Professor Ian Robert McAndrew PhD FRAeS

PERSONAL INFORMATION

Date of birth: 14th April, 1961

Nationality: British

Telephone No: Cell 07920004546 E-mail: work McAnd4f1@erau.edu

personal i.r.mcandrew@gmail.com



PROFESSIONAL TRAINING AND QUALIFICATIONS

Ph.D. in Mechanical Engineering (Hertfordshire)

M.Sc. in Manufacturing Engineering (Open University)

MA in Education Management (Bedfordshire)

Post-Graduate Diploma in Education (Hertfordshire)

B.Sc. (Hons) in Mechanical Engineering (Open University)

B.A. in Production Engineering University of East London)

Technical Qualifications (Associate Degrees)

Higher National Certificate, HNC, in Mechanical Engineering (University of East London)

Higher National Diploma, HND, in Production Engineering (Anglia Ruskin University)

System Safety in Occupational Hygiene and Safety – HAS Courses

City and Guilds 200, 205 II & III (all distinctions – highest grade ever achieved in Ford's Training Scheme)

Apprentice Toolmaker 1977 – 1981 (Distinction)

Healthcare – Member, 2010-2015, of the NHS Ethics Research Committee with particular focus on statistics.

Membership of Professional Bodies - Chartered Engineer (C.Eng.) Member of the Institute of Engineering Technology formally Electrical Engineers (M.I.E.E.), Fellow of the Royal Aeronautical Society (FRAeS), and Fellow of the Hong Kong Society of Mechanical Engineers.

External Advisor and Examiner: University of the Highlands and Islands, Scotland, all Aeronautical degree and professional courses, University of Bradford for M.Sc and B.Sc Engineering degrees. Have also been an external examiner at the University of Luton and Chichester.

Personal Achievements

- Ford 1984 European Award Design for Assembly
- Ford 1990 European Technology Award Engineering Innovation in Manufacturing (One awarded annually) in the whole of Europe.
- Embry-Riddle Aeronautical University European Faculty of the Year Award 2005 and 2008
- 27 years' research (with 57 peer reviewed conference, 36. and journal publications, 21)
- 28+ successful PhD supervisions. Served on four USA PhD committees (completed). Currently serving as a committee chair on two PhDs and as a member on two others.

Published books:

McAndrew, Ian & O'Sullivan, James. (1993). FMEAs: A Manager's Handbook, TQM practitioner series. Technical Communications. ISBN: 9780946655953

Hoxha, D., Rivera, F. and McAndrew, I. (2014) Mechanical and Aerospace Engineering V, Trans Tech Publications. ISBN-13: 978-3-03835-223-5

Hoxha, D., McAndrew, I, and Dung Ngo, A. (2015) Mechanical and Aerospace Engineering VI, Trans Tech Publications. ISBN-13:978-3-03835-523-6

Hoxha, D., McAndrew, I, and Dung Ngo, A. (2016) Mechanical and Aerospace Engineering VII, IEEE Press, IEEE Catalog Number: CFP1647L-AR, ISBN: 978-1-4673-8829-0

McAndrew, I, Hoxha, D., and Dung Ngo, A. (2017) Mechanical and Aerospace Engineering VIII, IEEE Press, IEEE Catalog Number: CFP17G51-DVD, ISBN: 978-1-5386-3304-5

McAndrew, I. Vishnevskaya, E. (2018) Failure Mode Effects Analysis: A PRACTICAL APPROACH, Lambert Academic Publishers, ISBN 978-613-4-97312-0

Scholarly Commons Citation

McAndrew, I. (2015). Book Review: Foundations of Aviation Law. *International Journal of Aviation, Aeronautics, and Aerospace*, 2(2). Retrieved from http://commons.erau.edu/ijaaa/vol2/iss2/1

International Committee Membership

Hong Kong Society of Mechanical Engineers - Committee Member and Reviewer of conference papers. http://www.icmat.net

