Dr. Rizal Effendy Mohd Nasir

Senior Lecturer / Head of CoE
Flight Technology & Test Centre (FTTC),
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Summary

- 13 years of teaching experience in Universiti Teknologi MARA.
- Currently leading Flight Technology & Test Centre (FTTC), Universiti Teknologi MARA.
- Research activities focus on Blended Wing Body (BWB) aircraft, aerodynamics, flight dynamics and aircraft design in FTTC.
- Obtained various research grants & consultancy projects since joining UiTM in 2002.

Academic Qualifications

- Ph.D. in Mechanical Engineering (Flight Dynamics of BWB UAV with Canard as Control Surface), Universiti Teknologi MARA, Malaysia, 2013.
- M.Sc. in Aerospace, University of Bath, UK, 2004.
- B.Eng. in Mechanical Engineering (Aeronautics), Universiti Teknologi Malaysia, 2001.

Areas of Research

- Blended Wing Body Aircraft
- Unmanned Aerial Vehicle
- Flight Dynamics, Stability & Control
- Aerodynamics
- Automotive Aerodynamics
- Aircraft Design
- Flight Performance

Program Development Experience

Head of CoE, Flight Technology & Test Centre (FTTC), Institute of Mechanical Engineering & Tech. Advacement (iMETA), Universiti Teknologi MARA (2012 – now)

- Leading a team of more than 20 researchers in Aeronautical Engineering and Aviation.
- A total of more than RM1.0 million worth of research grants, consultancy projects, awards and competition prizes since heading FTTC.
- Innovated various research products – Blended Wing-Body UAV, Hud-Hud UAV, NAMTOR Hexacopter Automatic Navigation Drone, Bird-Inspired Drone etc.
- Restructured organization of the centre to reflect FTTC core businesses.
- In a process of rebranding FTTC

Member, National Aerospace Council (NAC) Malaysia (2015-now)

- Part of consulting team to produce MiGHT's National Aerospace Industry Blueprint 2015-2030
- Involve in discussing policies, implementation, research, academic programmes and technology development related to Aeronautics, Astronautics and Aviation sectors.

Member, National Design Centre (NDC), Universiti Teknologi MARA (2014-now)

- Motorcycle Design Competition with Malaysian Automotive Institute (MAI)
- Involved in various industrial design projects

Member, Management Science Operational Research (MSOR) Society, Malaysia (2013-now)

- Sharing knowledge and expertise amongst members on Operational Research methods.
- Involve in various meetings and seminars related to military and aviation.

Member, Aerospace & Material Integrity Centre of Studies/Flight Technology & Test Centre, Faculty of Mechanical Engineering, Universiti teknologi MARA (2005-2008, 2009-2012).

- Develop Flight Aerial Management & Integrated Ground Observatory System (FLAMINGO) flight simulator laboratory.
- Leading research on Blended Wing Body (BWB) UAV & promoting knowledge on importance of BWB as efficient aerial vehicle
- Assisting Head of Centre on activities related to aeronautics development, consultancies & grants.
- Total research grants from this centre are estimated to be over RM 1.0 million.

Member, Malaysian Institute of Transport (MITRANS) (2007-2009)

- Assisting the institute in developing parts of module for Malaysia Airport Holdings Bhd Staff Professional Development Programme & delivered lectures on current & future airliners and its impact to the design of runways etc. Project worth RM1.5 million.
- Part of consultant team for Masterplan Studies on Public Transport in Major Cities/Town in Malaysia worth RM1.2 million.

Deputy Head, Computer-Aided Design, Engineering & Manufacturing Centre (CADEM) Centre, **Universiti Teknologi MARA (2006-2007)**

- Assisting Head of Centre on activities related to CADEM Centre & day-to-day operation of the centre.
- Conducted many projects i.e. as engineering consultant, conduct training, seminar & workshop.
- Trained 30 UiTM students to become trainers & assistant trainers for Formula One in School CAD training for school teachers
- Arranged exhibitions, lectures, panel discussions, etc.
- Total consultancy fees & project cost brought into this centre during 2006-2007 period is estimated around RM1.3 million.

Committee, Unit of Research Development & Commercialization (URDC), Faculty of Mechanical Engineering, Universiti Teknologi MARA (2002-2003)

- Assisting Head of URDC on actrivities related to research development
- Compiled data on researchers, laboratories equipments, activities etc.
- Organized seminars, workshop, lectures & conference for the Faculty of Mechanical Engineering, UiTM

Teaching Experience

1. Flight Mechanics & Control
2. Aircraft Systems
3. Flight Technology (Special Topics)
4. System Dynamics
5. Dynamics & Vibrations
6. Dynamics of Particles & Rigid Bodies
7. Fluid Mechanics
8. Heat & Fluids for Electrical Engineers
9. Control Engineering

10. Thermodynamics
11. Automotive Maintenance
12. Aerospace Manufacturing
13. Mechanical Engineering Design
14. Mechanics & Thermodynamics of Propulsion (Special Topics)
15. Aerodynamics
16. Flight Mechanics & Performance
17. Flight Dynamics & Control

