

## **DR. HARASANI, Wail I.**

*Associate Professor, Aerospace Engineering Dept., King Abdulaziz University*

### **Education**

<i>Degree</i>	<i>Field</i>	<i>Institution</i>	<i>Year</i>
PhD	Aerospace Engineering	Cranfield University (UK)	2005
MS	Aerospace Engineering	Kansas University (USA)	1999
BS	Aerospace Engineering	King Abdulaziz University (KSA)	1996

### **Academic Experience**

<i>From</i>	<i>To</i>	<i>Institution</i>	<i>Rank</i>	<i>Title (Chair, Coordinator, etc.)</i>	<i>Full or Part-Time</i>
2005	2015	King Abdulziz Univ.	Assist Prof.		Full-Time
2015	Date	King Abdulziz Univ.	Assoc. Prof.		Full-Time

### **Non Academic Experience (including Consultations)**

<i>From</i>	<i>To</i>	<i>Company/Entity</i>	<i>Title</i>	<i>Position Description (Brief)</i>	<i>Full or Part-Time</i>
1994	1995	Saudi Airline Engineering Dept.	Engineer	Training	Full-Time
1998	1999	Aerotech Engineering and Research Corporation KS. (USA)	Engineer	R&D Eng.	Full-Time

### **Certifications and Professional Registrations**

#### **Current Membership in Professional Societies and Organizations**

	<i>Society/organization</i>	<i>Rank</i>	<i>Member Since</i>
1.	Saudi Society for Aerospace Sciences	Member	2012
2.	Saudi Council of Engineering	Member	2016

### **Honors and Awards**

1. Guest Editor issue on renewable and sustainable Unmanned Aerial Systems for Advanced in Mechanical Engineering (AIME)
2. Honors Certificate From Tokai University for leading the solar UAV project

### **Service Activities (within and outside of the institution)**

1. Guest Editor issue on renewable and sustainable Unmanned Aerial Systems for Advanced in Mechanical Engineering (AIME)
2. Co-Supervisor in the Aerospace Vehicle Design course at Cranfield University , U.K. (recognized teacher status)
3. Establish the first UAV Lab. In King Abdulziz University 2005.
4. Design build and fly test the first UAV at King Abdulaziz University
5. ABET scholar, participating in the ABET Institute for the Development of Excellence in Assessment Leadership, 2013
6. Opportunity to work at *Aerotech Engineering and Research Corporation Kansas (USA)* as research and development engineer mainly in the area of 1: Composites design, and manufacturing, 2: Ultrasonic motors design and patents, and 3: Research in aerospace applications. (1998-1999)

7. Member of the Kansas Universities Design Team that worked on the UAV project "Aladdin." The team comprised members from four Kansas universities. Aladdin won a national general aviation competition sponsored by NASA, the Federal Aviation Administration, and the U.S. Air-force Research Laboratory in 1999
8. Team leader and project manager of the Solar UAV project with Tokai University (Japan), 14 faculty members from both Tokai university (Japan) and King Abdulaziz University and about 32 students and engineers from both Universities where involved.

