

CV:

He served as an aircraft maintenance officer and engineer officer in various units of the Air Force for more than twenty years. He worked as a hydro-mechanical group member on the Airbus A400M Atlas aircraft project and as a certification board member on the Peace Eagle Boeing 737 AEW&C aircraft. His research interests are wind tunnel aerodynamic test design of aircraft using design of experiments (DOE), thermodynamic analysis of jet engines and aircraft maintenance activities.

Education:

❖ **Old Dominion University (ODU)**, Aerospace Engineering, PhD, Norfolk, VA, USA (August 2006 – May 2010)

- Thesis Title: “Analysis of Helicopter Downwash/Frigate Airwake Interaction Using Statistically Designed Experiments”, *Advisor: Prof.Dr. Drew Landman*

❖ **Middle East Technical University (METU)**, Aerospace Engineering, MSc, Ankara, Türkiye (September 1999- June 2003)

- Thesis Title: “Detailed Measurements of Dynamic Stability Derivatives under Roll Oscillations for Standard Dynamic Model in Ankara Wind Tunnel”, *Advisor: Prof.Dr. Hüseyin Nafiz Alemdaroğlu*

❖ **Air Force Academy**, Aeronautical Engineering, BSc, İstanbul, Türkiye (September 1993- August 1997)

Theses Supervised:

MSc

1. Daşık Eren, (2020). “Thermodynamic Cycle Analysis of a Turbojet Engine to be used for UAVs”, National Defense University, Aeronautics and Space Technologies Institute, Aeronautical Engineering.

2. Alabaş Hüsamettin Alperen, (2019). “Computational Fluid Dynamics Analysis of Interaction of Flow around Helicopter Rotor with Ship Airwake”, National Defense University, Aeronautics and Space Technologies Institute, Aeronautical Engineering.

Projects:

1. MISAG-196 “Measurement of Dynamic Stability Derivatives of a Generic Fighter Aircraft Model in Ankara Wind Tunnel”, the Scientific and Technological Research Council (TÜBİTAK) Project, Researcher: Nacaklı Yavuz, 01 March 2002- 01 March 2004.

Courses Taught:

Fluid Mechanics	Turkish
Aerodynamics-I	Turkish
Thermodynamics-I	English
Introduction to Aerodynamics	English
Measurement Techniques	Turkish
Hydraulic and Pneumatic Systems	Turkish
Aviation Legislation	English
Engineering Orientation	Turkish
Introduction to Civil Aviation	English
History of Aviation	English
Scientific Research Methods	Turkish

Articles Published in International Peer-Reviewed Journals:

1. Yucer C.T, Nacaklı Y, (2024) “*Effects of using hydrogen on the exergetic and environmental damage performance of an UAV turbojet engine*”, Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 238 (11), 5331-5343.
2. Yucer C.T, Nacaklı Y, (2023) “*Experimental investigation for the different blend ratios of kerosene with diesel on the exergetic performance of a small-scale turbojet engine for UAV missions*”, International Journal of Engine Research, 24 (9), 3878-3892.
3. Yucer C.T, Nacaklı Y, (2023) “*Comparative analysis of using diesel/JP-8 fuel blends and JP-8 for the exergetic sustainability performance of an UAV turbojet engine*”, International Journal of Sustainable Aviation, 9 (4), 314-331.
4. Geçgel M., Nacaklı Y, (2018). “*A methodology for the analyses of unsteady flowfields around forward flying helicopter rotors*”, Journal of Aeronautics and Space Technologies, 11(2), 71-82.
5. Nacaklı Y, Landman D, Doane S, (2012). “*Investigation of backward-facing-step flow field for dynamic interface application*”, Journal of the American Helicopter Society, 57(3), 1-9.

Articles Published in National Peer-Reviewed Journals:

1. Eğinli M.A, Nacaklı Y, (2020). “*Uçak bakım eğitimlerinde artırılmış gerçeklik kullanımının değerlendirilmesi*”, Journal of Aviation, 4(1), 61-78.