Consultancy Projects

1. Master Plan Study for Public Transport in Urban Cities/Town in Malaysia: MITRANS & Ministry of Transport. January 2008 – 2010. RM2.75 mil.
2. Integrated Skills in Technical & Entrepreneurship Program (InSTEP): Collaboration between CADEM UiTM and MARA. 2006-2007.
3. Consultant to MSTIMES Sdn Bhd on reversed engineering of 3-tonne hoist for crane – January 2007 - 2008. RM10,000
4. Consultant for "Static & Damage Tolerance Analysis of Radome Pressure Box" to AIROD Sdn Bhd – January – February 2007 – RM33,000.
5. Consultant/Event Organiser/Planner/Trainer to F1-in-schools Sdn Bhd on Solid Edge CAD training for school teachers. – January – December 2007. RM1.2 mil.
6. Consultant Trainer/Facilitator to Malaysia Airports Sdn Bhd for Projek Pembangunan Kerjaya Staf MAB (Malaysia Airport Career Development Program (MACDP)). MITRANS – November 2007 – 2009. RM1.5 mil
7. FEA Simulation on Basement Structures of Taman Bukit Pelangi Apartment in Subang Jaya. – October – December 2007 (Community service) – free.
8. Consultant to Tepat Teknik SB on "FELDA Dearrator Project" - Mac – May 2007. RM10,000
9. Consultant to "3D scanning, measurement and CAD data of RMAF's Beechcraft B-200T Maritime Patrol Airplane's Radome". Client – AIROD Sdn Bhd. June 2006. RM5,000
10. Consultant to "3D scanning, measurement & CAD data of Turbine Blades & Blade Holders for Civil Airliners" Client – Lufthansa Technik (M) Sdn Bhd. August 2006. RM5,000.
11. Training Organizer/Consultant – "Seminar & Workshop: Advanced CFD for Industrial Applications" Client: NUMECA International, Belgium. RM2,000.
12. Training Consultant "Computer-Aided Modelling using IronCAD." Client: Intellifix Sdn Bhd. RM11,000.

Research Grants

1. IRDC Grant by A. M. I. Mamat, R. E. Mohd Nasir, Z. Ngah, "Aerodynamics Of Blended Wing Body (BWB) Unmanned Aerial Vehicle Using Computational Fluid Dynamics (CFD)", IRDC Research No. 600-IRDC/ST 5/3/1025, 15 September 2005 - 14 September 2006 – RM11,000
2. FRGS Grant by W. Wisnoe, A. M. I. Mamat, R. E. Mohd Nasir, W. Kuntjoro, "Aerodynamics Prediction Of Blended Wing Body (BWB) Unmanned Aerial Vehicle Using Wind Tunnel Experimental Approach", IRDC Research No. 600-IRDC/ST/FRGS 5/3/1177. 2007-2008. – RM44,000.
3. e-Sciece MOSTI Grant by Mohd Sharuddin, Junaidah Rahmat, Yupiter H.P. Manurung, R.E.M. Nasir et. al. "Structural design, configuration, analysis and design of a SWATH ship". 2006-2009 – RM182,000.
4. Dana Kecemerlangan Grant by Rizal E. M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe. "Flight Dynamics of Baseline-II Blended Wing-Body Aircraft." 2010-2012 – RM10,000.
5. RIF Grant by Rizal E. M. Nasir, Wahyu Kunt Joro, Wirachman Wisnoe. "Flight Dynamics, Stability and Control of a Bio-Inspired Blended Wing-Body Small Unmanned Aircraft." 2012-2014. RM32,000.

6. FRGS Grant by Rizal E. M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe, Firdaus Mohamed, Ramzyzan Ramly, "Flight Dynamics of Blended Wing-Body (BWB) UAV with Blended Tail-Body (BTB)." FRGS/1/2014/TK09/UITM/02/1, 600-RMI/FRGS 5/3 (103/2014). 2014-2016. RM123,000.
7. PRGS Grant by Wirachman Wisnoe, Rizal E. M. Nasir, Wahyu Kuntjoro, Firdaus Mohamed, Ramzyzan Ramly, Aman M. I. Mamat. "Blended Wing-Body Micro-class Unmanned Aircraft Prototype for Surveillence." 600-RMI/PRGS 5/3 (3/2014). 2014-2016. RM180,000.
8. FRGS Grant by Wan Mazlinan W Mohamed, Siti Mariam A. Rahman, Rizal E. M. Nasir. "Characterization of Traffic Movement and Risk Factors." FRGS/2/2014/TK09/UITM/03/2, 600-RMI/FRGS 5/3 (153/2014). 2014-2016. RM128,400.

Publications

Chapter in Book

1. Wirachman Wisnoe, Nor Fazira Reduan, Wahyu Kuntjoro, Rizal Effendy Mohd Nasir, Firdaus Mohamad, Zurriati Ali. "Experimental Results Analysis of UiTM BWB Baseline-I and Baseline-II UAV Running at 0.1 Mach number" New Aspects of Fluid Mechanics, Heat Transfer & Environment. WSEAS Press, Taipei, Taiwan. Aug 2010. ISBN: 978-960-474-215-8. WEB OF SCIENCE.

Thesis

1. Rizal Effendy Mohd Nasir, "Longitudinal Flight Dynamics & Stability of Blended Wing-Body Unmanned Aerial Vehicle with Canard as Control Surface." Ph.D. Thesis, Universiti Teknologi MARA, Dec. 2013.
2. Rizal Effendy Mohd Nasir, "Topology Optimisation of Thermoelastic Strucures." M.Sc. Thesis, Bath University, Oct. 2004.
3. Rizal Effendy Mohd Nasir, "Rekabentuk Awalan Pesawat Ringan Dua Tempat Duduk." B.Eng. Thesis, Universiti Teknologi Malaysia, Nov. 2001.

