satellite platform and is developing the Neutron 8-ton payload class launch vehicle. Since its first orbital launch in January 2018, Rocket Lab's Electron launch vehicle has become the second most frequently launched U.S. rocket annually and has delivered over 100 satellites to orbit for private and public sector organizations, enabling operations in national security, scientific research, space debris mitigation, Earth observation, climate monitoring, and communications. Rocket Lab's Photon spacecraft platform has been selected to support NASA missions to the Moon and Mars, as well as the first private commercial mission to Venus. Rocket Lab has three launch pads at two launch sites, including two launch pads at a private orbital launch site located in New Zealand, one of which is currently operational, and a second launch site in Virginia, USA which is expected to become operational in 2022.



Dr. Anita Sengupta

CEO and Founder
Hydroplane Ltd.

Professor of Astronautical Engineering,
University of Southern California

Ask me about

Mars, Motorcycles, Ion Drive

I'm passionate about

decarbonizing aviation

@Doctor_Astro

facebook.com/DrAnitaSengupta

AnitaSengupta.com

linkedin.com/in/anitasen

“Rocket scientist, pilot, and entrepreneur working to decarbonize aviation”

Dr. Anita Sengupta is an aerospace engineer, instrument rated pilot, rocket scientist, and veteran of the space program. She has developed technologies that have enabled the exploration of Mars, asteroids, and deep space for 20 years. Her career began with launch vehicles and communication satellites at Boeing Space and Communications. She then worked for NASA for 16 years where her engineering projects included her PhD research on developing the ion propulsion system for the Dawn Mission (currently in the main asteroid belt), the supersonic parachute that landed the Curiosity rover on Mars, and the Cold Atom Laboratory an atomic physics facility on board the International Space Station.

After leaving NASA she moved into the high-tech transportation sector and led the development of the Hyperloop as Senior Vice President of Systems Engineering at Virgin Hyperloop, a ground based transportation system that operates under vacuum and at jet aircraft speeds.

Her most recent entrepreneurial venture is as founder/CEO of Hydroplane Ltd., which is developing hydrogen fuel cell power plant technology for carbon emission free aviation, marine, and ground vehicles. Hydroplane is an awardee of an US Govt Agility Prime contract to develop the novel hydrogen fuel cell powerplant for a range of commercial and governmental use cases.

Dr. Sengupta is also Professor of Astronautical engineering at the University of Southern California where she teaches and is researching and technologies for the human exploration of Mars, earth re-entry vehicles, and boom-less supersonic flight.

Dr. Sengupta received her MS and PhD in Aerospace Engineering from the University of Southern California. In her spare time, she is active in emergency service operations as a Captain and Air Crew in the US Air Force Auxiliary Civil Air Patrol. In her free time, she is a member of the Caltech flying club and working on her commercial rating, is a sport motorcyclist, scuba diver, mountain biker, professional public speaker, and science communicator.



Daniel R. Millman, Ph.D.

**Chief Technology Officer,
Stratolaunch**

Ask me about

Reusable, Hypersonic, Flight Test

I'm passionate about

computational fluid dynamics, hypersonic flow, and flight test.

[linkedin.com/in/daniel-millman-8a447820](https://www.linkedin.com/in/daniel-millman-8a447820)

“How to lead affordability of reusable hypersonic flight testing.”