Papers Presented at International Scientific Meetings and Published in Conference Proceedings:

1. Yucer C.T, Nacaklı Y, (2022). “*Effects of the Partial Use of Diesel fuel with Kerosene on the Exergetic Sustainability Performance of an UAV Jet Engine in case of Emergency*”, International Symposium on Aircraft Technology, MRO & Operations (ISATECH 2022), 14-16 September 2022, Belgrade, Serbia.
2. Alabaş A, Nacaklı Y, (2019). “*Bir mini insansız hava aracı pervanesinin daimî olmayan üç boyutlu hesaplamalı akışkanlar dinamiği simülasyonu*”, Uluslararası Marmara Fen ve Sosyal Bilimler Kongresi, 26-28 Nisan 2019, Kocaeli, Türkiye.
3. Nacaklı Y, Geçgel M, (2018). “*İş sağlığı ve güvenliği kapsamında askeri havacılık örnekleri*”, 9. Uluslararası İş Sağlığı ve Güvenliği Kongresi, 6-9 Mayıs 2018, İstanbul, Türkiye.
4. Nacaklı Y, Yıldırım M, (2014). “*Askeri havacılıkta uçuşa elverişlilik sertifikasyon faaliyetleri ve uçuş emniyetine etkileri*”, 2. Uluslararası Havacılık İşletmeciliği Konferansı, 16 Nisan 2014, Ankara, Türkiye.
5. Nacaklı Y, Karadurmuş Z, (2013). “*Structural analytical control program for C-130 fleet of Turkish Air Force*”, 7th Ankara International Aerospace Conference, 11-13 September 2013, METU-Ankara, Türkiye.
6. Nacaklı Y, Landman D, (2011). “*Helicopter downwash/frigate airwake interaction flowfield PIV surveys in a low speed wind tunnel*”, AHS International 67th Annual Forum Technology Display, 3-5 May 2011, Virginia Beach, VA, USA.
7. Nacaklı Y, Landman D, (2010). “*Identification of regions of ship airwake influence on helicopter downwash using statistically designed experiments*”, International Powered Lift Conference, 5-7 October 2010, Philadelphia, PA, USA.

8. Alemdarođlu H.N, Nacaklı Y, Uysal H, Őahin T, Quaglotti F, Guglieri G, (2003). “*Roll oscillatory test in a low speed wind tunnel*”, AIAA 41st Aerospace Sciences Meeting and Exhibit, 6-9 January 2003, Reno, NV, USA.

Papers Presented at National Scientific Meetings and Published in Conference Proceedings:

1. DaŐık E, Nacaklı Y, (2019). “*İHA’lar için kullanılan bir turbojet motorunun bileŐenleri ve ekserji analizi parametreleri*”, 10. Ulusal Uçak, Havacılık ve Uzay Mühendisliđi Kurultayı, 11-12 Ekim 2019, EskiŐehir, Türkiye.

2. Nacaklı Y, Yıldırım M, (2014). “*Askeri hava araçlarına yönelik malzeme imalat çalıŐmalarında hava ikmal bakım merkezlerinin rolü ve uçuŐa elveriŐlilik sertifikasyon faaliyetleri*”, 3. Ulusal Havacılıkta İleri Teknolojiler Konferansı, 18-20 Haziran 2014, HHO-İstanbul, Türkiye.

Editorial Board:

1. Journal of Aeronautics and Space Technologies, Turkish Air Force Academy Printing Office, 01.01.2019-30.06.2019.

2. Journal of Aeronautics and Space Technologies, Turkish Air Force Academy Printing Office, 01.07.2019-31.12.2019.

3. The Journal of Aeronautics and Space Technologies, Turkish Air Force Academy Printing.

Academic Duties:

2017-2019: Air Force Academy Aerospace Engineering Department of National Defense University

2019-2021: Air NCO Vocational School Aeronautical Sciences Department of the National Defense University

2021- : Istanbul Aydın University Pilotage Department

2022- : Istanbul Aydın University Aerospace Engineering Department

Administrative Duties:

2018-2019: National Defense University Air Force Academy Aerospace Engineering Department Vice-President

2021- : Istanbul Aydın University School of Applied Sciences Vice-President / Head of Pilotage Department

Professional Experience:

2002-2006: 7th Main Jet Base Command, Malatya

- Flight Line Maintenance Officer
- Quality Assurance Officer

2009-2012: 12th Main Airlift Base Command, Erkilet /Kayseri

- Quality Assurance Officer
- Maintenance Operations Officer

2012-2014: 2nd ASMC Command, Kayseri

- Transportation Aircraft Technical Management Department

2014-2017: Air Technical Schools Command, Gazimir/zmir

- Aircraft Maintenance School