Journal

1. Rizal E. M. Nasir* , Firdaus Mohamed, Ramzyzan Ramly, Aman M. I. Mamat, Wirachman Wisnoe and Wahyu Kuntjoro, "Flight performance of various blended wing-body small UAV designs" Jurnal Teknologi. 75:8 (2015) pp. 71–75. eISSN 2180–3722. SCOPUS
2. Ramzyzan Ramly* , Wahyu Kuntjoro, Wirachman Wisnoe, Rizal Effendy Mohd Nasir, Aman Mohd Ihsan Mamat, Firdaus Mohamad, "Determination Of Delamination Size In Honeycomb Sandwich Panel Using Finite Element Method." 75:8 (2015) pp. 89–93. eISSN 2180–3722. SCOPUS
3. Wirachman Wisnoe* , Rizal E.M. Nasir, Ramzyzan Ramly, Wahyu Kuntjoro, Firdaus Muhammad, "Aerodynamic of UITM's blended-wing-body unmanned aerial vehicle baseline-II equipped with one central vertical rudder." Jurnal Teknologi. 75:8 (2015). Pp 95-99. eISSN 2180–3722. SCOPUS
4. Rizal E.M. Nasir*, Wahyu Kuntjoro , Wirachman Wisnoe "Aerodynamic, Stability and Flying Quality Evaluation on a Small Blended Wing-body Aircraft with Canard Foreplanes." Procedia Technology 15 (2014) pp. 783 – 791. ISSN 2212-0173. WEB OF SCIENCE
5. Rizal E. M. Nasir Wahyu Kuntjoro, " Stability Augmentation for Longitudinal Modes of a Small Blended Wing-Body Aircraft with Canard as Control Surface." Journal of Mechanical Engineering: An International Journal, Vol 10, No 2. (2013) Pp. 37-51. ISSN 1823-5514. SCOPUS
6. Rizal E. M. Nasir and Wahyu Kuntjoro, "Longitudinal Flight Stability Augmentation of a Small Blended WingBody Aircraft with Canard as Control Surface." Applied Mechanics and Materials Vol. 393 (2013) pp 329-337. SCOPUS

7. Firdaus Mohamad, Wirachman Wisnoe, Rizal E. M.Nasir, Khairul Imran Sainan, and Norhisyam Jenal, "Yaw Stability Analysis for UiTM's BWB Baseline-II UAV E- 4." Applied Mechanics and Materials Vol. 393 (2013) pp 323-328. SCOPUS
8. Rizal E. M. Nasir, Wahyu Kuntjoro and Wirachman Wisnoe. "Investigation on the Effect of Airspeed and Altitude to Phugoid Mode of a Small Unmanned Blended Wing-Body Aircraft with Canard as a Longitudinal Control Surface." Applied Mechanics and Materials Vol. 225 (2012) pp 375-384. SCOPUS, WEB OF SCIENCE
9. Rizal E. M. Nasir, Firdaus Mohamad, Ramlan Kasiran, M. Shahriman Adenan, M. Faizal Mohamed, M. Hanif Mat, Amir R. A. Ghani. "Aerodynamics of ARTeC's PEC 2011 EMo-C Car." Procedia Engineering 41 (2012) pp. 1775 – 1780. ISSN 1877-7058. SCOPUS
10. Rizal E. M. Nasir Wahyu Kuntjoro Wirachman Wisnoe. "Longitudinal Static Stability of a Blended Wing-Body Unmanned Aircraft with Canard as Longitudinal Control Surface." Journal of Mechanical Engineering, Vol. 9, No. 1, (2012) pp. 99-121. ISSN 1823-5514. SCOPUS
11. Nasir, R.E.M., Ali, Z., Kuntjoro, W., Wisnoe, W. "Investigation on aerodynamic characteristics of baseline-II E-2 blended wing-body aircraft with canard via computational simulation" AIP Conference Proceedings, 1440, (2012) pp. 700-706. SCOPUS
12. Firdaus Mohamad, Wirachman Wisnoe, Rizal E. M.Nasir, Wahyu Kuntjoro. "A Study about the Split Drag Flaps Deflections to Directional Motion of UiTM." American Institute of Physics AIP Conference Proceedings. Vol 1440, No 2012 (2012) pp. 324-329. SCOPUS
13. Amir Radzi Ab. Ghani*, Ramlan Kasiran, Mohd. Shahriman Adenan, Mohd. Haniff Mat, Rizal Effendy Mohd. Nasir, Mohd. Faizal Mohamad, and Wan Ahmad Najmi Wan Mohamed. "Novel Design of Impact Attenuator for an 'Eco Challenge' Car." Applied Mechanics and Materials Vol. 165 (2012) pp 237-241. ISSN 1662-7482. SCOPUS
14. Firdaus Mohamad, Wirachman Wisnoe, Wahyu Kuntjoro, Rizal E.M. Nasir. "The Effects of Split Drag Flaps on Directional Motion of UiTM's BWB UAV Baseline-II E-4: Investigation Based on CFD Approach." Advanced Materials Research Vols. 433-440 (2012) pp 584-588. ISBN 978-3-03785-319-1. SCOPUS, WEB OF SCIENCE.
15. Rizal E. M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe, Zurriati Ali. "Longitudinal Flight Dynamics of Baseline-II BWB UAV." Advanced Materials Research Vols. 433-440 (2012) pp 6636-6640. ISBN 978-3-03785-319-1. SCOPUS
16. Zurriati M. Ali , Wahyu Kuntjoro , Wirachman Wisnoe , Rizal E.M Nasir. "The Effect of Canard on Aerodynamics of Blended Wing Body." Applied Mechanics and Materials Vols. 110-116 (2012) pp 4156-4160. ISSN 1660-9336. SCOPUS, WEB OF SCIENCE.
17. Ali, Z.M., Kuntjoro, W., Wisnoe, W., Nasir, R.E.M., Mohamad, F., Reduan, N.F. "The aerodynamics performance of Blended Wing Body Baseline-II E2"2011 IEEE 3rd International Conference on Communication Software and Networks, ICCSN 2011, art. no. 6014899, (2011) pp. 293-297. SCOPUS
18. Wirachman Wisnoe, Wahyu Kuntjoro, Firdaus Mohamad, Rizal Effendy Mohd Nasir, Nor F Reduan, Zurriati Ali. "Experimental Results Analysis for UiTM BWB Baseline-I and Baseline-II UAV Running at 0.1 Mach number." International Journal of Mechanics, Issue 2, Volume 4, (2010). ISSN 1998-4448. SCOPUS
19. Rizal E. M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe, Aman M. I. Mamat. "The Effect of Centre-Elevator on Aerodynamics of UiTM Baseline-1 Blended Wing Body (BWB) Unmanned Aerial Vehicle (UAV) at Low Subsonic Speed" Journal of Mechanical Engineering: An International Journal. Vol.6 No. 2 Dec.(2009). pp. 73-96.
20. Rizal E.M. Nasir, Aman M.I. Mamat, Zulkiflee Ngah, W. Kuntjoro, W. Wisnoe, R. Ramly. "Aerodynamics of Blended Wing Body (BWB) Unmanned Aerial Vehicle (UAV) Using Computational Fluid Dynamics (CFD)". Journal of Mechanical Engineering. UiTM. October (2008). pp. 15-26

