



Defense Orientation Conference Association

Live: Virtual Conference

CONFERENCE READ AHEAD

Friday, July 17th, 2020

8:00AM PDT to Noon PDT via Microsoft TEAMS

Army Futures Command

Ever since the founding of the United States, there has been a need keep her protected. In June of 1775, less than a year before the Declaration of Independence was signed, there was the creation of the Continental Army. That same fall, the Continental Marines and Continental Navy were established. The continental armed forces were there to defend the new nation from the British Empire. After the signing of the Treaty of Paris, ending the War for Independence, the continental forces were demobilized. However, the Congress of the Confederation did not wait long to establish what we now know as the United States Army in June of 1784. Throughout the years the armed forces multiplied, bringing the United States 6 total factions to protect and defend, not only her own lands, freedoms, and peoples, but those all around the globe.

Each of the armed forces have continually grown, adapted, modernized, and served unique purposes. The U.S. Army serves as the predominant land based forces supporting U.S. battles and occupations. Within the Army there are different branches, all of which were established to better serve the country. The United States Army Futures Command (AFC) is one of the newer branches, which started fulfilling missions in 2018. The AFC aims to modernize the Army. Six priorities pave the missions of the AFC:

1. Long-Range Precision Fires
2. Next-Generation Combat Vehicles
3. Future Vertical Lift Platforms
4. Mobile & Expeditionary Army Network
5. Air & Missile Defense Capabilities
6. Soldier Lethality

This virtual conference will bring us insights from those that have understanding of what led to the need and establishment of the AFC and what actions are currently being made to accomplish AFC priorities. As plans are being made, there is congressional pressure placed on this young program to produce.

Establishment of Army Future Command

Warfare: 2050

Master Sgt. David M. Smith, United States Army Sergeant Major Academy NCO Journal (May 2020)

There is an expectation as to what the future of wars, weapons, and fights will look like. This article explains why the AFC is involved.

Establishment of Army Futures Command Marks a Culture Shift

Joe Lacdan, Army News Service (August 27th, 2018)

Explores some shifts that the country made following the foundation of AFC.



Current Army Future Command Projects

Army Futures Command Boosting AI Training

Mandy Mayfield, National DEFENSE Magazine (NDIA) (June 10th, 2020)

New academic programs and task forces.

Constructive Digital Twins Coming Alive

Keith Brawner, Frank Tucker, Lawrence Ziock, IT²EC (2020)

Having a complete Digital Twin is new to the wargaming practitioners. This presentation explains what a digital twin could mean and what steps are being made to make it a reality.

Apply Advanced Technologies to Fight Pandemics

Diane DiEuliis, Peter Emanuel, James Giordano, and Alexander Titus, National Defense Magazine (May 15th, 2020)

Medical response systems were threatened, prompted to respond, and altered by the pandemic of 1918, so too must those infrastructures and functions of the governmental, civilian and commercial sectors of 2020's pandemic.

The Future of the Army Future Command

Pressure Will Mount on Army Futures Command to Produce Results

Stew Magnuson, National Defense Magazine (NDIA) (March 4th, 2020)

The AFC has the support of Congress, but will it last?

Thinking About What Could Be

General John M. Murray, PRISM (November 5th, 2019)

An Interview with General John M. Murray, Commanding General Army Futures Command

Innovation Tradecraft: Sustaining Technological Advantage in the Future Army

Adam Jay Harrison, Bharat Rao, and Bala Mulloth, Technological Innovation: Problems & Prospects (2019)

Identifies the key components of an innovation ecosystem (like the AFC) that can assist in developing nontraditional defense resources to cope with rapidly evolving technology threats.



Principal Speakers and Briefers

Lieutenant General Edward “Ed” C. Cardon

United States Army, Retired



Lieutenant General (Retired) Edward “Ed” Cardon was born in Texas and grew up in Watsonville, California. He graduated from West Point in 1982 and was commissioned as an engineer officer. He has M.S. from both the Naval Command and General Staff College and the National War College.

