Associate Professor Ts. Dr. Rizal Effendy bin Mohd Nasir

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*Associate Professor in Mechanical Engineering (Aerospace)*

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**Academic Qualifications**

1. Ph.D. in Mechanical Engineering, Universiti Teknologi MARA, Malaysia, 2013.
2. M.Sc. in Aerospace Engineering, University of Bath, UK, 2004.
3. B.Eng. (Mechanicals-Aeronautics), Universiti Teknologi Malaysia, 2001.

**Membership in Professional Bodies and Society**

1. Professional Technologist (Member), Malaysian Board of Technologist – Aerospace & Aviation Technology (AV)
2. Professional Member, Aerospace Malaysia Society (AEROS)
3. Graduate Member, Board of Engineers, Malaysia (BEM)

**Teaching Experiences (Courses)**

1. Flight Dynamics & Control
2. Flight Mechanics & Performance
3. Aerodynamics & Flight Performance
4. Avionics & Unamnned System Design
5. Mechanics & Thermodynamics of Propulsion
6. Control Engineering
7. System Dynamics
8. Fluid Mechanics
9. Dynamics
10. Introduction to Aviation Technology

**Areas of Research & Development**

1. Blended Wing-Body
2. Unmanned Aerial Vehicles (UAV)
3. Flight Dynamics & Aerodynamics
4. Aircraft Design

**Academic and Research Appointments**

1. Head of RG, Flight Technology & Test Research Group (FTT-RG, FTTC), Universiti Teknologi Mara (2022 – now)
2. Affiliate Member, Electromagnetic Research Group (EMRG), Universiti Teknologi MARA (2021 – now)
3. Fellow Member, High Energy Material Research Laboratory (HEMREL), Universiti Teknologi MARA (2020 – now)
4. Head of CoE,Flight Technology & Test Centre (FTTC), Universiti Teknologi MARA (2012 – 2016, 2017 - 2019)
5. Allied Member, Applied Electromagnetic Research Group (AERG), Faculty of Electrical Engineering, Universiti Teknologi MARA (2019 – now)
6. Resource Person for Aerospace Engineering Specialization Certificate (AESC) Program for EM220 Bachelor of Engineering (Mechanicals) students (2019 – now)
7. Program Chair/Developer for EM707 Masters of Science in Aerospace Engineering Management (2018 – 2021)
8. Resource Person - Course Developer for MEC671 Flight Mechanics & Performance, MEC672 Flight Dynamics & Control, and MEC656 Applied Aerodynamics (2017 – now)
9. Head of Centre of Study,Thermofluids and Energy, Faculty of Mechanical Engineering, Universiti Teknologi MARA (2016-2017)
10. Vice Chairman – Project Manager,International Conference on Advances in Mechanical Engineering (ICAME) 2017 (2016-2017)
11. Member, Flight Technology & Test RIG (Formerly known as Aviation Technology Research (ATR) RIG) RENEU, Universiti Teknologi MARA (2014-now)
12. Member, National Design Centre (NDC), Faculty of Arts & Design, Universiti Teknologi MARA (2014-2018)
13. Deputy Head of Department (Centre of Study),Thermofluids and Energy Department, Faculty of Mechanical Engineering, Universiti Teknologi MARA (2012-2016)
14. Resource Person for KJM485 Head & Fluids, Faculty of Electrical Engineering (FKE), Universiti Teknologi MARA (2012 – 2014)
15. Member, Malaysian Institute of Transport (MITRANS), (2007-2008)
16. Deputy Head of CoE, Computer-Aided Design, Engineering & Manufacturing Centre (CADEM) Centre, Universiti Teknologi MARA (2006-2007)
17. Committee Member, Unit of Research Development & Commercialization (URDC), Faculty of Mechanical Engineering, Universiti Teknologi MARA (2002-2003)