Conference Proceeding

1. Rizal E.M. Nasir , Nur Syazwani C.M. , Ahmad Imran M.K. , Wahyu Kuntjoro, Wirachman Wisnoe, "Aerodynamic Improvements of Baseline-IV Bird-Inspired BWB over Baseline III BWB." The 3rd International Conference on Mechanical Engineering Research (ICMER) 2015. Kuantan, Malaysia. 18-19 Aug. 2015.
2. Rizal E. M. Nasir, Nur A. H. Zulkifli, Firdaus Mohamed, Wahyu Kuntjoro, Wirachman Wisnoe. "Aerodynamics of Bird-Inspired Blended Wing-Body Aircraft: Wind Tunnel Experiment." World of UAV International Conference 2015 (WoUCON 2015), LIMA 2015, Langkawi, Malaysia. 17-19 Mar 2015.
3. Nur Syazwani C.M., Ahmad Imran M.K., Rizal E.M. Nasir. "Aerodynamic Investigation of Baseline-IV Bird-Inspired BWB Aircraft Design: Improvements over Baseline-III BWB." ICAMAME 2015 : 17th International Conference on Aerospace, Mechanical, Automotive and Materials Engineering. WASET, Kuala Lumpur, Malaysia. 12-13 Feb 2015.
4. Rizal E.M. Nasir*, Wahyu Kuntjoro , Wirachman Wisnoe "Aerodynamic, Stability and Flying Quality Evaluation on a Small Blended Wing-body Aircraft with Canard Foreplanes." 2nd International Conference on System-Integrated Intelligence: Challenges for Product and Production Engineering, Universitat Bremen, Germany, 30 June-4July 2014. WEB OF SCIENCE
5. Rizal E. M. Nasir and Wahyu Kuntjoro, "Longitudinal Flight Stability Augmentation of a Small Blended WingBody Aircraft with Canard as Control Surface." International Conference on Advances in Mechanical Engineering 2013. Malacca, Malaysia. 28-29 Aug. 2013.
6. Rizal E. M. Nasir, Firdaus Mohamad, Ramlan Kasiran, M. Shahriman Adenan, M. Faizal Mohamed, M. Hanif Mat, Amir R. A. Ghani. "Aerodynamics of ARTeC's PEC 2011 EMo-C Car." International Symposium on Robotics and Intelligent Sensors 2012 (IRIS 2012), Kuching, Sarawak, Malaysia. 4-6th Sept 2012.
7. Amir Radzi Ab. Ghani*, Ramlan Kasiran, Mohd. Shahriman Adenan, Mohd. Haniff Mat, Rizal Effendy Mohd. Nasir, Mohd. Faizal Mohamad, and Wan Ahmad Najmi Wan Mohamed. "Novel Design of Impact Attenuator for an 'Eco Challenge' Car." Regional Conference on Automotive Research (ReCAR) 2011 ReCAR2011-P089, Kuala Lumpur, Malaysia, 14th -15th December 2011.
8. Mohamad, F, Wisnoe, W, Nasir, REM, Kuntjoro, W. "A Study about the Split Drag Flaps Deflections to Directional Motion of UiTM's Blended Wing Body Aircraft Based on Computational Fluid Dynamics Simulation" The International Meeting on Advances in Thermofluids (4th IMAT 2011), Malacca, 3-4 Oct (2011). Pp. 324-329. WEB OF SCIENCE
9. Rizal E. M. Nasir, Zurriati Ali, Wahyu Kuntjoro, Wirachman Wisnoe. "Investigation on Aerodynamic Characteristics of Baseline-II E-2 Blended Wing-Body Aircraft with Canard via Computational Simulation." The International Meeting on Advances in Thermofluids (4th IMAT 2011), Malacca, 3-4 Oct (2011). Pp. 700-706. WEB OF SCIENCE.
10. Ali, ZM, Kuntjoro, W, Wisnoe, W, Nasir, REM, "The Effect of Canard on Aerodynamics of Blended Wing Body." 2nd International Conference on Mechnaical and Aerospace Engineering (ICMAE 2011), Bangkok, THAILAND, Jul. 29-31, (2011). WEB OF SCIENCE.
11. Firdaus Mohamad, Wirachman Wisnoe, Wahyu Kuntjoro, Rizal E.M. Nasir. "The Effects of Split Drag Flaps on Directional Motion of UiTM's BWB UAV Baseline-II E-4: Investigation Based on CFD Approach." International Conference on Materials Science and Information Technology (MSIT 2011). Singapore, Sep. 16-18, (2011). ISBN 978-3-03785-319-1. WEB OF SCIENCE.
12. Rizal E. M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe, Zurriati Ali. "Longitudinal Flight Dynamics of Baseline-II BWB UAV." International Conference on Materials Science and Information Technology (MSIT 2011). Singapore, Sep. 16-18, (2011). ISBN 978-3-03785-319-1. WEB OF SCIENCE.
13. Zurriati M. Ali, Wahyu Kuntjoro, Wirachman Wisnoe, Rizal Efendy M. Nasir, Firdaus Mohamad, Nor F. Reduan. "The Aerodynamics Performance of Blended Wing Body