European Editor – IJAAA, http://commons.erau.edu/ijaaa/

Reviewer for Royal Aeronautical Society Journal

Committee member for International Conference of Design Engineering and Science http://icdes.org/com.html

International Journal of Research in Aeronautical and Mechanical Engineering – IJRAME – editorial Board. http://www.ijame.com

Scientific and Technical Committee & Editorial Review Board on Aerospace and Mechanical Engineering. http://waste.com

Editor at Cresco Publications. Journal of Mechanical and Automobile Engineering, http://crescopublications.org/submitmanuscript.php

Editorial Board Member, International Journal of Information Technology and Mechanical Engineering (IJITME), http://ijitme.org/index.html

Editorial Board of the Turkish Journal of Mathematics and Computer Science. www.tjmcs.org.tr

Editorial Board, International Journal of Machining and Machinability of Materials, http://www.inderscience.com/jhome.php?jcode=ijmmm

Editorial Reviewer Aircraft Engineering and Aerospace Technology,

http://www.emeraldinsight.com/toc/aeat/89/1#

http://fluid-aerodynamics.global-summit.com/organizing-committee.php OCM for Fluid & Aerodynamics Series Conferences

www.icmam.org 4th International Conference on Mechatronics, Automation and Manufacturing (ICMAM 2018) Phuket, Thailand, 12-15th October

Member of the society of the EU Academy of Sciences (EUAS); http://www.interpaper.org

Journal Editor

<u>http://www.ijmmm.org/</u> Editor-in-Chief
<u>http://www.ijmerr.com/</u> Assistant Editor-in-Chief
http://www.IJMMM.com European editor

CAREER HISTORY

2003 – Present, Adjunct until 2009, Faculty and Department Chair of Graduate Studies, College of Aeronautics at Embry-Riddle Aeronautical University, with the responsibility for 20 faculty and 300+ adjunct faculty and seven Master's degrees. Committee & Chair member of PhDs in Aviation, 2013-2017, Associate Dean of Research, started 2017. Tenured Faculty and Full Professor.

1991 – 2009 Senior Lecturer, Admissions Tutor and External Consultant at University of Hertfordshire. Experience in teaching under- and post-graduates in a wide range of engineering subjects, specialising in quality and reliability, statistical process control, mathematics and manufacturing Aviation, aerodynamic, thermodynamic and human factors. Extensive consultancy experience with over 50 companies specialising in the areas of Q.F.D., F.M.E.A., reliability, Ford G8D process and design of experiment (Taguchi) in both the U.K. and in Europe. Short courses in Aircraft Accident Investigation.

Internally examined Five Ph.D students and one M.Phil.

External Examiner (Ph.D) with Brunel, Buckinghamshire, Huddersfield, Bradford and Jordan Institute of Technology.

Income generated in last 5 years' - £175,000. (\$250,000)

Grant development for research grants in UK and Europe (120,000 GBP in 5 years).

1977 – 1991 Engine Process Engineer at Ford Motor Company (1986 to 1991). Responsible for the design and installation of multi-million-pound engine assembly equipment in European plants. Engine Designer for European engines (1984 to 1986), Car Body Designer (1982 to 1984), Toolmaker for press tools (1981 to 1982), Apprentice (1977 to 1981)

My experience is based on having been working in industry and academia or research that is mechanical, aeronautical and statistical in nature for over 28 years. In that time, I have developed extensive problem solving skills and this coupled with my teaching experience enables me to deliver at a professional level of teaching. An enthusiastic and a keen promoter of education, and have published papers on Education at Embry-Riddle's Education conference (2006, 2007 & 2014) and have developed online material for teaching at graduate level both with the University of Hertfordshire, University of Bedfordshire and The Open University as well as Embry Riddle Aeronautical University. Currently writing two textbooks, one on statistics and the other on aircraft crash investigation, and working on aeronautical research myself and with other colleagues within Embry Riddle Aeronautical University and other Universities.