**Research Grants**

1. MIDF 2024 Grant, “Proposed Enhancement Of Unmanned Aircraft System (Uas) Fleet Management System (Ufms) To Uas Fleet Management And Control.” 600-TNCPI/PBT 5/3 PRI (167/2024). RM870,000.
2. PRGS 2022 Grant, “Development Of A Blended Wing-Body Unmanned Aerial Transport Aircraft Prototype,” 600-RMC/PRGS 5/3 (004/2022). RM103,060.
3. TED1 MOSTI Grant, “Automatic Elderly Fall Detection Alert System,” 600-RMC/MOSTI-TeD1/5/3 (009/2021), 1/10/2021 – 30/9/2023. RM391,000.
4. KEPU Grant, “Flying Quality Evaluation Of A Multi-Role, Fixed Wing-Multirotor Hybrid Unmanned Aerial Vehicle For Crop Spraying On Pineapple Farm.” 600-RMC/KEPU 5/3 (004/2021), 15/7/2021 – 14/7/2023. RM40,000.
5. LESTARI Grant, “Development Of Small BWB UAV Wing Box Structure Manufactured By 3d Printing,” 600-RMC/MYRA 5/3/LESTARI (051/2020), 21/12/2020 – 20/3/2023. RM20,000
6. Micro Indutrial Hub (MIH) Grant, “MIH (MTCE FKM) – Development of Rocket” MIH-(005/2020 25/8/2020 – 24/8/2022. RM150,000.
7. SINERGI Grant, “Development Of A Blended Wing-Body Unmanned Aerial System (UAS) With 4G Navigation System” 600-IRMI/DANA 5/3/SINERGI (001/2019), 2019-2021. RM50,000.
8. BESTARI PERDANA Grant, “Flight Performance Optimisation of Energy-Efficient Blended Wing-Body Aircraft using Simulations Based-on Blade Element Theory,” 600-IRMI/PERDANA 5/3 BESTARI (047/2018), 2018-2020. RM35,000.
9. TRGS Grant, “3D Design Development And Modular Body Framework Fabrication Of Autonomous Vehicle Prototype”, 600-IRMI/KPT 5/3/TR (001/2017)-7, 2017-2018, RM145,000
10. TRGS Grant, “Design And Development Of An Autonomous Electric Vehicle Platform And Drive System For Uitm-Av1”, 600-IRMI/KPT 5/3/TR (001/2017)-6, 2017-2018, RM75,000
11. GIP Grant, “Aerodynamics and Stability of Blended Wing Body Aircraft with integrated tail,” 600-IRMI/MyRA 5/3/GIP (037/2017), 2017-2018. RM20,000
12. MarCeL Grant, “Development of drone for delivery of medical supply within UiTM campuses.” 600-RMI/MITRANS\_IRES 5/3(004/2017), 2017-2019. RM69,000.
13. BESTARI Grant, “Development of tilted quadrotor for autonomous flight.” 600-IRMI/MYRA 5/3/BESTARI (022/2017), 2017-2019. RM35,000.
14. FRGS Grant, “Characterisation of Natural Frequencies and Damping Ratios of a BWB aircraft with multiple elevons” FRGS/1/2016/TK09/UITM/02/1, 600-RMI/FRGS 5/3 (0117/2016). 2016-2018. RM117,200.
15. LESTARI Grant, “Using embedded sensors for analyzing multi-configuration stiffened panels under compressive loads.” 600-RMI/DANA 5/3/LESTARI (84/2015), 2015-2017. RM20,000
16. FRGS Grant, “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.
17. PRGS Grant, “Blended Wing-Body Micro-class Unmanned Aircraft Prototype for Surveillence.” 600-RMI/PRGS 5/3 (3/2014). 2014-2016. RM180,000.
18. FRGS Grant, “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.
19. RIF Grant, “Flight Dynamics, Stability and Control of a Bio-Inspired Blended Wing-Body Small Unmanned Aircraft.” 600-RMI/DANA 5/3/RIF (611/2012), 2012-2014. RM32,000.
20. Dana Kecemerlangan Grant, “Longitudinal flight control surfaces of blended wing-body (BWB) unmanned aerial vehicle”, 600-RMI/ST/DANA 5/3/DST (219/2009), 2010-2012 – RM10,000.
21. FRGS Grant, “Design parameters for the development of wing test ring for static test experiment,” 600-RMI/ST/FRGS 5/3/FST (31/2008), 2008-2011. RM48,000.
22. e-Science MOSTI Grant, “Development Of A Principal Approach For The Transverse Strength Of A Semi-Swath Vessel”. 100-IRDC/SF 16/6/2(34/2007), 2006-2009 – RM182,000.
23. FRGS Grant, “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.
24. IRDC Grant, “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

**Intellectual Property (IP)**

1. PI2023005976, Patent, 2023, Unmanned Aircraft For Parcel Delivery And Method Thereof.
2. PI2019007951, Patent, 2020, Ducati 1198 Semi-Active Racing Winglet.
3. PI2019007950, Patent, 2020, Ducati Diavel Gen 1 S-A Windshield.
4. LY2018004305, Copyright, 18/09/2018, Baseline 7 Bird-Inspired BWB UAV 4G LTE Navigation.
5. LY2017003525, Copyright, 21/09/2017, Aerodynamically Efficient Blended Wing-Body Drone.
6. PI2017701509, Patent, 28/04/2017, Blended Wing-Body UAV for Surveillance Mission.
7. 16-E0366-0101, Industrial Design, 30/12/2016, BWB UAV for Aerial Surveillance.
8. LY2016002456, Copyright, 15/09/2016, Blended Wing-Body Unmanned Aerial Vehicle

**Postgraduate Supervision**

**Ph.D. Supervision Completed (Graduated)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Students Name | Institutions | Year Enrolled | Year End |
| 1 | Ir. Mohd Razip Bin Abdullah | FKM, UiTM | 2015 | 2024 |

**On-Going Ph.D. Supervision**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Students Name | Institutions | Year Enrolled | Year End |
| 1 | Nur Atikah Basyirah Binti Abdul Muta’ali | FKM, UiTM | 2020 | 2023 |
| 2 | Tc. Shahrean Zainurin, MRAeS | FKM, UiTM | 2020 | 2024 |
| 3 | Ir. Ts. Abdul Malik Hussein Abd Jalil, P. Eng. | FKM, UiTM | 2020 | 2024 |

**M.Sc. (Research) Supervision Completed (Graduated)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Students Name | Institutions | Year Enrolled | Year End |
| 1 | Mohd Firdaus Bin Mohamad | FKM, UiTM | 2010 | 2012 |
| 2 | Nor Syazwani Che Mazlan | FKM, UiTM | 2014 | 2017 |
| 3 | Rizqiah Banu Binti Varusai | FSSR, UiTM | 2015 | 2018 |
| 4 | Nor Zaini Bin Hashim | FKM, UiTM | 2015 | 2018 |
| 5 | Muhammad Aiman Bin Ahmad | FKM, UiTM | 2016 | 2019 |
| 6 | Mohd Zulfazly Arief Latiff | FKM, UiTM | 2016 | 2019 |
| 7 | Nur Atikah Basyirah Binti Abdul Muta’ali | FKM, UiTM | 2018 | 2019 |
| 8 | Tc. Shahrean Zainurin, MRAeS | FKM, UiTM | 2019 | 2020 |
| 9 | Nur Fahimah Mat Salleh | MITRANS, UiTM | 2018 | 2021 |
| 10 | Muhammad Ridzwan Bin Ramli | MITRANS, UiTM | 2021 | 2023 |
| 11 | Muhammad Ashraf Zhafry Nor Azri | COE, UiTM | 2022 | 2023 |
|  |  |  |  |  |