Baseline-II E2." 2011 International Conference on Computer and Communication Devices (ICCCD 2011), Bali, Indonesia, 1-3 Apr 2011. IEEE
14. Firdaus Mohamad, Wirachman Wisnoe, Wahyu Kuntjoro, Rizal E.M.Nasir, Zurriati Mohd.Ali and Nor Fazira Reduan. "Wind Tunnel Experiments of UiTM's Blended Wing Body (BWB) Baseline-II Unmanned Aerial Vehicle (UAV) at Low Subsonic Speed", 2010 International Conference on Science and Social Research (CSSR 2010). Kuala Lumpur, Malaysia, 5-7 Dec (2010). Pp. 991-994. ISBN 978-1-4244-8985-5. SCOPUS, IEEE
15. Ramzyzan Ramly Wahyu Kuntjoro Wirachman Wisnoe Rizal Effendy Mohd Nasir. "Design and Analysis for Development of a Wing Box Static Test Rig." 2010 International Conference on Science and Social Research (CSSR 2010). Kuala Lumpur, Malaysia, 5-7 Dec (2010). Pp. 113-117. ISBN 978-1-4244-8985-5. SCOPUS, IEEE
16. Rizal E. M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe, Zurriati Mohd. Ali, Norfazira Reduan, Firdaus Mohamad, Ramzyzan Ramly. "Static Stability of Baseline-II Blended WingBody Aircraft at Low Subsonic Speed: Investigation via Computational Fluid Dynamics Simulation." 2010 International Conference on Science and Social Research (CSSR 2010). Kuala Lumpur, Malaysia, 5-7 Dec (2010). Pp. 97-102. ISBN 978-1-4244-8985-5. SCOPUS, IEEE
17. Wirachman Wisnoe, Zurriati M.A, Firdaus M, Nor Fazira R, Rizal E.M. Nasir,Wahyu Kuntjoro. "Experimental Investigation of Center Elevator Deflection on Aerodynamics of UiTM's Baseline-I Blended Wing Body (BWB) Unmanned Aerial Vehicle (UAV)." 2010 International Conference on Science and Social Research (CSSR 2010). Kuala Lumpur, Malaysia, 5-7 Dec (2010). Pp. 108-112. ISBN 978-1-4244-8985-5. SCOPUS, IEEE
18. Nor Fazira Reduan, Wirachman Wisnoe , Wahyu Kuntjoro, Rizal Effendy Mohd Nasir, Firdaus Mohamad, Zurriati Ali. "Aerodynamics Characteristic of UiTM's BWB UAV Baseline-II at Different Canard Deflection Angles at Low Pitching Angle." 2010 International Conference on Science and Social Research (CSSR 2010). Kuala Lumpur, Malaysia, 5-7 Dec (2010). Pp. 1005-1009. ISBN 978-1-4244-8985-5. SCOPUS, IEEE
19. Ramzyzan Ramly, Wahyu Kuntjoro, Wirachman Wisnoe, Rizal Effendy Mohd Nasir. "Finite Element Analysis of Frame Profiles for the Development of Static Wing Box Test Rig." 2010 International Conference on Advances in Mechanical Engineering (ICAME 2010), Shah Alam, Malaysia, 2-5 Dec 2010. ISBN 9789673631865.
20. Wirachman Wisnoe, Nor Fazira Reduan, Wahyu Kuntjoro, Rizal Effendy Mohd Nasir, Firdaus Mohamad, Zurriati Ali. "Study of Aerodynamics Characteristic of BWB Baseline-II." 2010 International Conference on Advances in Mechanical Engineering (ICAME 2010), Shah Alam, Malaysia, 2-5 Dec 2010. ISBN 9789673631865.
21. Rizal E. M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe, Zurriati Ali, Norfazira Reduan, Firdaus Mohamad, Ramzyzan Ramly. "Aerodynamics and Longitudinal Static Stability of Baseline-II Blended Wing-Body Aircraft Variants." 2010 International Conference on Advances in Mechanical Engineering (ICAME 2010), Shah Alam, Malaysia, 2-5 Dec 2010. ISBN 9789673631865.
22. Zurriati M.A , Wahyu Kuntjoro ,Wirachman Wisnoe , Rizal E. M. Nasir , Matzaini K. "The Aerodynamic Study of Low Aspect Ratio Canard on BWB-Baseline II E2." 2010 International Conference on Advances in Mechanical Engineering (ICAME 2010), Shah Alam, Malaysia, 2-5 Dec 2010. ISBN 9789673631865.
23. Firdaus Mohamad, Wirachman Wisnoe, Wahyu Kuntjoro, Rizal E.M. Nasir, Zurriati M.Ali, Nor Fazira Reduan. "Experiment Results of UiTM's Blended Wing Body (BWB) Baseline-II UAV using Low Speed Wind Tunnel." 2010 International Conference on Advances in Mechanical Engineering (ICAME 2010), Shah Alam, Malaysia, 2-5 Dec 2010. ISBN 9789673631865.
24. Wirachman Wisnoe, Firdaus Mohamad , Rizal Effendy Mohd Nasir , Nor F. Reduan. "Wind Tunnel Experiments of UiTM BWB Baseline-I And Baseline-II UAV At 0.1 Mach Number." World Engineering Congress 2010, Kuching, Sarawak, Malaysia, 2nd – 5 th August 2010.
25. Rizal E.M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe, Firdaus Mohamad, Zurriati M.Ali, Nor Fazira Reduan. "The Effect of Canard on Aerodynamics and Static Stability of