2018 Keynote Speeches and Conference Chair

http://www.IJMMM.org International Journal of Materials, Mechanics and Manufacturing 10th – 12th February, 2018, Krakow, Poland.

<u>http://www.camme.org/</u> International Conference on Aerospace, Mechanical and Mechatronic Engineering, March 23rd – 26th, 2018, Hanoi Vietnam.

http://www.caect.org International Conference on Aerospace Engineering and Control Technologies Athens, Greece, 13th – 16th April 2018

http://www.icmae.org 9th International Conference on Mechanical and Aerospace Engineering (ICMAE) in 2018, 10th – 13th July, 2018, Budapest, Hungary.

<u>www.irce.org</u> The International Conference on Intelligent Robotics and Control Engineering 2018, July 28-31, 2018, Lanzhou Jiaotong University, China

<u>http://www.siusai.org</u> 2nd International Symposium on Intelligent Unmanned Systems and Artificial Intelligence, Las Vegas, USA 27th – 29th August, 2018.

http://www.icmeas.org/ 4th International Conference on Mechanical Engineering and Automation Science (ICMEAS 2018), Beijing, 12th – 14th October, 2018.

2017 Keynote Speeches and Conference Chair

http://ecmmm.org for the IJMMM Paris 15th – 17th February, 2017

http://www.camme.org,International Conference on Aerospace, Mechanical and Mechatronic Engineering (CAMME 2017) April 21-23, 2017, Bangkok, Thailand.

http://www.icmae.org/&http://www.icpam.org 8th International conference on Mechanical and Aerospace Engineering, Prague, 22nd – 25th July

<u>http://www.wueng-congress.com</u> 3rd World Congress on Unmanned Systems Engineering, Cambridge, UK, 27th – 28th July

<u>http://www.siusai.org</u> International Symposium on Intelligent Unmanned Systems and Artificial Intelligence, Osaka, Japan, 22-24th September 2017

<u>http://www.icmeas.org</u>, 3rd International conference on Mechanical Engineering and Automotive Sciences, University of Birmingham, 13th – 15th October.

<u>www.acmae.com</u> Asia Conference on Mechanical and Aerospace Engineering (ACMAE) 29th -31st Dec., 2017 Yokohama, Japan.

2016 Keynote Speeches

http://waset.org/conference/2016/01/dubai/ICMAME Dubai, UAE, January 28 - 29, 2016

http://www.icoae.org/ Moscow, Russia, 18th – 20th May, 2016.

http://www.issasci.org/ Sustainability in Aviation, Turkey on 29 May - 1 June 2016.

http://www.icmae.org/&http://www.icpam.org London, 18th - 20th July, 2016

http://www.icmeas.org/index.php Singapore, 13th – 15th, Oct. 2016.

(http://iopscience.iop.org/journal/1757-899X). keynote speaker and opening speaker, guest editor of this proceedings.

http://www.afcac.org/en/ African Civil Aviation Commission, 21-25 November 2016, Nairobi-

KENYA, 10th Onsite Aircraft Accident Investigation Techniques

http://www.icmae.net, Hong Kong ICMAE 2016, Dec 28th – 30th Dec

2015 Keynote Speeches

2nd World Congress on Unmanned Systems Engineering, Granada, Spain, 30th -31st July 6th International Conference on Mechanical and Aerospace Engineering, Rome, Italy, 16th-17th July

2014 Keynote Speeches

1st World Congress on Unmanned Systems Engineering, Oxford, UK, 30th July-1st August 5th International Conference on Mechanical and Aerospace Engineering, Madrid, Spain, 18th - 20th July, 2014.