**On-Going M.Sc. (Research) Supervision**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Students Name | Institutions | Year Enrolled | Year End |
| 1 | Nor Fazira Redzuan | FKM, UiTM | 2010 | - |
| 2 | Nor Liza binti Kassim | FKM, UiTM | 2012 | - |
| 3 | Khairol Nazmi Bin Zainol Ariffin | FKM, UiTM | 2015 | - |
| 4 | Mohd Hafiz bin Othman | FKM, UiTM | 2016 | - |
| 5 | Zulhimi Harun | FKM, UiTM | 2018 | - |
| 6 | Mohd Faizal Bin Mohd | FKM, UiTM | 2020 | 2023 |
| 7 | Muhammad Amirul Hakim Bin Amir | UiTM Penang | 2020 | 2023 |
| 8 | Mukhriz bin Mazlan | COE, UiTM | 2021 | 2022 |
| 9 | Ummu Humairah Binti Mat Latip | COE, UiTM | 2021 | 2023 |

**Publications**

**Chapter in Book**

1. Wirachman Wisnoe dan Rizal E. M. Nasir, “Aerodinamika dan kinerja terbang pesawat blended wing body - unmanned aerial vehicle (BWB-UAV),” Indonesian Brain Gain, PT Penerbit IPB Press, Jan 2017. ISBN: 978-602-440-031-6.
2. 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. Nadzari, Muhammad Nabil Iman bin Mat, Atikah B. A. Muta'ali, and Rizal Effendy bin Mohd Nasir. "Multi-Disciplinary Optimisation (MDO) of a Blended Wing-Body (BWB) Aeroplane Design with Variable Wing Sweep Angle." Journal of Aeronautics, Astronautics and Aviation 57, no.3S (2025): 341-353. Accessed June 18, 2025. Airiti Library. doi:10.6125/JoAAA.202503\_57(3S).06
2. Norzaini, Irfan Fathullah, Shahrean Zainurin, and Rizal Effendy Mohd Nasir. "Optimal Variable PID Control Tuning for the Baseline-X Blended Wing-Body Aircraft Design." Journal of Aeronautics, Astronautics and Aviation 57, no.3S (2025): 451-459. Accessed June 18, 2025. Airiti Library. doi:10.6125/JoAAA.202503\_57(3S).16
3. Muta’ali, A. B. A., Nasir, R. E. M., & Kuntjoro, W. (2024). Aerodynamic investigation by experimental and computational simulation of a flying wing unmanned aerial vehicle for cargo delivery and surveillance missions. Aviation, 28(4), 264-278.
4. Osman, A., Hamid, A.H.A., Yusof, M.F.I.N.M. and Nasir, R.E.M., 2024. Aerodynamic Evaluation of UiTM's Blended Wing Body Unmanned Aerial Vehicle at Different Elevon Configurations using Vortex Lattice Method. Journal of Aeronautics, Astronautics and Aviation, 56(1S), pp.419-437.
5. Muta'ali, A.B.A., Noryatim, A.N.M., Nasir, R.E.M., Hamid, A.H.A. and Mokhtar, A.S., 2024. Aerodynamics Analysis of a Boomerang Blended-Wing-Body Unmanned Aerial Vehicle using Different Numerical Simulation Tools. Journal of Aeronautics, Astronautics and Aviation, 56(1S), pp.319-331.
6. Shuairi, M.D.M., Nasir, R.E.M. and Romli, F.I., 2024. Flight Performance Analysis of a Blended Wing-Body Unmanned Aerial Transport Vehicle. Journal of Aeronautics, Astronautics and Aviation, 56(1S), pp.243-256.
7. Mazlan, M., Nasir, R.E. and Ma’arof, M.I.N., 2024. Flight Simulation Assessment of a Novel FW-MR Hybrid Agriculture Drone. In E3S Web of Conferences (Vol. 477, p. 00004). EDP Sciences.
8. Kuntjoro, W., Jalil, A.M.H.B.A. and Nasir, R.E.B.M., 2023, November. Parametric study on the stress behaviour of 3D printed PLA plate with hole. In AIP Conference Proceedings (Vol. 2847, No. 1). AIP Publishing.
9. Ma’arof, M.I.N., Nasir, M.F.M., Ridzuan, M.N., Chala, G.T., Nasir, R.E.M. and Rajendran, K., 2023. Effects of Diffuser Length of an Open and Ducted Propellers in UAV Applications. Journal of Advanced Research in Applied Sciences and Engineering Technology, 32(3), pp.307-315.
10. Kuntjoro, W., bin Abdul Jalil, A.M.H., bin Mohd Nasir, R.E. and Saedon, J., 2023. Surface Roughness Analysis of 3D Printed PLA Notched Curve Shell. Journal of Aeronautics, Astronautics and Aviation, 55(3S), pp.469-478.
11. Nasir, R.E.M., Mustapha, M.F., Mohamad, F., Hamid, A.H.A. and Noh, M.H.M., 2023. Low-Fidelity Aerodynamic Computational Simulation on a Fixed Wing-Multirotor Hybrid Unmanned Aerial Vehicle. Journal of Aeronautics, Astronautics and Aviation, 55(3S), pp.439-452.
12. bin Abdul Jalil, A.M.H., Kuntjoro, W., Redzuan, A.N.A. and Nasir, R.E.M., 2023. STRESS BEHAVIOUR OF 3D PRINTED PLATE WITH HOLE. Journal of Engineering & Technological Advances, 8(1), pp.13-29.
13. Romli, F.I., Sabri, M.A.M. and Nasir, R.E.M., 2023. Optimization of a Blended-Wing-Body Unmanned Aerial Vehicle Design for Maximum Aerodynamic Lift-to-Drag Ratio. CFD Letters, 15(3) 2023, pp.12-21.
14. Mohd Azan Mohammed Sapardi Ahmad Hussein Abdul Hamid, Firdaus Mohamad, Mohd Hafiz Mohd Noh, Rizal Effendy Mohd Nasir, Aerodynamics of a Modified High-Lift Low Reynolds Number Airfoil: Preliminary Analysis., International Journal of Emerging Technology and Advanced Engineering, Vol. 12, Issue 12, 2022. Pp. 16-22.
15. Nasir, R.E., Mohamad, F., Hamid, A.H.A. and Noh, M.H.M., 2022. Blended Wing-Body Unmanned Aerial Transport Aircraft: A conceptual design. Environment-Behaviour Proceedings Journal, Vol. 7(SI9) 2022, pp.601-610.
16. Latip, U.H.M., Kuntjoro, W., Ramly, R. and Nasir, R.E.M., 2022. Modeling Comparison of 3D Printed Lap Joint Using Finite Element Analysis. Journal of Applied Engineering Design and Simulation, Vol 2, Issue 2, 2022, pp.1-10.
17. Nasir, R.E., Hamdan, H.A., Hamid, A.H.A., Mohamed, W.M.W. and Sapak, Z., 2022. Development of Crop-Spraying Module for Multirotor Drone. Journal of Aeronautics, Astronautics and Aviation, Vol 54, Issue 3, 2022, pp.315-324.