General Cardon’s service to our nation spans over 36 years where he honed his profession both domestically and internationally including work in Germany, Bosnia-Herzegovina, multiple combat tours in Iraq, and the Republic of Korea.

General Cardon has extensive experience establishing, leading, and transforming very different organizations with diverse mission sets. He led the creation of a 4000 Soldier brigade combat team and deployed it to Baghdad, Iraq in just nine months. He commanded one of the Army’s premier Infantry Division’s located in the Republic of Korea, and he both transformed and scaled Army Cyber Command into a world-class cyber force. He led the creation and employment of Task Force Ares, an offensive cyber task force oriented against the Islamic State of Iraq and the Levant. His final assignment was leading a task force to create Army Futures Command to lead the modernization of the Army.

He is working across a wide portfolio of companies, universities, government, and Think Tanks with a focus on solving hard problems.

Lieutenant Colonel Arnel P. David

U.S. Special Assistant to the Chief of General Staff, U.S. Army



Lieutenant Colonel Arnel P. David is a Distinguished Military Graduate of Valley Forge Military College’s ROTC Early Commissioning Program. He was commissioned a Second Lieutenant into the Florida Army National Guard.

In 2000, LTC David completed the Signal Officer’s Basic Course and entered active duty. After company command in the 101st Airborne Division (Air Assault) he transitioned to Fort Bragg, NC to complete the US Army John F. Kennedy Special Warfare Center and School Civil Affairs Qualification and Regional Analysis Course. He has completed a variety of mediation, evasive driving, negotiation, surveillance detection, and other special operations and interagency training courses.

He is currently serving as the DACOS G5 of the NATO Allied Rapid Reaction Corps in the United Kingdom after completing an assignment as the Special Assistant to the Chief of General Staff of the British Army. He recently served as the Chief of Staff for the Army Future Studies Group in Washington D.C. LTC David redeployed in 2017 from Afghanistan where he served as the Commander’s Initiative Group Chief for the Special Operations Joint Task Force – Afghanistan (SOJTF-A). Prior to deployment he served as a fellow in the Chief of Staff of the Army’s Strategic Studies Group.

He has served in a variety of leadership positions from platoon leader to battalion commander and in key staff positions leading planning teams and staffs. LTC David deployed routinely on overseas contingency operations to the Middle East, Southwest Asia, Central Asia, and Pacific.



LTC David's military education includes the Infantry Captain's Career Course, Combined Arms Services and Staff School, Resident Intermediate Level Education, Defense Strategy Course, Airborne School, Air Assault School, SERE-C High Risk, and Pathfinder School.

LTC David's civilian education consists of a Master of Arts & Science from the Command and General Staff College's Local Dynamics of War Scholar Program, Master Degree in International Relations from the University of Oklahoma, and a Bachelor Degree in International Relations from the University of North Florida. He frequently writes and publishes with pieces featured in Special Warfare Magazine, Foreign Policy, Real Clear Defense, Small Wars Journal, and War on the Rocks. He is the winner of the CA Call for Papers competition in 2015 and is a coauthor with LTG (r) Charles T. Cleveland, Dr. Ben Jensen, and Dr. Sue Bryant, of Military Strategy in the 21st Century: People, Connectivity, and Competition

In 2016 he was awarded the State of Florida Citizen Life Saving Award. In 2019 he completed the Artificial Intelligence Program at the Saïd Business School at the University of Oxford.

Colonel Ross T. Guieb

Executive Officer to the Commanding General, Army Futures Command, U.S. Army



COL Guieb assumed the Executive Officer to the Commanding General, Army Futures Command in September 2018. During his previous 28 years of service, COL Guieb has served in a variety of professionally rewarding and developmental positions across the Army in both the generating and operating force.