Grants

1996 \$150,000 IBC investigation into Quality and reliability for University of Hertfordshire, successful

2004 \$300,000 EPSRC Surface mount technology, one of three researchers for University of Hertfordshire, successful

2012 Ison, D., Vincenzi, D., Witcher, K., McAndrew, I., Worrells, D., Terwilliger, B., Weiland, L., and Benny, D. (2012). Unmanned Aircraft Systems (UAS) at Airports: A Primer. A grant application submitted to the Transportation Research Board for funding on April 2, 2012. Unsuccessful

2016 \$15,000 Accelerated Research Initiative Proposal, joint with Dr. K Witcher and E Navarro. Unsuccessful

2016 \$35,000 Accelerated Research Initiative Proposal, joint with Dr. A Zajdband, selected for full proposal

Journals (Peer Reviewed)

McAndrew, I. Vishnevskaya, E. and Carruthers, A. (2017) Twin-Wing Design Options used for Unmanned Aerial Vehicles to achieve High Altitudes at Low Speeds, International Journal of Mechanical and Civil Engineering (IJRDO). Nov, Vol 3 Issue 11. p 15 – 24.

Whelan, K., McAndrew I. R. and Clark, P, (2017) ECONOMIC IMPLICATIONS FOR EMISSIONS WITH EUROPEAN LOW-COST CARRIERS USING VARIOUS FUELING STRATEGIES AND OPERATIONS, Journal of International Sustainable Aviation. Submitted. Accepted, waiting issue release.

Witcher, K, Navarro, E, Wood, B & McAndrew, I (2017) Quality Function Deployment and Proactive Quality Techniques applied to University Lectures to Improve Student Feedback, International Journal of Research in Engineering and Science (IJRES) ISSN (Online): 2320-9364, ISSN (Print): 2320-9356 www.ijres.org Volume 5 Issue 7 | July. 2017 | PP. 41-4

McAndrew, I, Witcher, K, Navarro, E & Foreman, P., (2017) Multi-Choice Questions and their Problems when used for assessment of Aircraft Engineers Education, Engineering Publication House Journal, July Volume-3 | Issue-7, Paper-2, page 12-19.

McAndrew, I. R, Navarro, E. & Witcher, K (2017), INTERNATIONAL JOURNAL OF MATERIALS, MECHATRONICS AND MANUFACTURING, Propeller Design Requirements for Quadcopters Utilizing Variable Pitch Propellers, Volume 6, Number 1.

Tuccio, W., Driscoll, G., Smith, M. & McAndrew, I. R. (2016). INTERVENTIONIST APPLIED CONVERSATION ANALYSIS: COLLABORATIVE TRANSCRIPTION AND REPAIR BASED LEARNING (CTRBL) IN AVIATION. *Journal of Pragmatics and Society,* Volume 7, Issue 1, 2016, pages: 30 –56

Holley, S. & McAndrew, I. (2016), *Cognitive Loading, Affect Regulation and Aerodynamic Considerations in Uninhabited Aerial Vehicle Systems Refueling Operations*, Journal of Multidisciplinary Engineering Science and Technology, Volume 3, Issue 4, March, pp.4264-4272, ISSN: 2458-9403 (Online).

McAndrew, I., Kanitz, M., & Carruthers, A. (2016), Maintenance Implications for Unmanned Aerial Vehicles in Remote Locations, IOSR Journal of Engineering Volume 6, Issue 2, Version 3, p.1-6. ISSN (Online): 2250-3021.

McAndrew, I., (2016), Lift & Drag Reductions on Iced Wings during Take-off and Landing with Unmanned Aerial Vehicles, American Journal of Engineering Research (AJER), www.ajer.org, Volume 5 - Issue 2, pp. 215-221

McAndrew, K. L. Witcher, & E. Navarro (2016), Glide Effects on Low Speed Unmanned Aerial Vehicles with Ice Formation, Int. Journal of Information Technology & Mechanical Engineering -