18. Kuntjoro, W., Ridhwan, M.A.M., Nasir, R.E. and Muta, A.B. Structural Analysis of 3D Printed UAV Straight Wing Box. Journal of Aeronautics, Astronautics and Aviation, Vol 54, Issue 3, 2022, pp.347-356.
19. Kuntjoro, W., Latip, U.H., Nasir, R.E. and Ramly, R. Static Analysis of 3D-Printed Sub Wing Box Lug Joint Assembly using Finite Element Method. Journal of Aeronautics, Astronautics and Aviation, Vol 54, Issue 3, 2022. pp.335-346.
20. Saiful Aman Sulaiman Khairul Khaizi Mohd Shariff, Suraya Zainuddin, Nur Emileen Abd Rashid, Rizal Effendy Mohd Nasir, Wirachman Wisnoe. An Evaluation of Cots-Based Radar for Very Small Drone Sense and Avoid, International Journal Of Integrated Engineering. Vol. 14, Issue 1, 2022 pp. 389-398.
21. Ismail, N. I., M. Asyraf Tasin, Hazim Sharudin, M. Hisyam Basri, S. Che Mat, H. Yusoff, and R. E. M. Nasir. Computational Aerodynamic Investigations on Wash Out Twist Morphing MAV Wings. Joint Journal of Novel Carbon Resource Sciences & Green Asia Strategy, Vol. 09, Issue 04, pp1090-1102, December 2022.
22. MR Abdullah, W Kuntjoro, Mohd Nasir RE, UAV Dynamic Behaviour Comparison of Quadcopter Based on Thrust Differential and Tilted Rotor, Journal of Aeronautics, Astronautics and Aviation, Volume 53, Issue 2, pp. 257-262, 2021.
23. Rizal EM Nasir, Nabil F Tajuddin, Atikah BA Muta, Wahyu Kuntjoro, Wirachman Wisnoe, Fairuz I Romli, The Effect of Inboard and Outboard Wing Sweep Angles to Lift-to-Drag Ratio of a Compound Wing-Body Using Panel Code, Journal of Aeronautics, Astronautics and Aviation, Volume 53, Issue 2, pp. 155-164, 2021.
24. Shahrean Zainurin, Rizal EM Nasir, W Kuntjoro, Flight Dynamic Stability Performance of the Baseline-IX Blended-Wing-Body Unmanned Aerial System Using Flight Simulator, Journal of Aeronautics, Astronautics and Aviation, Volume 53, Issue 2, pp. 179-192, 2021.
25. W Kuntjoro, Atikah BA Muta, N Izyan AK Anwar, Rizal EM Nasir, A Study of 3D Printed Box Structure, Journal of Aeronautics, Astronautics and Aviation, Volume 53, Issue 2, pp. 137-142, 2021.
26. Muta'ali, A.B.., Nasir, R.E.M.\*, Wisnoe, W., Kuntjoro, W., Aerodynamic performance of a tail-less blended wing-body small transport aircraft, Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, Volume 66, Issue 1, 1 February 2020, Pages 135-150, 2020.
27. Ishak, I.S., Mansor, S., Lazim, T.M.a, Mat, S., Md. Zain, M.Z., Mohd Nasir, R.E., Mohd Ali, Z., Experimental work on unsteady helicopter rotor hub wakes, Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, Volume 65, Issue 2, 1 January 2020, Pages 314-323, 2020.
28. N F M Salleh, W M W Mohamed, R E M Nasir, A B A Mutaáli, S Zainurin, Multirotor for Medical Aid Kit Transport, International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN: 2278-3075, Volume-9 Issue-2, December 2019.
29. Muhammad Nur Akmal Noor ‘Adzam, Wahyu Kuntjoro, Mohd Razip Abdullah, Rizal Effendy Mohd Nasir, Dynamic Simulation of Tilted Rotor Quadcopter, International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN: 2278-3075, Volume-9 Issue-2, December 2019.
30. Shahrean Zainurin, Rizal E. M. Nasir, Atikah B. A. Muta’ali, W. Wisnoe, W. Kuntjoro, Performance of 4G-LTE Communication and Navigation System in Blended Wing-Body UAS, International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-8 Issue-4, November 2019.
31. Kuntjoro, Wahyu; Saleh, AHM; Nasir, Rizal Effendy Mohd; Abdullah, MR; Suada, MG; ,Flight thrust performance of quadcopter,Journal of Mechanical Engineering,5,Specialissue1,210-221,2018,"Institut Pengurusan Penyelidikan (RMI), Universiti Teknologi MARA"
32. Ahmad, AM; Nasir, Rizal Effendy Mohd; Latif, ZAA; Kuntjoro, Wahyu; Wisnoe, Wirachman; Ishak, IS; ,Aerodynamic characteristics of a cranked planform blended wing-body aircraft with 40° sweep angle,International Journal of Engineering and Technology (UAE),7,4,37-42,2018,Science Publishing Corporation Inc
33. Ramly, Ramzyzan; Kuntjoro, Wahyu; Ghani, Amir Radzi Ab; Nasir, Rizal Effendy Mohd; Muhammad, Zulkifli; ,Multi-configuration stiffened panels under compressive load: Part 1-Theoretical analysis,International Journal of Engineering and Technology (UAE),7,3,38-42,2018,Science Publishing Corporation Inc
34. Latif, Mohamad Zulfazli Arief Bin Abd; Nasir, Rizal Effendy Mohd; Ahmad, Muhammad Aiman Bin; Wisnoe, Wirachman; Kuntjoro, Wahyu; Ishak, IS; Saad, MR; ,Comparison on the aerodynamic coefficients obtained from three different size of wind tunnel model on Baseline V set at 45 degree sweep tail angle,International Journal of Engineering and Technology (UAE),7,4,62-66,2018,Science Publishing Corporation Inc
35. Shafari, Nur Azan Haiqal Mohamed; Nasir, Rizal Effendy Mohd; Latif, Mohamad Zulfazli Arief Abd; Ahmad, M Aiman; Wisnoe, Wirachman; Kuntjoro, Wahyu; ,Aerodynamics of a blended wing body aircraft with close-coupled tail: Computational Fluid Dynamics simulations of two different tail sweep angle cases,International Journal of Engineering and Technology (UAE),7,4,147-153,2018,Science Publishing Corporation Inc
36. Ramly, Ramzyzan; Ghani, Amir Radzi Ab; Nasir, Rizal Effendy Mohd; Mohamed, Zulkifli; Kuntjoro, Wahyu; ,Multi-configuration stiffened panels under compressive load: Part 2-Finite Element Analysis,International Journal of Engineering and Technology (UAE),7,4,160-162,2018,Science Publishing Corporation Inc