Past assignments have taken COL Guieb and his family across the country and world during both times of peace and war. Following graduation from the University of California, Colonel Guieb was commissioned and assigned as a platoon leader for the 170th Military Police Company, WA with multiple deployments to Honduras and Panama; Operations Officer to the Deputy Commanding General, Operation Uphold Democracy, Haiti; Commander, 58th MP Company, Hawaii and; Provost Marshal, United States Army, Hawaii; Small Group Leader/Instructor, United States Army Military Police School, Alabama and Missouri; United States Army Exchange Officer and Regimental S3 Royal Military Police, Her Majesty's Armed Forces, London, England; Planner 1st Cavalry Division, Iraq; S3 720th MP Bn, Texas; S3 Task Force 720th MP, Iraq; Executive Officer 720th MP Bn; Chief, Strategic Initiatives Group, Office of the Provost Marshal General, Pentagon; Commander, 728th MP Bn, Hawaii and Commander, Task Force Warfighter, Afghanistan; Executive Officer to the Provost Marshal General/Commanding General Criminal Investigation Command and Army Corrections Command, Pentagon.

Colonel Guieb's most recent assignment was as the Commander of the 89th Military Police Brigade and Director of Emergency Services, Fort Hood, Texas in July 2014. The largest MP Brigade in the Army with over 4400 Soldiers and 300 DA civilians. The Military Deputy, Office of the Assistant Secretary of Defense for Readiness, Office of the Secretary of Defense. Executive Officer and Chief of Staff, Army Futures Command Task Force. Executive Officer to the Under Secretary of the Army, HON Ryan McCarthy.

Colonel Guieb's military education and professional associations include: Military Police Officers Basic and Advance Courses; Counter Terrorism Course; Protective Service School, Close Protection Course (UK), Search Advisors Course (UK), Command and General Staff College; the Eisenhower School for National Security Policy and Resource Strategy.

Colonel Guieb's Civilian education achievements include: BA, International Relations, University of California; MA, Business and Organizational Security Management, Websters University; MS Ed, Adult Education, Kansas State University and MS, National Security Policy and Resource Strategy, Eisenhower School (Formally ICAF). He is also a graduate of the FBI Academy. COL Guieb also received professional certification from the University of St Andrews (Scotland) Centre for the Study of Terrorism. He is an active

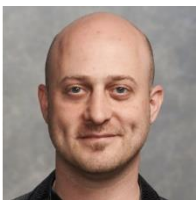


member of the International Association of Chiefs of Police, Military Police Association (Lifetime), Industrial College of the Armed Forces Association (Lifetime), Royal Military Police Association (Lifetime) and FBI National Academy Associates.

Colonel Guieb's awards include, Distinguished Service Medal, the Legion of Merit (1 OLC), the Bronze Star Medal (1 OLC), Defense Meritorious Service Medal, Meritorious Service Medal (6 OLC), Joint Service Commendation Medal, Combat Action, Air Assault, and Airborne Badges, Joint Meritorious Unit Award, Meritorious Unit Award (2 OLC), Army Service Unit Award, Top Cop state of Hawaii 1997, the Order of the Marechaussee (Silver) and the Freedom of the City of London (Key to the City of London).

Joshua Baer

Founder & Chief Executive Officer, Capital Factory



Joshua Baer helps people quit their jobs and become entrepreneurs. He's the founder of Capital Factory, a coworking community and mentorship-based accelerator designed to help startups find their first investors, customers and employees. He founded his first startup in 1996 in his college dormitory at Carnegie Mellon University and now teaches a class at the University of Texas for student entrepreneurs. He was recently recognized as a Henry Crown Fellow and Braddock Scholar at the Aspen Institute, a member of the National Committee on US-China Relations Young Leaders Forum, and an Eisenhower Fellow.

Dr. Adam Cohen, Ph.D.

Senior Associate, Center for Strategic and International Studies (CSIS) Energy and National Security Program, President, CEO, Associated Universities, Inc.