Dr. Daniel R. Millman is the Chief Technology Officer at Stratolaunch, and has extensive experience in hypersonic aerodynamics, hypersonic vehicle design, and flight test. As a Chief Engineer at Booz Allen Hamilton, he was named an Engineering Fellow for Hypersonics and co-led the Hypersonic Working Group for the firm. He has worked with the Air Force Research Labs to design new concepts for an extended range, maneuverable hypersonic glide vehicle. He received a patent for a flight control system using a flush air data system that is usable on various aircraft and missiles, including hypersonic re-entry vehicles. He designed an autopilot for an agile missile concept using reaction control jets for rapid turns. He advised the USAF on conceptual design methodologies for advanced aircraft, as well as tactical and cruise missiles. Dr. Millman served in the US Air Force as a B-52H Instructor Pilot and Air Force Test Pilot. He graduated from the USAF Test Pilot School (TPS) in 1998 and was the project pilot for the Advanced Weapons Integration Program on the B-52H. In 2004, he graduated from the Air Force Institute of Technology with a Ph.D. in Aeronautical Engineering. His three years of research led to four journal articles, four conference papers, and a session keynote address at an international conference. After earning his Ph.D., Dr. Millman returned to Edwards AFB where he instructed at TPS. Besides classroom instruction in compressible/hypersonic flow and modeling and simulation, he taught multi-engine flight test techniques in the B-52H and the C-12C. He was chosen to be the first director of the Hypersonic Combined Test Force (CTF) in 2006. His CTF was responsible for ground and flight testing of the X-37A, X-51A, and the development of the Blackswift Hypersonic Aircraft. He also conducted the first test flight of Fisher-Tropsche fuel on an Air Force aircraft – the B-52H. On May 26, 2010, he piloted a B-52H to 49,500 feet and performed the first launch of the X-51A, which set a world record for a climb using a scramjet. As a command pilot, he flew over 3600 hours in 35 different aircraft types.



Dr. Eileen A. Bjorkman

**Executive Director,
Air Force Test Center
Edwards AFB**

Ask me about

Flying, Flight Testing, Modeling and Simulation

I'm passionate about

aviation history

[linkedin.com/in/eileen-bjorkman-b323b51a/](https://www.linkedin.com/in/eileen-bjorkman-b323b51a/)

“Flight Testing at Edwards Air Force Base: Toward the Unexplored”

Dr. Eileen A. Bjorkman, a member of the Senior Executive Service, is Executive Director, Air Force Test Center, Edwards Air Force Base, California. She serves as principal deputy to the AFTC Commander on all matters under the cognizance of the Commander. She has extensive authority for broad management, policy development, decision-making and effective program execution of the AFTC's developmental test and evaluation mission. Her role as an Executive Director involves long and short-range planning, policy development, the determination of program and center goals, including those involving scientific and technical matters, and the overall management of the AFTC enterprise.

Dr. Bjorkman was commissioned through Officer Training School in 1980 and served nearly 30 years in the Air Force, retiring as a colonel. During her military career, she served as a Flight Test Engineer, Instructor and Test Squadron Commander. She was a Senior Non-rated Aircrew Member and flew more than 700 hours as a Flight Test Engineer in more than 25 different aircraft, primarily the F-4 Phantom II, F-16 Fighting Falcon, C-130 Hercules and C-141 Starlifter. She also held multiple staff and director positions involving modeling, simulation, analysis and joint testing, retiring from active duty as the Chief of the Modeling and Simulation Policy Division, Warfighter Systems Integration and Deployment. Dr. Bjorkman was appointed as a Senior Leader Executive in January 2010, and entered the Senior Executive Service in 2015.

EDUCATION

1979 Bachelor of Science, Computer Science, University of Washington, Seattle

1982 Bachelor of Science, Aeronautical Engineering, Air Force Institute of Technology, Wright-Patterson Air Force Base, Ohio

1984 Squadron Officer School, Maxwell AFB, Ala.

1986 Flight Test Engineers Course, U.S. Air Force Test Pilot School, Edwards AFB, Calif.

1986 Master of Science, Aeronautical Engineering, Air Force Institute of Technology, Wright-Patterson AFB, Ohio

1993 Air Command and Staff College, Maxwell AFB, Ala.

1997 Air War College, Maxwell AFB, Ala., by correspondence
1998 Advanced Program Managers Course, Defense Systems Management College, Fort Belvoir, Va.
2000 Master of Science, National Resource Strategy, Industrial College of the Armed Forces, Fort Lesley J. McNair, Washington, D.C.
2012 Doctor of Philosophy, Systems Engineering, The George Washington University, Washington, D.C.