37. Kuntjoro, Wahyu; Abdullah, MR; Nasir, Rizal Effendy Mohd; Jaafar, J; ,X-type tilted quadrotor flight dynamic modeling,International Journal of Engineering and Technology (UAE),7,4,136-140,2018,Science Publishing Corporation Inc
38. Huang, Farah Diyana Nasri; Wisnoe, Wirachman; Nasir, Rizal Effendy Mohd; Askari, Ehan Sabah Shukri; ,Effect of wing locations to the aerodynamic of UiTM's Blended Wing Body-Unmanned Aerial Vehicle (BWB-UAV) prototype,International Journal of Engineering and Technology (UAE),7,4,119-125,2018,Science Publishing Corporation Inc
39. Rizal E. M. Nasir\*, Ilyas H. Basri, Aiman M. Ahmad, Zulfazli A. A. Latif, Wirachman Wisnoe, Wahyu Kuntjoro, “The Effect of Elevons Deflection to Aerodynamic Coefficients of A Tailless Blended Wing-Body Planform,” Journal of Mechanical Engineering Vol SI 4(4), 151-166, 2017.
40. Nur Syazwani C.M. Rizal E.M. Nasir, “The Effects of Tail-Tilt on the Yaw Stability of Baseline-V Blended Wing Body Aircraft,” Journal of Mechanical Engineering Vol SI 4(4), 60-73, 2017.
41. Wirachman Wisnoe\* , Rizal E. M. Nasir, Wan Aizad Musyamel Saarani, Nornashiha Mohd Saad, Mohd Amirul Afiq Mamud, “Wind Tunnel Tests of UiTM Blended Wing Body - Unmanned Aerial Vehicle (BWB-UAV) Prototype,” Journal of Mechanical Engineering Vol SI 4(3), 234-245, 2017.
42. Mohamad Zulfazli Arief Bin Abd Lati1, Muhammad Aiman Bin Ahma1 Rizal Effendy Mohd Nasir, \*, “K-180 G Micro Gas Turbine Performance Evaluation,” Journal of Mechanical Engineering Vol SI 4(3), 64-77, 2017.
43. R E M Nasir, A M Ahmad\*, Z A A Latif, R M Saad and W Kuntjoro, “Experimental result analysis for scaled model of UiTM tailless blended wing-body (BWB) Baseline 7 unmanned aerial vehicle (UAV),” IOP Conf. Series: Materials Science and Engineering 270 (2017) 012005 doi:10.1088/1757-899X/270/1/012005.
44. M Z A Abd Latif1,\*, M A Ahmad1 , R E Mohd Nasir1 , W Wisnoe1 and M R Saad2, “An analysis on 45˚ sweep tail angle for blended wing body aircraft to the aerodynamics coefficients by wind tunnel experiment,” IOP Conf. Series: Materials Science and Engineering 270 (2017) 012001 doi:10.1088/1757-899X/270/1/012001
45. R E M Nasir\* , N S C Mazlan, Z M Ali, W Wisnoe and W Kuntjoro, “A blended wing body airplane with a close-coupled, tilting tail.” IOP Conf. Series: Materials Science and Engineering 152 (2016) 012021 doi:10.1088/1757-899X/152/1/012021.
46. 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
47. 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
48. 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
49. 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
50. 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
51. 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
52. 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
53. 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
54. 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
55. 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
56. 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
57. 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
58. 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
59. 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.
60. 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
61. 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.
62. 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
63. 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
64. 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.
65. 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. Mazlan, M., Nasir, R.E. and Ma’arof, M.I.N., 2024. Flight Simulation Assessment of a Novel FW-MR Hybrid Agriculture Drone. In E3S Web of Conferences (Vol. 477, p. 00004). EDP Sciences.
2. Kuntjoro, W., Jalil, A.M.H.B.A. and Nasir, R.E.B.M., 2023, November. Parametric study on the stress behaviour of 3D printed PLA plate with hole. In AIP Conference Proceedings (Vol. 2847, No. 1). AIP Publishing.
3. Nasir, R.E., 2023, October. Mini Class Blended Wing Body Unmanned Aerial Vehicle Aerostructure Design for Fused Deposition Modelling 3D Printing. In Proceedings of International Exchange and Innovation Conference on Engineering & Sciences (IEICES) (Vol. 9, pp. 24-25). Interdisciplinary Graduate School of Engineering Sciences, Kyushu University.
4. Rizal E. M. Nasir\*, Nur N. M. Fadzil, Atikah B. A. Muta’ali, Wahyu Kuntjoro, Wirachman Wisnoe; Thrust Performance Of A 90-Mm Electric Ducted Fan (EDF); International Symposium on Electric Aviation and Autonomous Systems 2020 (ISEAS 2020), 22 – 24 September 2020, Kyiv, Ukraine.
5. I. Mohd Arrif, W. Kuntjoro, M. Razip Abdullah and R. E. Mohd Nasir, "Dynamics and Simulation of Thrust Differential Based Quadcopter," 2020 IEEE 8th Conference on Systems, Process and Control (ICSPC), Melaka, Malaysia, 2020, pp. 19-24, doi: 10.1109/ICSPC50992.2020.9305799.
6. Saad, Nornashiha Mohd; Wisnoe, Wirachman; Nasir, Rizal Effendy Mohd; Ali, Zurriati Mohd; Askari, Ehan Sabah Shukri; ,Aerodynamic Analysis of Blended Wing Body-Unmanned Aerial Vehicle (BWB-UAV) Equipped with Horizontal Stabilizers,MATEC Web of Conferences,256,,02004,2019,EDP Sciences