Baseline-II Blended Wing-Body Aircraft at Low Subsonic Speed." World Engineering Congress 2010, Kuching, Sarawak, Malaysia, 2nd – 5 th August 2010.
26. Rizal E. M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe, Zurriati Ali, Nor F. Reduan, Firdaus Mohamad, Shahrizal Suboh. "Preliminary Design of —Baseline-II Blended Wing-Body (BWB) Unmanned Aerial Vehicle (UAV): Achieving Higher Aerodynamic Efficiency Through Planform Redesign and LowFidelity Inverse Twist Method." Proceedings of EnCon2010 3 rd Engineering Conference on Advancement in Mechanical and Manufacturing for Sustainable Environment, Kuching, Sarawak, Malaysia. April 14-16, 2010.
27. Ramzyzan Ramly, Wahyu Kuntjoro, Wirachman Wisnoe, Rizal Effendy Mohd Nasir, Aman Mohd Ehsan Mamat. "Design and Development of Lab-Based Wing Test Rig for Static Test" Proceedings. International Conference on the Advancement of Mechanical Engineering (ICAME) 2009. Concorde Hotel, Shah Alam, Malaysia. 24-25th June 2009.
28. Wirachman Wisnoe, Rizal Effendy Mohd Nasir, Wahyu Kuntjoro, Aman Mohd Ihsan Mamat, Ramzyzan Ramly. "Study of Blended Wing Body (BWB) Unmanned Aerial Vehicle (UAV) Aerodynamic Performance at Mach 0.1 and Mach 0.3." Proceedings. International Conference on the Advancement of Mechanical Engineering (ICAME) 2009. Concorde Hotel, Shah Alam, Malaysia. 24-25th June 2009.
29. Rizal E. M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe, Aman M. I. Mamat. "The Effect of Centre Elevator Deflection on Aerodynamics of UiTM Baseline-1 Blended Wing Body (BWB) Unmanned Aerial Vehicle (UAV) at Mach 0.3 using Computational Fluid Dynamics." Proceedings. International Conference on the Advancement of Mechanical Engineering (ICAME) 2009. Concorde Hotel, Shah Alam, Malaysia. 24-25th June 2009.
30. Wirachman Wisnoe, Rizal Effendy Mohd Nasir, Wahyu Kuntjoro, and Aman Mohd Ihsan Mamat. "Wind Tunnel Experiments and CFD Analysis of Blended Wing Body (BWB) Unmanned Aerial Vehicle (UAV) at Mach 0.1 and Mach 0.3". 13th International Conference on Aerospace Sciences and Aviation Technology (ASAT 2009). Military Technical College. Cairo, Egypt. 26-28Th May 2009.
31. SHAHARUDIN BIN AHMAD, YUPITER HARANGAN PRASADA MANURUNG (DR), JUNAIDAH BT RAHMAD , RIZAL EFFENDY BIN MOHD NASIR, HAMZAH BIN A BAKAR (HAJI), Assoc. Prof. Dr. Adi , " Finite Elemenet Analysis of A Semi-Smail Water-Plane Area Twin Hull (SWATH) Structure." Proceedings. Conference on Social & Scientific Research CSSR 2008/2009. A Farmosa Resort. 14-15th March 2009.
32. W. Wisnoe, Aman M.I. Mamat , Rizal E.M. Nasir, W. Kuntjoro, R. Ramly. "Aerodynamic Performance of UiTM BWB-UAV at Mach 0.1 Obtained from Wind Tunnel Experiments" Proceedings. Conference on Social & Scientific Research CSSR 2008/2009. A Farmosa Resort. 14-15th March 2009.
33. WAHYU KUNTJORO (PROF. DR.), RIZAL EFFENDY BIN MOHD NASIR, WIRACHMAN WISNOE (DR), AMAN MOHD IHSAN BIN MAMAT (DR), M Razip Abdulah. "Computer Aided Design and Engineering of Blended Wing Body UAV Structure." RAeS/CEAS Aircraft Structural Design Conference, The Foresight Centre, University of Liverpool, UK. 14-16 Oct 2008. ISBN 1 85768 227 0
34. SHAHARUDIN BIN AHMAD, YUPITER HARANGAN PRASADA MANURUNG (DR), JUNAIDAH BT RAHMAD , RIZAL EFFENDY BIN MOHD NASIR, HAMZAH BIN A BAKAR (HAJI) , Assoc. Prof. Dr. Adi Maimun Abdul Malik. "Transverse Strength of A Semi-Small Water-Plane Area Twin Hull (SWATH)." 2nd Regionsl Conference on Vehicle Engineering And Technology RIVET 2008, Kuala Lumpur, Malaysia, 15-17 July 2008. ISBN 978-983-42496-1-8.
35. W. Wisnoe, Aman M.I. Mamat , Rizal E.M. Nasir, W. Kuntjoro, R. Ramly. "Wind Tunnel Test of Blended Wing Body (BWB) Unmanned Aerial Vehicle (UAV) At Loitering Phase" Proceedings. International Conference on Mechanical Engineering (ICME) 2008.. Puteri Pacific, Johor Bahru. UTHM, 21-25 Mei 2008.
36. Rizal E.M. Nasir, Aman M.I. Mamat, W. Kuntjoro, W. Wisnoe, R. Ramly. "Aerodynamics of Sub-Sonic Blended Wing Body (BWB) Unmanned Aerial Vehicle (UAV) Using