- McAndrew, I., Witcher, K., Navarro, E. (2016). Aerodynamic Effects of Ice and Its Influences on Flight Characteristics of Low Speed Unmanned Aerial Vehicles'. World Academy of Science, Engineering and Technology, International Science Index, Mechanical and Mechatronics Engineering, 2(1), 1338.
- Whealan George, K. A., Brady, T., McAndrew, I., Price, I., & Clair, R. T. (2015). ECONOMIC INTERRELATIONSHIPS AND IMPACTS OF THE AVIATION/AEROSPACE INDUSTRY IN THE STATE OF FLORIDA USING INPUT-OUTPUT ANALYSIS. *International Journal of Aviation, Aeronautics, and Aerospace, 2*(3). Retrieved from http://commons.erau.edu/ijaaa/vol2/iss3/9
- McAndrew, I. R., Witcher, K. & Navarro, E. (2015). UNMANNED AERIAL VEHICLE MATERIAL SELECTION AND ITS INFLUENCE ON DRAG AT LOW SPEED, *International Journal of Unmanned Systems Engineering*, 2nd World Congress on Unmanned Systems Engineering, Granada, Spain, 30th -31st July
- McAndrew, I. R., Navarro, E., Godsey, O. (2015). Drogue System Reliability Analysis Using Weibull Analysis. Applied Mechanics and Materials, Vol. 798, pp. 622-626. Trans Tech Publications, Switzerland, doi: 10.4028/www.scientific.net/AMM.798.622
- McAndrew, I. R., Witcher, K. & Navarro, E. (2015). DROGUE DEFLECTIONS IN LOW SPEED UNMANNED ARIAL REFUELLING. *International Journal of Research in Aeronautical and Mechanical Engineering* (Vol. 3, No. 1, pp. 119-127). ISSN (Online): 2321-3051. http://www.ijrame.com/vol3issue1/V3i114.pdf
- Ison, D. C., Weiland, L., McAndrew, I., & Moran, K. (2015). Identification of Air Traffic Management Principles Influential in the Development of an Airport Arrival Delay Prediction Model. Journal of Aviation/Aerospace Education & Research, 24(2). http://dx.doi.org/10.15394/jaaer.2015.1618
- McAndrew, I. R., Godsey, O., & Navarro, E. (2014). AERODYNAMICS OF DROGUE SYSTEM REFUELING OF UNMANNED AERIAL VEHICLES. *Advanced Materials Research* (Vol. 1016, pp 349-353). Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMR.1016.349
- McAndrew, I, R. & Navarro, E. (2014). LOW SPEED RE-FUELLING OF UNMANNED AERIAL VEHICLES USING THE DROGUE SYSTEM. *European Journal of Engineering and Technology*, 2 (1), 1-8.
- McAndrew, I. R. & Moran, K. (2013). AERODYNAMIC DESIGN CONSIDERATIONS FOR IN-FLIGHT REFUELLING OF UNMANNED VEHICLES. *Applied Mechanics and Materials* (Vol. 390, pp 43-47). Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMM.390.43
- McAndrew, I. R., & Witcher, K. (2013). DESIGN CONSIDERATION AND REQUIREMENTS FOR IN-FLIGHT REFUELLING OF UNMANNED VEHICLES. *Journal of Aeronautics & Aerospace Engineering*, 2(2), 1-4, doi:10.4172/2168-9792.1000108
- Arunachalam, S, O'Sullivan, J. & McAndrew, I. R. Implications of QS-9000 in the implementation of a new technology: A case study: International Journal of Manufacturing Technology and Management 4(3):322-332 · January 2002

Kounis, L. D., O'Sullivan, J. M., & McAndrew, I. R. (2001). MODELLING OF PARAMETRIC RELATIONSHIPS IN JET FANS. *International Journal of Condition Monitoring and Diagnostic Engineering Management*, 4(1), 34.

Pending Journal & Conferences

McAndrew, I & Vishnevskaya, E, & Witcher, K. (2018), Take-Off Characteristics for NACA 4612 Aerofoil in a Twin-Wing Configuration with Optimum Angles of Attack. International Conference on Aerospace, Mechanical and Mechatronic Engineering, March 23rd – 26th, 2018, Hanoi Vietnam. http://www.camme.org/

Conferences

McAndrew, I & Vishnevskaya, E, & Witcher, K. (2018), Establishing Angle of Attach of NACA 6412 Twin-Wing on Take-Off, European Conference on Material, Mechatronics and Manufacture, Krakow, Poland, 10th – 12th February.