Dr. Adam Cohen serves as President and CEO of Associated Universities, Inc (AUI). AUI operates the National Radio Astronomy Observatory (NRAO) and the Green Bank Observatory (GBO), two federally-funded research and development centers (FFRDCs) for NSF. AUI also manages cybersecurity, STEM, and distance learning programs and activities for various federal, state, and private sponsors. Dr. Cohen serves as a Senior Associate with the Center for Strategic and International Studies (CSIS) Energy and National Security Program.

Prior to joining AUI in 2017, Dr. Cohen served as the Deputy Under Secretary for Science and Energy at the U.S. Department of Energy (DOE), overseeing basic science, applied energy research, technology development, and deployment efforts, including the stewardship of 13 of the 17 DOE National Laboratories. His experience also includes senior leadership positions at the Princeton Plasma Physics Lab and at Argonne National Laboratory.

Dr. Cohen organized and ran the National Laboratory Directors Council. He has served as head of the U.S. Delegation on the ITER Council, on the New Jersey Department of Environmental Protection's Oyster Creek Nuclear Station Oversight Panel, and on the DOE Laboratory Operations Board. Earlier in his career, he was a submarine officer in the US Navy and a manufacturing engineer at Babcock & Wilcox Naval Nuclear Fuel Division.

Dr. Cohen earned his bachelor's degree in materials engineering from Columbia University, his M.B.A. from the University of Chicago, and his Ph.D. in materials science and engineering from Northwestern University.



Dr. David M. Catarious, Jr., Ph.D.

Director, Cybersecurity Programs & Chief Information Officer, Associated Universities, Inc.



Dr. Catarious is AUI's Director of Cybersecurity Programs and Chief Information Officer. In that position, he oversees AUI's cybersecurity portfolio that focused on the nation's critical infrastructure sectors. He came to AUI from his position as Senior Advisor for Cyber Policy at the U.S. Department of Energy (DOE). In that role, he served as the Department's representative to the National Security Council's Cyber Response Group, led efforts to expand DOE's cybersecurity research and development portfolio, and developed Departmental initiatives on energy-sector supply chain cyber threats, threat analysis, and incident response.

Prior to his cybersecurity role, he served as the Senior Advisor to DOE's Under Secretary for Science and Energy, where he helped oversee basic science, applied energy research, and technology development and deployment efforts, including stewardship of 13 of the 17 DOE National Laboratories.

He was awarded the Secretary's Appreciation Award by Energy Secretary Ernest Moniz in 2016 and 2017. Dr. Catarious also serves as an Information Warfare Officer in the U.S. Navy Reserve, where he is stationed with Fleet Cyber Command/U.S. Tenth Fleet.

Dr. Catarious earned his bachelor's and master's degrees in mathematics from Virginia Tech, and his Ph.D. in biomedical engineering from Duke University.

Dr. Elizabeth M. Catarious, Doctor of Law (JD)

Senior Advisor, Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response



Dr. Elizabeth Catarious has been a homeland security advisor for nearly 20 years, focusing primarily on public health and medical preparedness and response, as well as counterterrorism, consequence management and natural disaster events. She led the public health and medical area of safety and security for the Center for Naval Analyses for 10 years, as well served as a senior technical advisor for FEMA and the office of the Assistant Secretary for Preparedness and Response (ASPR) within HHS.

She served as a responder to several disaster events including Hurricanes Katrina and Rita in 2005 and their recovery in 2006, the international deployment to the Haiti earthquake in 2010, as well as serving as the lead health official in the joint field office in Florida after Hurricane Irma in 2017.

She was appointed to lead the national lessons learned process after the Ebola Virus Disease outbreak in 2015 and until May of this year was active in the hospital preparedness response to COVID-19.

Dr. Catarious earned her Doctor of Law (JD) from the Catholic University of America, Columbus School of Law.