Computational Fluid Dynamics (CFD)" Proceedings. International Conference on Mechanical Engineering (ICME) 2008.. Puteri Pacific, Johor Bahru. UTHM, 21-25 Mei 2008.

37. Aman M.I. Mamat , Rizal E.M. Nasir, W. Kuntjoro, W. Wisnoe, R. Ramly. "Aerodynamics Characteristics Determination of High Subsonic Aerial Target Drone Using CFD At 0.7 Mach Number" Proceedings. International Conference on Mechanical Engineering (ICME) 2008.. Puteri Pacific, Johor Bahru. UTHM, 21-25 Mei 2008.
38. Nasir, R.E., Mamat, A.M., Ngah, Z., Kuntjoro, W., Wisnoe, W. "Aerodynamics of Blended Wing Body Unmanned Aerial Vehicle using Computational Fluid Dynamics". Proceedings. Conference on Social & Scientific Research CSSR 2006/2007. Sunway Lagoon Resort Hotel. 3-4th July 2007.
39. Nasir, R. E.. 2005. "Implementation of Topology Optimisation for thermoelastic problems in ANSYS environment and its application to the design of turbine disc cross-section". Proceedings. National Conference on Advances in Mechanical Engineering 2005 (NAME 2005). 18-20 Mei 2005. Cititel Midvalley, Kuala Lumpur

Technical Paper/Report/Bulletin

1. Rizal E. M. Nasir, Wahyu Kunt Joro, Wirachman Wisnoe. "Flight Dynamics, Stability and Control of a Bio-Inspired Blended Wing-Body Small Unmanned Aircraft." Technical Report. RIF Grant, RMI, UiTM. August 2014.
2. Rizal E. M. Nasir, Wahyu Kuntjoro, Wirachman Wisnoe. "Flight Dynamics of Baseline-II Blended Wing-Body Aircraft." Technical Report. Dana Kecemerlangan Grant, RMI, UiTM. January 2012.
3. W. Wisnoe, W. Kuntjoro, R. E. M. Nasir, A. M. I. Mamat, "Aerodynamics Prediction of Blended Wing-Body (BWB) Unmanned Aerial Vehicle Using Wind Tunnel Experimental Approach." Technical Report 600-IRDC/ST/FRGS.5/3/1177, RMI UiTM. November 2010.
4. R Ramly, W Kuntjoro, W Wisnoe, R E M Nasir, "Design Parameters for the Development of Wing Test Rig for Static Test Experiment." Technical Report 600-RMI/ST/FRGS 5/3/Fst (31/2008). RMI UiTM. October 2010
5. Nasir, R.E. "Into The Black Hole: The universe is too big for us to reach… but does it stop us from exploring?" aCADEMia (CADEM Bulletin) issue 1 June/July 2007.
6. Kuntjoro, W., Nasir, R.E., Ngah, Z., Ramly, R. "Static & Damage Tolerance Analysis of Radome Pressure Box". Technical Report. CADEM-IRDC UiTM-AIROD. February 2007.
7. Rizal E.M. Nasir, Aman M.I. Mamat, Zulkiflee Ngah et. Al. "Aerodynamics of Blended Wing-Body Unmanned Aerial Vehicle using CFD". Technical Report. IRDC UITM. January 2007.
8. Nasir, R.E., Ngah, Zulkiflee. "Annual Report 2006: Computer-Aided Design Engineering & Manufacturing Centre". CADEM. January 2007.
9. Rizal E.M. Nasir. "How Flight Simulator can Enhance Learning in Aerospace Engineering Courses in Universiti Teknologi MARA" Technical paper, Kursus Asas Pengajaran, ILQAM, Mei 2006.
10. Rizal E.M. Nasir. " Method of Evaluation for Students Taking Aircraft Design Course in Bachelor of Aerospace Engineering in Universiti Teknologi MARA" Technical Paper, Kursus Asas Pengajaran, ILQAM, Mei 2006

Invention, Innovation, Design and Student Competition

1. Deputy Director, Research Innovation Symposium & Exposition 2015 (RISE 2015). 15-16 Nov 2015.
2. Organizer, FTTC Motor glider competition UiTM. April 2015.
3. 1st runner up Overall Category, Speacial Jury Prize, 1st Place for the fastest bombing mission 1, 2nd Place for the most accurate bombing mission 2, UAV Challenge France 2014. 8-9 June 2014. (NAMTOR Hexacopter)