CIVILIAN CAREER CHRONOLOGY

1. January 2010–January 2011, Senior Advisor, Warfighter Systems Integration and Deployment, Office of Warfighting Integration and Chief Information Officer, Office of the Secretary of the Air Force, the Pentagon, Arlington, Va.
2. January 2011–September 2013, Technical Advisor, Air Force Flight Test Center, then-Air Force Test Center, Edwards Air Force Base, Calif.
3. September 2013–January 2015, Private sector, Everett, Wash.
4. January 2015–February 2017, Deputy Director of Operations, Directorate of Air, Space and Cyberspace Operations, Headquarters Air Force Materiel Command, Wright-Patterson AFB, Ohio
5. February 2017–July 2018, Deputy Director of Programs, Deputy Chief of Staff for Strategic Plans, Programs and Requirements, Headquarters U.S. Air Force, the Pentagon, Arlington, Va.
6. July 2018–October 2019, Deputy Director of Test and Evaluation, Headquarters U.S. Air Force, the Pentagon, Arlington, Va.
7. October 2019–present, Executive Director, Air Force Test Center, Edwards AFB, Calif.

MILITARY CAREER CHRONOLOGY

1. August 1980–April 1982, Student, Air Force Institute of Technology, Wright-Patterson Air Force Base, Ohio
2. April 1982–June 1984, Flight Test Engineer, 6585th Test Group, Holloman AFB, N.M.
3. June 1984–June 1985, Student, Air Force Institute of Technology, Wright-Patterson AFB, Ohio
4. June 1985–June 1986, Student, U.S. Air Force Test Pilot School, Edwards AFB, Calif.
5. June 1986–July 1987, Chief L. ANTIRN Engineer, F-16 Combined Test Force, Edwards AFB, Calif.
6. July 1987–August 1989, Chief, Data Processing Branch, U.S. Air Force Test Pilot School, Edwards AFB, Calif.
7. August 1989–August 1991, C-17 Flight Test Manager, C-17 System Program Office, Wright-Patterson AFB, Ohio
8. August 1991–August 1992, Liaison officer, C-17 System Program Office/Combined Test Force, Edwards AFB, Calif.
9. August 1992–June 1993, Student, Air Command and Staff College, Maxwell AFB, Ala.
10. June 1993–November 1995, Tactical Fighter Analyst, Air Force Studies and Analyses Agency, the Pentagon, Arlington, Va.
11. November 1995–August 1996, Commander, 846th Test Squadron, Holloman AFB, N.M.
12. August 1996–June 1998, Commander, 746th Test Squadron, Holloman AFB, N.M.
13. June 1998–August 1999, Chief, Commander's Action Group, Air Armament Center, Eglin AFB, Fla.
14. August 1999–June 2000, Student, Industrial College of the Armed Forces, Fort Lesley J. McNair, Washington, D.C.
15. June 2000–May 2002, Associate Director, Transformation Initiatives, Defense Modeling and Simulation Office, the Pentagon, Arlington, Va.
16. May 2002–October 2003, Deputy Director, Resource Analyses Directorate, Air Force Studies and Analyses Agency, the Pentagon, Arlington, Va.
17. October 2000–November 2004, Director, Simulation and Analysis Facility, Advanced Computational Analysis Directorate, Aeronautical Systems Center, Wright-Patterson AFB, Ohio
18. November 2004–July 2005, Deputy Director, Capabilities Integration Directorate, ASC, Wright-Patterson AFB, Ohio

19. July 2005–July 2008, Joint Test Director, Joint Test and Evaluation Methodology Joint Test and Evaluation Project, Office of the Secretary of Defense, Suffolk, Va.
20. July 2008–December 2009, Chief, Modeling and Simulation Policy Division, Warfighter Systems Integration and Deployment, Office of Warfighting Integration and Chief Information Officer, Office of the Secretary of the Air Force, the Pentagon, Arlington, Va.

