



BIOGRAPHY



UNITED STATES AIR FORCE

COLONEL K. COLIN TUCKER, PhD

Colonel Colin Tucker is the Military Deputy to the Deputy Assistant Secretary of the Air Force for Science, Technology, and Engineering, Office of the Assistant Secretary of the Air Force for Acquisition, the Pentagon, Washington, D.C. Colonel Tucker is responsible for advocacy, prioritization and management of the Air Force's annual \$3.6 billion science, technology and engineering program. He serves as a principle legislative advisor, provides technical counsel to the Air Force Acquisition Executive, and provides strategic science and technology guidance to the Office of the Secretary of Defense. In addition, Colonel Tucker supports the Deputy Assistant Secretary's Chief Engineer role, shaping policy and managing a broad array of engineering and technical programs executed by more than 14,000 military and civilian scientists and engineers.



Colonel Tucker was commissioned in June 1994, after earning his Aerospace Engineering degree from Mississippi State University. He advanced to the Air Force Institute of Technology (AFIT) for graduate education, where he led experimental tests to simulate supersonic ramjet combustion. Upon graduation, Colonel Tucker served as the lead missile propulsion engineer at the Aeronautical Systems Center, where he supported the Miniature Air Launched Decoy and Joint Air to Surface Standoff Missile programs.

From 1998 to 2001, Colonel Tucker taught Aeronautical Engineering at the United States Air Force Academy, where he was nominated for a PhD program at AFIT, earning his doctorate degree with concentrations in propulsion and computational fluid dynamics in 2005. His doctoral research designed a fuel flash vaporization system for a pulse detonation engine, and he pioneered JP-8 fuel and air detonations without a pre-detonator.

While serving as Chief of the 60-person Energetic Materials Branch at the Air Force Research Laboratory Munitions Directorate, Colonel Tucker led all Air Force research, development, and production technologies of new and emerging energetic materials and explosives. Following this assignment, he returned to the Air Force Academy and served as Director of the 50,000 ft² Aeronautics Laboratory and Deputy Department Head for Operations.

In 2012, Colonel Tucker was selected to serve as the F-35 Lightning II Lead Systems Integration Engineer at the F-35 Joint Program Office, where he was responsible for systems integration and engineering activities for all three variants of the \$400 billion Joint Strike Fighter Program for the Air Force, Marine Corps, Navy, eight partner nations, and three foreign military sale customers.

Colonel Tucker deployed twice in support of Operation Enduring Freedom. In 2008, he was a Lead Case Research Officer for the Office of Administrative Review and Detention of Enemy Combatants. In 2013, he served in Kabul, Afghanistan as the Chief of Coalition Support for US Forces Afghanistan, where he was responsible for all theater-wide logistics and materiel support to 50 coalition nations.

EDUCATION

1994 Bachelor of Science in Aerospace Engineering, Mississippi State University, Starkville, Miss.

1995 Master of Science in Aeronautical Engineering, AFIT, Wright-Patterson AFB, Ohio.

2001 Squadron Officer School, Maxwell AFB, Ala.

2005 Doctor of Philosophy in Aeronautical Engineering, AFIT, Wright-Patterson AFB, Ohio.

2005 Intermediate Developmental Education, Air Force Institute of Technology, Wright-Patterson AFB, Ohio.

2005 Air Command and Staff College, by correspondence

2012 Air War College, by correspondence

ASSIGNMENTS

1. June 1994 - December 1995, Master of Science Candidate, Air Force Institute of Technology, Wright-Patterson AFB, Ohio.
2. December 1995 - August 1997, Lead Engineer, Missile Engines, Advanced Engine Projects Division, Propulsion Developmental System Office, Wright-Patterson, Ohio.
3. August 1997 - June 1998, Executive Officer, Engineering Directorate, Aeronautical Systems Center, Wright-Patterson AFB, Ohio.
4. June 1998 - July 2001, Assistant Professor of Aeronautical Engineering, Assistant Deputy for Plans and Programs, Department of Aeronautics, US Air Force Academy, Colo.
5. August 2001 - September 2004, Doctor of Philosophy Candidate and IDE Student, Air Force Institute of Technology, Wright-Patterson AFB, Ohio.
6. September 2004 - November 2006, Deputy Chief, Energetic Materials Branch, Ordnance Division, Munitions Directorate, Air Force Research Laboratory, Eglin AFB, Fla.
7. December 2006 - June 2008, Chief, Energetic Materials Branch, Ordnance Division, Munitions Directorate, Air Force Research Laboratory, Eglin AFB, Fla.
8. January 2008 - May 2008, Lead Case Research Officer, Office for the Administrative Review of the Detention of Enemy Combatants, Pentagon, Washington, D.C.
9. June 2008 - May 2009, Deputy Director for Plans and Programs, Aeronautics Lab, Dept of Aeronautics, US Air Force Academy, Colo.
9. June 2009 - June 2011, Director, Aeronautics Lab, Dept of Aeronautics, US Air Force Academy, Colo.
10. July 2011 - June 2012, Deputy Department Head for Operations, Dept of Aeronautics, US Air Force Academy, Colo.
11. July 2012 – June 2015, F-35 Lead Systems Integration Engineer, F-35 Joint Program Office, Arlington, Va.
12. September 2013 - April 2014, Chief, Coalition Support Cell, J4 Director of Logistics, US Forces Afghanistan, Kabul Afghanistan International Airport, Islamic Republic of Afghanistan.
13. July 2015 – June 2016, Chief, Engineering Management and Workforce Policy Division, Deputy Assistant Secretary of the Air Force for Science, Technology, & Engineering, Pentagon, Washington, D.C.
14. July 2016 - present, Military Deputy, Deputy Assistant Secretary of the Air Force for Acquisition Science, Technology, & Engineering, Pentagon, Washington, D.C.

MAJOR AWARDS AND DECORATIONS

Bronze Star Medal
Defense Meritorious Service Medal
Meritorious Service Medal with oak leaf cluster
Joint Service Commendation Medal
Air Force Commendation Medal with oak leaf cluster
US Air Force Academy Outstanding Academy Educator in Aeronautics
AFRL Lance P. Sijan Leadership Award Nominee to AFMC, Senior Officer Category
AFRL Mid-Career Military Engineer of the Year
Air Force Chief Scientist's Science & Technology Team of the Year
Associate Fellow, American Institute of Aeronautics and Astronautics

EFFECTIVE DATES OF PROMOTION

Second Lieutenant	14 May 1994
First Lieutenant	01 Jun 1996
Captain	01 Jun 1998
Major	01 Nov 2004
Lieutenant Colonel	01 Oct 2009
Colonel	01 Jan 2016

(Current as of October 2017)