7. Rizal E. M. Nasir\*, Ilyas H. Basri, Aiman M. Ahmad, Zulfazli A. A. Latif, Wirachman Wisnoe, Wahyu Kuntjoro, “The Effect of Elevons Deflection to Aerodynamic Coefficients of A Tailless Blended Wing-Body Planform,” Int. Conf. on Adv. In Mech. Engr (ICAME), Aonang Krabi, Thailand, 16-18 Aug. 2017.
8. Nur Syazwani C.M. Rizal E.M. Nasir, “The Effects of Tail-Tilt on the Yaw Stability of Baseline-V Blended Wing Body Aircraft,” Int. Conf. on Adv. In Mech. Engr (ICAME), Aonang Krabi, Thailand, 16-18 Aug. 2017.
9. Wirachman Wisnoe\* , Rizal E. M. Nasir, Wan Aizad Musyamel Saarani, Nornashiha Mohd Saad, Mohd Amirul Afiq Mamud, “Wind Tunnel Tests of UiTM Blended Wing Body - Unmanned Aerial Vehicle (BWB-UAV) Prototype,” Int. Conf. on Adv. In Mech. Engr (ICAME), Aonang Krabi, Thailand, 16-18 Aug. 2017.
10. Mohamad Zulfazli Arief Bin Abd Lati1, Muhammad Aiman Bin Ahma1 Rizal Effendy Mohd Nasir, \*, “K-180 G Micro Gas Turbine Performance Evaluation,” Int. Conf. on Adv. In Mech. Engr (ICAME), Aonang Krabi, Thailand, 16-18 Aug. 2017.
11. R E M Nasir, A M Ahmad\*, Z A A Latif, R M Saad and W Kuntjoro, “Experimental result analysis for scaled model of UiTM tailless blended wing-body (BWB) Baseline 7 unmanned aerial vehicle (UAV),” AEROS Conference, Putrajaya, Malaysia 12-13 Nov. 2017.
12. M Z A Abd Latif1,\*, M A Ahmad1 , R E Mohd Nasir1 , W Wisnoe1 and M R Saad2, “An analysis on 45˚ sweep tail angle for blended wing body aircraft to the aerodynamics coefficients by wind tunnel experiment,” AEROS Conference, Putrajaya, Malaysia 12-13 Nov. 2017.
13. R E M Nasir\* , N S C Mazlan, Z M Ali, W Wisnoe and W Kuntjoro, “A blended wing body airplane with a close-coupled, tilting tail.” AEROTECH VI - Innovation in Aerospace Engineering and Technology, Kuala Lumpur, Malaysia. 16-17 Nov 2016.
14. Zurriati Mohd Ali , Wahyu Kuntjoro , Wirachman Wisnoe , Rizal Effendy Mohd Nasir , Noor Iswadi Ismail, “Numerical Study of Aerodynamic Characteristics on Blended Wing Body Aircraft with Small Canard,” Int. Conf. on Soc. & Science Res. CSSR 2016, Putrajaya, Malaysia, 6-7 Dec. 2016.
15. R E M Nasir\* , N S C Mazlan “The Effects Of Tail-Tilt On The Yaw Stability Of Baseline-V Blended Wing Body Aircraft.” MESPIC 2016, Shah Alam, Malaysia, 28-29 Sep 2016.
16. Zurriati M.A , Wahyu Kuntjoro, Wirachman Wisnoe Rizal E.M Nasir, Ainaa M.M.Ismail, “Computational study on the aerodynamics of UITM’s blended wing body aircraft,” Malaysian Research Conference And Innovation Exhibition MRCIE 2015, Putrajaya, Malaysia, 2-3 Dec 2015.
17. 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.
18. 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.
19. 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.
20. 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
21. 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.
22. 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.
23. 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.
24. 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
25. 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.
26. 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.
27. 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.
28. 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.
29. 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
30. 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
31. 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
32. 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
33. 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
34. 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
35. 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.
36. 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.
37. 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.
38. 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.
39. 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.
40. 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.
41. 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.
42. 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.
43. 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.
44. 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.
45. 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.
46. 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.
47. 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.
48. 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.
49. 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
50. 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.
51. 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.
52. 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.
53. 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.
54. 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.
55. 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. 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.
2. R.E. Nasir, W. Kuntjoro, N. I. Ismail, M. H. M. Noh, A. H. A. Hamid, F. Mohamed, R. Ramly. “1. Analyses on Pylon-X1 - LGTR bomb – Su-30 MKM Flight Dynamics, Strength, Fatigue.” FTTC-PUSPEKA- Innopeak, 2023.
3. R. E. Nasir, W. Kuntjoro, A. R. A. Ghani, “2. Fatigue Analyses on PC-7 Mk II Turbo Trainer Airframe’s Longeron” FTTC-PUSPEKA-STRIDE, 2022.
4. R.E. Nasir, W. Kuntjoro, M. H. M. Noh, A. H. A. Hamid, F. Mohamed, R. Ramly. “Analyses on BDRU-500 Pylon – GBU-16,12 Laser Guided Bomb and FAB500 unguided bomb – on Su-30 MKM” FTTC-PUSPEKA-ATSC, 2021.