MAJOR CIVILIAN AWARDS

- 2011–2013 Air Force Meritorious Civilian Service Award
- 2015–2017 Air Force Meritorious Civilian Service Award

MAJOR MILITARY AWARDS

- Defense Superior Service Medal
- Legion of Merit with oak leaf cluster
- Defense Meritorious Service Medal
- Meritorious Service Medal with four oak leaf clusters
- Air Force Commendation Medal with oak leaf cluster
- 2008 Military Tester of the Year, National Defense Industrial Association, Office of the Secretary of Defense

PROFESSIONAL MEMBERSHIPS AND ASSOCIATIONS

- International Test and Evaluation Association
- Society of Flight Test Engineers



Victor Luquin

Aerospace Engineer
773 Test Squadron /
Engineering Flight Science, Structures
Edwards AFB

Ask me about

Applied Mathematics, Space Exploration, Gardening

I'm passionate about

finding new ways to solve engineering problems

“Implementing AI in flight test and beyond.”

Mr. Victor Luquin is an Aerospace Engineer at Edwards Air Force Base. He is part of the Structures test team, where he has been instrumental in developing a Rapid Prediction Generator (RPG) algorithm for the 412th Test Wing.

Mr. Luquin attended California State University, Long Beach (CSULB) where he earned a Bachelor of Science (BS) with a double major in Aerospace Engineering and Applied Mathematics, in Science and Engineering. During his time at CSULB, Mr. Luquin completed five internships with the National Aeronautics and Space Administration (NASA). Three at NASA Langley Research Center in Hampton, VA supporting the Landing and Impact Research Facility team. Two at NASA Glenn Research Center in Cleveland, OH conducting research at the Ballistic Impact Lab. He also worked on a funded research project for the Army Research Lab (ARL) while earning his Master of Science (MS) in Aerospace Engineering with a focus in Aerospace Structures and Materials at CSULB.

After graduation, Mr. Luquin accepted a position as a flight test engineer with the Structures Flight (773 TS/ENFS). He worked approximately a year at the 416th CTF testing the F-15 Saudi Arabia (SA) platform which upgraded the aircraft to a Fly-by-Wire control system with activated outboard wing stations, doubling the store capability of all previous F-15 models. Currently, Mr. Luquin is a structures engineer at the 411th Flight Test Squadron testing various F-22 modernization programs ensuring continued F-22 air superiority.

EDUCATION

2018 Masters of Science Degree in Aerospace Engineering, Cal State Long Beach

2015 Bachelors of Science Degree (Double Major) in Aerospace Engineering and Applied Mathematics, Cal State Long Beach

ASSIGNMENTS

1. April 2019 - Present, F-22 Structures Engineer, 411 CTF, Edwards AFB, CA
2. February 2019 - March 2019, Aerospace Engineer, 773 TS/ENFS, Edwards AFB, CA
3. August 2018 - January 2019, F-15SA Structures Engineer, 416 CTF, Edwards AFB, CA
4. June 2016 - August 2017, Aerospace Engineer Graduate Intern, Ballistic Impact Lab, NASA Glenn Research Center, OH
5. June 2012 - August 2014, Aerospace Engineer Intern, Landing & Impact Research Facility, NASA Langley Research Center, VA

MAJOR AWARDS AND DECORATIONS

2021 Howard W. Leaf Award, Test Team of the Year (Air Force)
2021 Innovator of the Year (412 TENG, 773 TS)
2021 Innovation Team of the Year (773 TS)
2021 3rd Quarter Innovator Award (412 Test Wing, 412 TENG, 773 TS)
2021 3rd Quarter Team Award (411 CTF)
2021 2nd Quarter Team Award (412 Test Wing)
2020 Team of the Year (AFMC, 412 TENG, 773 TS, 411 CTF)
2020 3rd Quarter Innovation Team Award (773 TS)
2020 2nd Quarter Team Award (411 CTF)
2020 1st Quarter Team Award (412 TENG, 773 TS)
2020 1st Quarter Innovator Award (773 TS)
2019 2nd Quarter Team Award (412 TENG, 773 TS)



Lauren Kruszewski

**F-22 Structures Lead
773 Test Squadron /
Engineering Flight Science, Structures
Edwards AFB**

Ask me about

Airplanes, Sports, Travel

I'm passionate about

building relationships with local communities to promote STEM and inspire the next generation of engineers.