4. Overall Champion, Top Prize to France for 10 days, 1st Place for the fastest bombing mission 1 & 2 and the 1st place for the most accurate bombing mission, UAV Siswa Challenge Malaysia 2013-2014. (NAMTOR Hexacopter)
5. 1st runner up Best Design, Perodua Eco Challenge 2013 (LANTERN car based on Myvi)
6. Participated, Shell Eco-Marathon 2012, Fuel-Cell, Prototype Category.
7. 1st runner up Best Design, Perodua Eco Challenge 2012 (single-seater car)
8. Participated in Perodua Eco Challenge 2011 (E-MoC car design - single-seater car)
9. 1st Runner Up, 1st Place Best Engineering & Design, Perodua Eco Challenge 2010 (Viva).
10. 1st Runner Up (Automatic), Perodua Eco-Challenge 2009 (Myvi).
11. Presented "The Design and Aerodynamics of Blended Wing Body (BWB) of Unmanned Aerial Vehicle (UAV) Using Computational Fluid Dynamics (CFD)" at PECIPTA 2007 KLCC, 10-12 August 2007.
12. SILVER MEDAL Award for presenting research product at Invention, Innovation & Desifgn Exposition 2007 (IID 2007) on "Blended Wing-Body UAV" at UiTM Shah Alam pada 24-25 January 2007.

Invited Speaker/Other Seminars

1. Presented "Future Passenger Aircraft Design, Blended Wing-Body and Performance: Their Impact to the Design of Runway, Taxiway, Taxilane and Terminal Apron Sizing" Program Latihan Pembangunan Staf Malaysia Airports Berhad, 28 Februari 2008. MAB Training Centre, KLIA, Sepang.
2. Presented lecture on "Open Lecture on Blended Wing-Body (BWB) Aircraft: Historical Development, Mission Requirement and Challenges in Designing BWB UAV." Pada 14 Mac 2007, FKM, UiTM Shah Alam.
3. Presented as invited speaker on "The Way Forward: The Future (of material technology on BWB UAV)" di Malaysian Symposium on Advanced Powder Metallurgy & Particulate Materials 2007, 21-22 August 2007 anjuran CAMAR UiTM, Shah Alam.
4. Presented working paper on "Collaboration between CADEM Faculty of Mechanical Engineering UiTM, industries & government departments on the development of future unmanned aerial vehicle" Pada 8 Mac 2007 di Beechcraft B-200T Modification Seminar organized by AIROD at Subang Air Force Base.
5. Presented lecture on "Passenger Aircraft Design and Performance: Their Impact to the Design of Runway, Taxiway, Taxilane and Terminal Apron Sizing" di Program Latihan Pembangunan Staf Malaysia Airports Berhad, 18 November 2007. MAB Training Centre, KLIA, Sepang.
6. Presented "CADEM Centre: the Way Forward" di Mechanical Engineering Colloquium. 25 Julai 2007 Bilik Seminar FKM.

In The Mass Media

1. TV Interview. "Berita Tengahari (1pm): Isu helicopter AS365 terhempas di Semenyih" TV1, Radio Televisyen Malaysia (RTM). 1pm, 5 April 2015.
2. Radio Interview. "Berita Radio 24: Kehilangan Airbus A320 Air Asia QZ8501 di Indonesia." Radio BERNAMA. 10am. 28 Dis 2014.
3. Radio Interview. "Dalam RADAR: Diskusi Tentang Sistem peluru Berpandu dan MH17." Radio BERNAMA, 9.30pm-10am September 2014.
4. Newspaper Article. "Hexacopter Mission in Paris: UiTM Students Scale New Heights" Learning Curve: New Sunday Times, 10 August 2014.
5. Newspaper Article. "Flying High with Hexacopters" The Star, 20 April 2014
6. Newspaper Article. "Mana Pergi Satelit, Radar AS?" Sinar Harian, 5 April 2014.
7. TV Interview. "Galaksi: Diskusi tentang teknologi pesawat dan kehilangan MH370." TV1, Radio Televisyen Malaysia (RTM). 3pm-4pm, 17 Mac 2014.
8. Newspaper Article. "Pelbagai Kemungkinan MH370" Berita Harian, 15 March 2014.

9. Radio Interview. "Dalam RADAR: Diskusi tentang misteri kehilangan MH370." Radio BERNAMA, 5.30pm-6pm 9 Mar 2014
10. Newspaper Article. "Tiada Serpihan ditemui bukti pesawat tak terhempas" Berita Harian, 10 March 2014.

Previous Job Training & Employments

1. Lecturer, Faculty of Mechanical Engineering, Universiti Teknologi MARA, Shah Alam (2002-2003)
2. Technical Executive, Shiprepair Division, Malaysian Shipyard & Engineering, Pasir Gudang, Johore (2001-2002)
3. Engineering Trainee, SENTRA 4, Royal Malaysian Air Force, Alor Setar, Kedah (1999)
4. Trainee, Investment Department, American International Assurance (AIA), Kuala Lumpur (1995-1996)

Community Service

1. Committee, Running River Turbine Project in Taman Negara Pahang (2012-2014).
2. Member, Persatuan Penduduk Kuarters KKM Hospital Rehabilitasi Cheras (2012-2014)
3. Committee, Taman Bukit Pelangi Resident Association (2007-2009)

Other Hobbies & Interest

- RC Airplane/Drone/Car/Tank/Robots
- Reading on topics related to aerospace, military technology & doctrine, automotive, history, politics & international affairs.
- Stage Performance (Play)
- Photography
- Enjoy variety of coffee

References

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