**Invention, Innovation, Design and Student Competition**

1. Silver Medal, “Blended Wing-Body Unmanned Aerial Transport” Malaysian Technology Exposition (MTE) 2024, Feb. 2024.
2. Gold Medal, “Blended Wing-Body Unmanned Aerial Transport” International Invention, Innovation & Design Exposition (IIDEX) 2022, Dec 2022.
3. Gold Medal - BWB UAS with 4G Internet-Based Command, Communication & Navigation, PECIPTA 19, Kementerian Pengajian Tinggi Malaysia, UTHM, Sep 2019.
4. Winner - MyDroneX University Drone Competition, FUTURISE, MDEC, Cyberview, MaGIC, 2019.
5. Gold Medal, “BWB UAV using 4G LTE navigation” International Invention, Innovation & Design Exposition (IIDEX) 2018, Sep 2018.
6. Broze Medal - Indegenous Construction of Multirotor Drone, International Invention, Innovation & Design Exposition (IIDEX) 2018, Sep 2018.
7. Overall Champion, Champion of Design & Marketing Category, Champion of Engineering & Process Category, Total prize of RM35,000, Perodua Eco-Challenge 2017.
8. Silver Medal, “Aerodynamically Efficient Blended Wing-Body Drone for Surveillance.” International Invention, Innovation & Design Exposition (IIDEX) 2017, Sep 2017’
9. Gold Medal, “BWB UAV for Surveillance Mission” International Invention, Innovation & Design Exposition (IIDEX) 2016, 20-23 Sep 2016’
10. Silver Medal - Aircraft Smart Structure, Research Innovation Symposium & Exposition 2015 (RISE 2015). Shah Alam, 15-16 Nov 2015.
11. Bronze Medal, “Bird-Inspired Drone” Research Innovation Symposium & Exposition 2015 (RISE 2015). Shah Alam, 15-16 Nov 2015.
12. 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)
13. Overall Champion, Top Prize to France for 10 days, 1st Place for the fastest bombing mission 1 & 2, UAV Siswa Challenge Malaysia 2013-2014. (NAMTOR Hexacopter)
14. 1st runner up Best Design, Perodua Eco Challenge 2013 (LANTERN car based on Myvi)
15. Participated, Shell Eco-Marathon 2012, Fuel-Cell, Prototype Category.
16. 1st runner up Best Design, Perodua Eco Challenge 2012 (single-seater car)
17. Participated in Perodua Eco Challenge 2011 (E-MoC car design - single-seater car)
18. 1st Runner Up, 1st Place Best Engineering & Design, Perodua Eco Challenge 2010 (Viva).
19. 1st Runner Up (Automatic), Perodua Eco-Challenge 2009 (Myvi).
20. Bronze Medal “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.
21. Silver Medal, “Blended Wing-Body UAV” Invention, Innovation & Design Exposition 2007 (IID 2007) , Shah Alam, 24-25 January 2007.

**Consultancy Projects**

1. Analyses on Pylon-X1 - LGTR bomb – Su-30 MKM Flight Dynamics, Strength, Fatigue. Innopeak-PUSPEKA Royal Malaysian Air Force. 2022 – RM
2. Fatigue Analyses on PC-7 Mk II Turbo Trainer Airframe’s Longeron – STRIDE-PUSPEKA Royal Malaysian Air Force. 2022 – RM
3. Analyses on BDRU-500 Pylon – GBU-16,12 Laser Guided Bomb and FAB500 unguided bomb – on Su-30 MKM. ATSC-PUSPEKA Royal Malaysian Air Force. 2021 – RM
4. Master Plan Study for Public Transport in Urban Cities/Town in Malaysia: MITRANS & Ministry of Transport. January 2008 – 2010. RM2.75 mil.
5. Integrated Skills in Technical & Entrepreneurship Program (InSTEP): Collaboration between CADEM UiTM and MARA. 2006-2007.
6. Consultant to MSTIMES Sdn Bhd on reversed engineering of 3-tonne hoist for crane – January 2007 - 2008. RM10,000
7. Consultant for “Static & Damage Tolerance Analysis of Radome Pressure Box” to AIROD Sdn Bhd – January – February 2007 – RM33,000.
8. 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.
9. 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
10. FEA Simulation on Basement Structures of Taman Bukit Pelangi Apartment in Subang Jaya. – October – December 2007 (Community service)
11. Consultant to Tepat Teknik SB on “FELDA Dearrator Project” - Mac – May 2007. RM10,000
12. 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
13. 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.
14. Training Organizer/Consultant – “Seminar & Workshop: Advanced CFD for Industrial Applications” Client: NUMECA International, Belgium. RM2,000.
15. Training Consultant “Computer-Aided Modelling using IronCAD.” Client: Intellifix Sdn Bhd. RM11,000.

**Invited Speaker/Other Seminars**

1. KEYNOTE. Nasir, R.E., 2023. Mini Class Blended Wing Body Unmanned Aerial Vehicle Aerostructure Design for Fused Deposition Modelling 3D Printing. IEICES 2023 Conference, Japan. 20 Oct 2023.
2. Keynote Speaker, Webminar on “Artificial Intelligence, Transport and UAV in Smart Cities,” RVS College of Engineering & Technology, Coimbatore and New Horizon College of Engineering, Bengaluru, 19 June 2020, India.
3. Panelist Speaker, Webminar on “Application of Drone During Pandemic,” Timbalan Naib Chanselor Series 10 Webminar, Malaysian Institute of Transport (MITRANS), 10 July 2020, Malaysia.
4. Opening/Welcoming Speaker, “Engineering for Humanities” Intl. Conf. on Adv. In Mech. Engr. (ICAME) 2017, Aug. 16, 2017, Aonang Resort Krabi Thailand.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.
10. Presented “CADEM Centre: the Way Forward” di Mechanical Engineering Colloquium. 25 Julai 2007 Bilik Seminar FKM.