Witcher, K., McAndrew, I. R., and Vishnevskaya, E, (2017) Aerodynamic Analysis of Low Speed Wing Design using Taguchi L9 Orthogonal Array, International Conference on Mechanical and Aerospace Engineering, Yokohama, Japan, 29th – 31st Dec. http://acmae.com/

Clark, P., McAndrew, I., & Whealan, George, K. (2017) Mechanical and Economical Consequences of Heavy Fuel Loadings for Low Cost Air Carriers, International Symposium on Sustainable Aviation, $10^{th} - 13^{th}$ Sept, Kiev, Ukraine.

McAndrew, I., Navarro, E. and Godsey, O. (2017), Low Speed and High Altitude Flight - Unmanned Flight at low speed in Altitudes above 50,000ft, 8th International Conference on Mechanical and Aerospace Engineering, $22^{nd} - 25^{th}$ July, Prague, Czech Republic.

McAndrew, I., Navarro, E. and Godsey, O. (2016), Symmetrical Aerofoils and the Influence of Damage or Debris for Unmanned Aerial Vehicles, 7th International Conference on Mechanical and Aerospace Engineering, 18th – 21st July, London, England.

McAndrew, I., Clark, P., & Whealan George, K. (2016), ECONOMICAL IMPLICATIONS FOR EMISSIONS WITH LOW-COST CARRIERS USING VARIOUS FUELING STRATEGIES AND OPERATIONS, International Symposium on Sustainable Aviation, 31 May – 3 June, 2016 Istanbul, TURKEY.

McAndrew, I., Balog, C., Glassman, A., Bourdeau, D., Navarro, E. (2016) [Keynote], Unmanned Aerial Systems Operational Challenges When Used Between Regions in Where English is not Widely Spoken or Understood, ICOAE, Moscow, Russia, 18th-20th May.

McAndrew, I., Witcher, K., Navarro, E. (2016). '[Keynote Talk]: Aerodynamic Effects of Ice and Its Influences on Flight Characteristics of Low Speed Unmanned Aerial Vehicles'. World Academy of Science, Engineering and Technology, International Science Index, Mechanical and Mechatronics Engineering, 2(1), 1334.

Holley, S. & McAndrew, I. (2015, July). *Cognitive loading and aerodynamic considerations in unmanned aerial vehicle systems refueling operations*. Paper presented at the 6th International Conference on Applied Human Factors and Ergonomics, Las Vegas, NV.

McAndrew, I. R., Godsey, O., & Navarro, E. (2015). DROUGUE SYSTEM RELIABILITY ANALYSIS USING WEIBULL ANALYSIS. *Applied Mechanics and Materials Journal:*