### **Principal Publications/Presentations from the Past Five Years**

1. Mostefa Bourchak, Wail Harasani. "Assessment of Liquid Resin Infusion Impregnation Quality using Scanning Electron Microscopy". *Advanced Composites Letters*, Vol. 24, Iss. 1, 2015.
2. Wail Harasani, "A Survey of Subscale Aircraft Primary Flight Control Actuator Dynamic Response Characteristics". *GSTE Journal on Aviation Technology (JAT)* Vol. 1. No. 2. March 2015
3. Wail Harasani, Mohammd Khalid, Yusuf A. Al-Turki, Nobuyuki Arai, Kota Fukuda, and Katsumi Hiraoka. "Conceptual Design Methodology of Flight Solar UAV". *International Journal of Aerospace and Mechanical Engineering*. ISSN(0)2393-8609, Volume 2-No.6. October 2015.
4. R.M. Ajaj, M. Bourchak, W. Harasani, "Twisted Morphing Using the Variable Cross Section Spar: Feasibility Study," *Journal Aerospace Engineering*, 28(6):04014146, Volume 28 Issue 6- November 2015.
5. Harasani W. "Designing and fly testing a Long Endurance Solar Unmanned Air Vehicle". *Journal of Aeronautics Aerospace Eng.* ISSN: 2168-9792 JAAE. Vol 4. Issue 2. 1000148, November 28, 2015
6. Takaaki Tsukuriyama, Wail Harasani, Nobuyuki Arai, Kota Fukuda, and Katsumi Hiraoka. "Vibrational Characteristics of High Aspect Ratio Wing of s Solar UAV". 7<sup>th</sup> Asia Pacific International Symposium of Aerospace Technology, 25-27 November 2015, Cairns
7. Harasani W. "Generating Cost Efficiency Chart: A Comparison between B737, A319, and A321" *Journal of Aeronautics & Aerospace Engineering*, ISSN: 2168-9792 JAAE, Vol 5. Issue 1-1000155. 2016
8. R. M. Ajaj, M. I. Friswell, M. Bourchak, W. Harasani. "Span Morphing using the GNATSpar wing". *Aerospace Science and Technology*. Article number 3611. V13 (1270-9638), 2016.
9. Nasir Mahmud Khokhar, Wail Harasani, "Adaptive Prediction based Diamond Search Algorithm (APDS) for Video Encoder of Solar Power UAV" , *International Journal of Computer Application (0975-8887)* Vol 140-No.9, April 2016.
10. W. Harasani, M. Khalid, Y. Alturki, K. Hiraoka, K. Fukuda and N. Arai, "Conceptual Design Features of the Sun Falcon 2 a Long Duration UAV". *MAYFEB, Journal of Mechanical Engineering*, Vol 1(2016)-Page 1-21.
11. Nasir Mahmud Khokhar, Wail Harasani, "Performance Analysis of Fast Block Matching Motion Estimation Algorithms" , *International Journal of Computer Application (0975-8887)* Vol 122-No.6, July 2015.
12. Harasani W. "Operation Simulation Modeling in Legacy Engine Maintenance". *Journal of Aeronautics & Aerospace Engineering*, ISSN: 2168-9792 JAAE, Vol 5 Issue 1-1000162, 2016
13. Shin Oura, Wail Harasani, Nobuyuki Arai, Kota Fukuda, and Katsmui Hiraoka. "Study of Inverse V Tail for Long Endurance Solar UAV". 7<sup>th</sup> Asia Pacific International Symposium of Aerospace Technology, 25-27 November 2015, Cairns
14. Saad bin Nazarudeen, Wail I. Harasani, and A.F. Rafique. "Conceptual Design of a solar HALE UAV". *Journal of Advanced Research Design* 44, Issue 1 (2018) 30 40, ISSN: 2289-7984.
15. Book, Wail I Harasani, " **Designing Long Endurance Solar Unmanned Air Vehicle**". Noor Publishing, ISBN-13:978-3-330-80337-4. 2016

### **Recent Professional Development Activities** (*Workshops, training, etc.*)

1. "Recent Changes in EAC of ABET Accreditation Requirements," QAAU Workshop, Faculty of Engineering, King Abdulaziz University, Jeddah, Saudi Arabia, Jan. 2020
2. ABET Institute for the Development of Excellence in Assessment Leadership (IDEAL) Workshop, Gloria Rogers, ABET Foundation, King Abdulaziz University, Jeddah, Saudi Arabia, Sept. 2013.
3. "Strategic planning and performance measurement," Personal Development Course, KAU Centre for Teaching and Learning Development, 2014.
4. "Principal of educational assessment in classroom," Personal Development Course, KAU Centre for Teaching and Learning Development, 2014.
5. DARcorporation, Workshop, Kansas USA, "AAA aircraft design" , 2014