“Implementing AI in flight test and beyond.”

Ms. Lauren Kruszewski is the F-22 Structures Lead at the 411th Combined Test Force (CTF). In this roll, she leads an integrated government and contractor team through all phases of flight sciences testing, to include planning, execution and reporting.
355451

Lauren was born at Fort Carson in Colorado Springs, CO. Both of her parents were in the United States Army and she had the privilege of moving all over the country growing up. Lauren had three main passions: mathematics, planes, and golf. She began playing competitive golf at the age of six, and was recruited to play at the collegiate level. She chose to attend Embry-Riddle Aeronautical University (ERAU) in Prescott, AZ where she both studied Aerospace Engineering (Aeronautics) and captained the women's golf team. During her time at ERAU, Lauren completed three internships with the NASA Jet Propulsion Laboratory. She supported the Aerospace and Nuclear Engineering group and spent a majority of her time working on the Mars 2020 program.

After graduation, Lauren moved out to Lancaster, CA to work as a flight test engineer with the Structures Flight (ENFS). She spent 1.5 years at the 416th CTF testing the F-15 Saudia Arabia (SA) platform which upgraded the aircraft to a Fly-by-Wire control system with activated outboard wing stations, doubling the store capability of all previous F-15 models. Lauren was the primary F-15SA noise and vibration engineer, while also supporting the loads and flutter programs. Currently, Lauren is the lead structures engineer at the 411th Flight Test Squadron. Her team is responsible for testing various F-22 modernization programs that will ensure continued F-22 air superiority. While working at EAFB, Lauren has also earned a master's degree in Aerospace Engineering (Aeronautics) from Auburn University.

EDUCATION:

2021 MS Degree in Aerospace Engineering, Auburn University

2017 BS Degree in Aerospace Engineering, Embry-Riddle Aeronautical University (Prescott, AZ)

PROFESSIONAL EXPERIENCE:

2019 - Present: F-22 Structures Lead

2018 - 2019: F-22 Structures Engineer

2017 - 2018: F-15 Saudia Arabia Structures Engineer

2014 – 2016: NASA JPL Intern, Aerospace and Nuclear Engineering

PROFESSIONAL MEMBERSHIPS AND AWARDS:

Sigma Gamma Tau Member (Aerospace Engineering Honor Society)

Tau Beta Pi Member (Engineering Honor Society)

Embry-Riddle Aeronautical University Athletics Hall of Fame, Golf

Team of the Quarter, 3rd Quarter 2021 – 411th CTF

Team of the Quarter, 2nd Quarter 2021 – 412th Test Wing (TW)

Team of the Year, 2020 – Air Force Material Command

Team of the Year, 2020 – Air Force Material Command

Team of the Year, 2020 – 412th Test Engineering Group (TENG), 773rd Test Squadron (TS)

Team of the Year, 2020 – 411th CTF

Supervisor of the Year, 2020 – 773rd TS

Team of the Quarter, 2nd Quarter 2020 – 411th CTF

Team of the Quarter, 1st Quarter 2020 – 412th TENG, 773rd TS

Team of Quarter, 2nd Quarter 2019 – 412th TENG, 773rd TS

Air Force Association Howard W. Leaf Award (Test Team of the Year), 2018 – Air Force

Engineer of the Quarter, 3rd Quarter 2018 – 412th TW, 412th TENG, 773rd TS

Our sincerest appreciation for