- *Proceedings from the 6th International Conference on Mechanical and Aerospace Engineering*, Rome, Italy.
- McAndrew, I. R., Carruthers, A. & Navarro, E. (2014). HYPERSONIC UNMANNED AERIAL VEHICLES: A CASE FOR RAPID DEPLOYMENT OF SPECIALISED CARGO. *International Journal of Unmanned Systems Engineering* (Vol. 2, No. 3, pp. 80-85). ISBN: 978-1-907980-06-0. World Congress on Unmanned Systems Engineering, University of Oxford, Oxford, UK. 30th July 1st August
- McAndrew, I. R. & Wise, G. P. (2014, June). CREW RESOURCE MANAGEMENT AND ITS POSSIBLE ROLE IN NURSING RISK MANAGEMENT. (p 251 -261). *Risk Management Conference*, Wessex Institute, New Forest, Hampshire.
- McAndrew, I. R., Godsey, O., & Navarro, E. (2014). LOW SPEED AERODYNAMICS OF DROGUE SYSTEM REFUELING OF UNMANNED AERIAL VEHICLES. *Applied Mechanics and Materials Journal: Proceedings from the 5th International Conference on Mechanical and Aerospace Engineering*, Madrid, Spain.
- Ison, D., McAndrew, I., Weiland, L., & Moran, K. (2013, July). AIR TRAFFIC MANAGEMENT PRINCIPLE BASED DEVELOPMENT OF AN AIRPORT ARRIVAL DELAY PREDICTION MODEL. The Second International Conference on Interdisciplinary Science for Innovative Air Traffic Management on Applied Mathematics and Operations Research for ATM. Toulouse, France.
- McAndrew, I. R., & Anderson, K. (2013, October). WEEKLY DISCUSSION BOARD QUESTIONS RELATIONSHIP INTO GRADES. *The Twenty-first Bollinger/Rosado Teaching and Learning Effectiveness Symposium*. Symposium conducted at the Embry-Riddle Aeronautical University-Worldwide Faculty Senate, Daytona Beach, FL, USA.
- McAndrew, I. R. & Moran, K. (2013). AERODYNAMIC CONSIDERATIONS FOR IN-FLIGHT REFUELLING OF UNMANNED VEHICLES. *International Conference of Aeronautical and Mechanical Engineering*, July 20-21. Moscow, Russia.
- McAndrew, I. R., Little, A., & Moran, K. (2013). FIGHTERS PILOT HELMET DESIGN FOR 5TH GENERATION AIRCRAFT. *International Conference on Manufacturing Research*. 19-20th September, Cranfield, UK.
- McAndrew, I.R., Sinka, I.R. & Muldoon, W. (2007). Grade Distributions and Targets, 16th Annual Bollinger-Rosado Teaching and Learning Symposium, Dayton Beach, Fl, 16th October, Section D.
- McAndrew, I.R., Sinka, I.R. & Wills, M. (2006). Blended Learning in Aviation Education, 14th Annual Bollinger-Rosado Teaching and Learning Symposium, Dayton Beach, FL, 14th November, p 16-36.
- Rahman, A. U., McAndrew, I. R., & O'Sullivan, J. M. (2006). WEIBULL ANAYSIS IMPACT ON SELF-LIFE OF SENSITIVE ITEMS. 6th International Conference of Quality Managers hosted by Iranian Society of Quality Managers. July 17th 20th.
- Rahman, A. U., McAndrew, I. R., & O'Sullivan, J. M. (2004). ENSURING RELIABILITY IN DESIGN FOR A COST-EFFECTIVE ENVIRONMENT. *Pakistan 8th International Convention on Quality Improvement*. Pakistan Institute of Quality Control in collaboration with Institute of Quality Control, United Kingdom.

