

BIOGRAPHY



UNITED STATES AIR FORCE

LIEUTENANT COLONEL PATRICK HIGHLAND

Lieutenant Colonel Patrick J. Highland serves as the sole Chief of Staff of the Air Force's Blue Horizons Senior Developmental Education Fellow at the Center for Strategy and Technology, Maxwell AFB, Ala.

Lieutenant Colonel Highland graduated with a Bachelor of Science (Electrical Engineering with honors) degree and received his commission in 2007 from the United States Air Force Reserve Officer Training Corps at the University of Maryland. Lieutenant Colonel Highland served seven years at Offutt AFB, Neb., in varying assignments culminating as a reconnaissance special missions evaluator pilot on the RC, OC, and WC-135. Following his graduation in 2017 from the United States Air Force Test Pilot School, Lieutenant Colonel Highland served as an experimental test pilot on the KC-135, KC-10, and KC-46. Lieutenant Colonel Highland then served as an experimental test pilot for the University of Iowa Operator Performance Laboratory in conjunction with his Air Force Institute of Technology Ph.D. duties

Prior to this assignment, Lieutenant Colonel Highland served as the Commander of the Air Force Life Cycle Management Center Detachment 3 (Squadron). Lieutenant Colonel Highland was responsible for all MQ-9 production, test, and sustainment at three facilities hosting 21 aircraft, 2 billion dollars in assets, and 175 personnel.



EDUCATION

2007 Bachelor of Science, Electrical Engineering (with honors), University of Maryland, College Park, Md.

2007 Air and Space Basic Course (top performer), Maxwell AFB, Ala.

2011 Squadron Officer School, Maxwell AFB, Ala., by correspondence

2012 Master of Engineering, Engineering, University of Nebraska, Lincoln, Neb.

2013 Squadron Officer School, Maxwell AFB, Ala.

2017 Master of Science, Flight Test Engineering, Air University, Maxwell AFB, Ala.

2017 Intermediate Developmental Education In-Residence Equivalent Credit, Maxwell AFB, Ala.

2019 Air Command and Staff College, Maxwell AFB, Ala., by correspondence

2020 Master of Science, Industrial Engineering, University of Iowa, Iowa City, Iowa

2022 Air War College, Maxwell AFB, Ala., by correspondence

2022 Doctor of Philosophy, Industrial Engineering, University of Iowa, Iowa City, Iowa

FLIGHT INFORMATION

Rating: command pilot

Flight Hours: more than 3,300 (289 combat)

Aircraft Flown: 52 different aircraft types, including the KC-46, T-38, MQ-9 and WC-135.

ASSIGNMENTS

1. June 2007 - April 2008, Mobility Officer, 43 Operations Support Squadron, Pope AFB, N.C.

- 2. April 2008 April 2009, Student Pilot, 33 Flying Training Squadron, Vance AFB, Okla.
- 3. April 2009 August 2009, Student Pilot, RC-135, 338 Combat Training Squadron, Offutt AFB, Neb.
- 4. August 2009 August 2010, Pilot, RC-135, 45 Reconnaissance Squadron, Offutt AFB, Neb.
- 5. August 2010 February 2012, Safety Officer, Pilot, 45 Reconnaissance Squadron, Offutt AFB, Neb.
- February 2012 June 2012, Safety Officer, Aircraft Commander (distinguished graduate), 45 Reconnaissance Squadron, Offutt AFB, Neb.
- 7. June 2012 April 2013, Training Officer, Aircraft Commander, 45 Reconnaissance Squadron, Offutt AFB, Neb.
- 8. April 2013 February 2014, Training Officer, Instructor Pilot, 45 Reconnaissance Squadron, Offutt AFB, Neb.
- 9. February 2014 April 2014, Assistant Flight Commander, Instructor Pilot, 45 Reconnaissance Squadron, Offutt AFB, Neb
- 10. April 2014 August 2014, Assistant Flight Commander, Instructor Pilot RC/WC-135, 45 Reconnaissance Squadron, Offutt AFB, Neb.
- 11. August 2014 October 2014, Flight Commander, Instructor Pilot, 45 Reconnaissance Squadron, Offutt AFB, Neb.
- 12. October 2014 May 2015, Flight Commander, Evaluator Pilot, RC/OC/WC-135, 45 Reconnaissance Squadron, Offutt AFB, Neb.
- 13. May 2015 August 2015, Group Commander Action Officer, Evaluator Pilot, 55 Operations Group, Offutt AFB, Neb.
- 14. August 2015 June 2016, Group Executive Officer, Evaluator Pilot, 55 Communications Group, Offutt AFB, Neb.
- 15. June 2016 June 2017. Student Experimental Test Pilot. United States Air Force Test Pilot School. Edwards AFB. Calif.
- 16. June 2017 August 2017, Experimental Test Pilot, KC-135, 418 Flight Test Squadron, Edwards AFB, Calif.
- 17. August 2017 March 2018, Assistant Flight Commander, Experimental Test Pilot, 418 Flight Test Squadron, Edwards AFB, Calif.
- 18. March 2018 April 2018, Flight Commander, Experimental Test Pilot, KC-135, KC-10, 418 Flight Test Squadron, Edwards AFB, Calif.
- 19. April 2018 September 2019, Flight Commander, Experimental Test Pilot, KC-135, KC-10, KC-46, 418 Flight Test Squadron, Edwards AFB, Calif.
- 20. September 2019 May 2022, Air Force Institute of Technology Ph.D. Student, Experimental Test Pilot, A-36, L-29, University of Iowa, Iowa City, Iowa
- 21. May 2022 June 2025, Commander, Air Force Life Cycle Management Center Detachment 3, Poway, Calif.
- 22. June 2025 present, Chief of Staff of the Air Force's Blue Horizons SDE Fellow, Center for Strategy and Technology, Maxwell AFB, Ala.

MAJOR AWARDS AND DECORATIONS

Meritorious Service Medal with one oak leaf cluster

Air Medal

Aerial Achievement Medal with six oak leaf clusters

Air and Space Commendation Medal with three oak leaf clusters

Air and Space Achievement Medal

Combat Readiness Medal with two oak leaf clusters

Global War on Terrorism Expeditionary Medal

Air and Space Expeditionary Service Ribbon with Gold Border with six oak leaf clusters

SELECTED PUBLICATIONS

Highland, P., Williams, J., Yazvec, M., Dideriksen, A., Corcoran, N., Woodruff, K., ... & Schnell, T. (2020). Modelling of unmanned aircraft visibility for see-and-avoid operations. Journal of Unmanned Vehicle Systems, 8(4), 265-284. <u>Link</u>.

Highland, P. (2022). Commander dominance via trust and reliability in unmanned system teaming. Available from Dissertations & Theses @ University of Iowa. On embargo pending multiple journal publications.

Highland, P., Schnell, T., Woodruff, K., & Avdic-McIntire, G. (2023). Towards human objective real-time trust of autonomy measures for combat aviation. The International Journal of Aerospace Psychology, 33(1), 1-34. <u>Link</u>.

EFFECTIVE DATES OF PROMOTION

Second Lieutenant May 2007
First Lieutenant May 2009
Captain May 2011
Major May 2017
Lieutenant Colonel January 2022

(Current as of August 2025)