**In The Mass Media**

1. TV Interview and Newspaper Article, “Kawal Dron dari London: Dron Terbang Guna 4G” Metro TV (Harian Metro), 13 Oct 2019. <https://www.hmetro.com.my/utama/2019/10/506512/dron-terbang-guna-4g-metrotv> , youtube: <https://youtu.be/ULWQaE3nK4k>
2. TV Interview (Telephone). “Ruang Bicara: Duka Tragedi JT610,” BERNAMA News Channel, 10pm-11pm, 30 October 2018.
3. TV Interview. “Berita Tengahari (1pm): Isu helicopter AS365 terhempas di Semenyih” TV1, Radio Televisyen Malaysia (RTM). 1pm, 5 April 2015.
4. Radio Interview. “Berita Radio 24: Kehilangan Airbus A320 Air Asia QZ8501 di Indonesia.” Radio BERNAMA. 10am. 28 Dis 2014.
5. Radio Interview. "Dalam RADAR: Diskusi Tentang Sistem peluru Berpandu dan MH17." Radio BERNAMA, 9.30pm-10am September 2014.
6. Newspaper Article. "Hexacopter Mission in Paris: UiTM Students Scale New Heights" Learning Curve: New Sunday Times, 10 August 2014.
7. Newspaper Article. "Flying High with Hexacopters" The Star, 20 April 2014
8. Newspaper Article. "Mana Pergi Satelit, Radar AS?" Sinar Harian, 5 April 2014.
9. TV Interview. “Galaksi: Diskusi tentang teknologi pesawat dan kehilangan MH370.” TV1, Radio Televisyen Malaysia (RTM). 3pm-4pm, 17 Mac 2014.
10. Newspaper Article. "Pelbagai Kemungkinan MH370" Berita Harian, 15 March 2014.
11. Radio Interview. "Dalam RADAR: Diskusi tentang misteri kehilangan MH370." Radio BERNAMA, 5.30pm-6pm 9 Mar 2014
12. Newspaper Article. "Tiada Serpihan ditemui bukti pesawat tak terhempas" Berita Harian, 10 March 2014.

**Community Service**

1. Committee, JK Persatuan Penduduk Serena Bukit Bandaraya, Shah Alam (2021-2023)
2. Committee, UiTM Research Station Restoration Project in Kuala Keniam, Taman Negara Pahang (2016-2018).
3. Committee, Running River Turbine Project in Taman Negara Pahang (2012-2014).
4. Member, Persatuan Penduduk Kuarters KKM Hospital Rehabilitasi Cheras (2012-2014)
5. Committee, Taman Bukit Pelangi Resident Association (2007-2009)

**Referee**

Prof Dr Ir Wahyu Kuntjoro, C.Eng.

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Appendix –

**Research Grants (on application proccess)**

1. UAE-REP Grant 2021, “Unmanned Aircraft System for Weather Modification Activities,”App. ID: APP-REP-2021-03160, Collaborator: Malaysian Meteorological Department, KASA. United Arab Emirates Rain Enhancement Program. – as principal investigator
2. Strategic Research Fund (SRF), “Gas-Electric Hybrid Propulsion Vertical Take-off and Landing (VTOL) Unmanned Aerial Vehicle (UAV) with Perching System for Shipborne Operation.” As collaborator to Leigh Aerosystems Malaysia Sdn. Bhd. (subs. Of Leigh Aerosystems Corp., San Diego, USA), Ministry of Science, Tech. & Innovation (MOSTI). – lead design team
3. TED2 Grant, “Development of a Blended Wing-Body Unmanned Aerial Vehicle for Cloud Seeding Activities,” Collaborator: Malaysian Meteorological Department, KASA, AICAD Aeroengineering PLT. Ministry of Science, Tech. & Innovation (MOSTI) – as principal investigator
4. PRGS 2021-1, “Development of Medium Range SACCON Delta-Winged Unmanned Combat Air Vehicle (UCAV) Prototype.” App. ID: 390869-405802, As collaborator to AEROLAB Universiti Teknologi Malaysia and Deftech Unmanned System Sdn Bhd, Kementerian Pengajian Tinggi, Malaysia – as team member
5. FRGS 2021-1, “Flight dynamics of a fixed wing-multirotor hybrid aircraft,” App. ID: 361963-415762, Kementerian Pengajian Tinggi, Malaysia – as principal investirgator
6. FRGS 2021-1, “Determination of relationship between the unsteady aerodynamics wake of rotary-wing aircraft with the aerodynamic and stability characteristics towards a good flying performance.” App. ID: 394305-410489. As collaborator to AEROLAB Universiti Teknologi Malaysia and Deftech Unmanned System Sdn Bhd, Kementerian Pengajian Tinggi, Malaysia – as team member
7. FRGS 2021-1, “Numerical correlation between Smagorinsky constant (Cs) and sub-grid scale (SGS) characteristic length (∆) in One-equation SGS model (kSGS) for flows in laminar-turbulent transition region.” App. ID: 404758-418485, Kementerian Pengajian Tinggi, Malaysia – as team member
8. KEPU Grant 2021, “Pineapple Plantation Aerial Crop Spraying using Fixed-Wing Multi-rotor Hybrid UAV,” Collaborator: MITRANS and Faculty of Agriculture UiTM, Geran Kolaborasi Entiti Penyelidikan Uitm (KEPU), RMC UiTM – as program head and principal investigator for one of the projects (three projects in this program)
9. GIP 2020 Grant, “The Effect Of Bezier Curve-Blended Planform's Inboard And Outboard Wing Sweep Angles To Aerodynamic And Stability Coefficients Of A Blender Wing-Body Aircraft.” App. ID: RMC/GP/GIP2020. RMC, UiTM – as principal investigator.