- Rahman, A. U., McAndrew, I. R., & O'Sullivan, J. M. (2002). IMPLICATIONS OF SHELF LIFE FOR PRODUCT QUALITY. *Advances in Manufacturing Technology Conference* (Vol. 18, pp. 559-564). Taylor & Francis LTD.
- McAndrew, I. R., & O'Sullivan, J. M. (2002). Enterprise Resource Planning and its statistical accuracy: a case study, Proceedings of the Advanced Manufacturing Technology,pp 490-497, Wiley
- Rahman, A. U., McAndrew, I. R., & O'Sullivan, J. M. (2002). THE USE OF WEIBULL ANALYSIS TO PREDICT SHELF-LIFE PARAMETERS. *Pakistan 7th International Convention on Quality Improvement*. Pakistan Institute of Quality Control in collaboration with Institute of Quality Control, United Kingdom.
- Abughazaleh, T., McAndrew, I. R., O'Sullivan. J. M. & Wickramatillake, C. (2002). WEIBULL CONTROL CHARTS FOR SMALL SAMPLE INSPECTION. *ICQI*, *Pakistan* 7th *International Convention on Quality Improvement*. October, 26-27th, Karachi.
- Abughazaleh, T. A., O'Sullivan, J. M., & McAndrew, I. R. (2002). A COMPARISON OF WEIBULL PARAMETER ESTIMATION TECHNIQUES IN SMALL SAMPLE INSPECTION. *Advances in Manufacturing Technology Conference* (Vol. 18, pp. 547-552). Taylor & Francis LTD.
- Abughazaleh, T., Wickramatillake, C., O'Sullivan, J. M., Chen, Y., Chrysanthou, A. & McAndrew, I. R. (2001). MEASUREMENT OF ADHESIVE STRENGTH IN SHEET ALUMINIUM/EPOXY JOINTS BY CRACK PROPAGATION TECHNIQUES. *1st International Industrial Engineering Conference*. University of Jordan, Amman, pp. 115-120.
- Kounis, A. B., McAndrew, I. R., & O Sullivan, J. M. (2000, October). DETERMINING CAPABILITY INDICES WITH SMALL SAMPLES. *Advances in Manufacturing Technology Conference* (Vol. 14, pp. 449-456). Taylor & Francis LTD.
- Wickramatillake, C. D., O Sullivan, J. M., & McAndrew, I. R. (2000, October). INVESTIGATING THE PERFORMANCE OF ADHESIVE JOINTS USING STATISTICAL ANALYSIS. *Advances in Manufacturing Technology Conference* (Vol. 14, pp. 435-442). Taylor & Francis LTD.
- Kounis, L. D., O'Sullivan, J. M., & McAndrew, I. R. (1999). PRELIMINARY EXPERIMENTS ON A MODEL TO RELATE CpK AND SNR INDICES. *Advances in Manufacturing Technology Conference* (Vol. 13, pp. 409-414). Taylor & Francis LTD.
- Kounis, L. D., O'Sullivan, J. M., & McAndrew, I. R. (1999). GEOMETRICAL EVALUATIONS FOR BALANCING ROBUSTNESS AND CAPABILITY INDICES. *Proceedings of the 15th International Conference on Production Research, Manufacturing for a Global Market* (Vol. 2, pp. 1115-1118).
- Kounis, L. D., O'Sullivan, J. M., & McAndrew, I. R. (1997) RELATION CAPABILITY INDICES FOR SIGNAL TO NOISE RATIOS IN MANUFACTURING. Proceedings of the 14th Conference on Manufacturing Research Technology, pp785-890.
- Lee, P., O'Sullivan, J. M., Spurgeon, D., McAndrew, I. R., & Keough, D. (1997). ANTILUBRICATION: PROBLEM OR PROCESS? *Advances in Manufacturing Technology Conference* (Vol. 11, pp. 285-289). Taylor & Francis LTD.

McAndrew, I. R., Harland, G., & O'Sullivan, J. M. (1997). PREDICTING FAILURE MODES IN COMPRESSION PISTON RINGS DURING ASSEMBLY. *Advances in Manufacturing Technology Conference* (Vol. 11, pp. 321-325). Taylor & Francis LTD.

McAndrew, I. R., O'Sullivan, J. M., & Harland, G. (1995, September). PHOTOELASTIC STRESS ANALYSIS OF COMPRESSION PISTON RING ASSEMBLIES. *Advances in Manufacturing Technology IX: Proceedings of the 11th National Conference on Manufacturing Research* (Vol. 9, p. 67). CRC Press.

McAndrew, I. R., O'Sullivan, J. M., & Harland, G. (1995, September). THE USE OF EXPERIMENTAL DESIGN TO DETERMINE THE OPTIMUM CONDITIONS FOR ASSEMBLING PISTON RINGS. *Advances in Manufacturing Technology IX: Proceedings of the 11th National Conference on Manufacturing Research* (Vol. 9, p. 92). CRC Press.

McAndrew, I. R., O'Sullivan, J. M., & Harland, G. (1994, September). VIBRATIONAL CHARACTERISTICS OF PISTON RINGS. *Advances in Manufacturing Technology X: Proceedings of The 10th National Conference on Manufacturing Research* (Vol. 8, p. 126). CRC Press.