IMechE Aerospace North West  
Meeting Minutes  

A meeting of the IMechE Aerospace North West committee was held on **Monday 22nd January 2018** at David Lloyd Club, Chorley. The meeting commenced at 18:30 till 20:30.

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman</td>
<td>Paul Gardner</td>
</tr>
<tr>
<td>Vice Chairman</td>
<td>Arreyhon Alemi</td>
</tr>
<tr>
<td>Immediate Past Chairman</td>
<td>Euan Mason</td>
</tr>
<tr>
<td>Hon Secretary</td>
<td>Rebecca Donald-Lopez</td>
</tr>
<tr>
<td>Hon Treasurer</td>
<td>Manuel Donald-Lopez</td>
</tr>
<tr>
<td>Committee members</td>
<td>Martin Baxter</td>
</tr>
<tr>
<td></td>
<td>Ivan Dean</td>
</tr>
<tr>
<td></td>
<td>Emma-Jane Guy</td>
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<td></td>
<td>Martin Hyman</td>
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<td>Andrew Medd</td>
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<td></td>
<td>Iain Minton</td>
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<tr>
<td></td>
<td>Thurai Rahulan</td>
</tr>
<tr>
<td></td>
<td>Clive Winby</td>
</tr>
</tbody>
</table>

1 **ATTENDEES**

- Paul Gardner Safran, Nacelles / Chairman IMechE ANW
- Arreyhon Alemi, Vice Chairman IMechE ANW
- Martin Baxter, BAE SYSTEMS
- Martin Hyman, Business Consultant
- Andrew Medd, Education Advisory Group
- Ivan Dean, Past Chairman IMechE ANW
- Dave Entwistle, BAE SYSTEMS
- Joseph Soltan, Solvay

2 **APOLOGIES WERE RECEIVED FROM**

- Rebecca Donald-Lopez, BAE SYSTEMS / Hon Secretary IMechE ANW
- Manuel Donald-Lopez, BAE SYSTEMS / Hon Treasurer IMechE ANW
- Clive Winby, SILCOMS Ltd.
- Thurai Rahulan, University of Salford / Royal Aeronautical Society

3 **MINUTES FROM THE LAST MEETING**

No corrections or comments were raised for the last meeting notes.
4  REVIEW OF ACTIONS FROM LAST MEETING

4.1  Manuel Donald-Lopez to pay the catering invoice for the UAS Challenge lecture. Manuel hasn’t received the invoice for catering. Thurai Rahulan has chased this but the invoice still hasn’t arrived.

Action Carried Over

4.2  Rebecca Donald-Lopez to check if Manuel has received the invoice for catering from the FAAM lecture.

Action Carried Over

4.3  Rebecca Donald-Lopez to send out advertising material and poster for Lancashire Fire & Rescue event, to the region before the Christmas break.

Action Completed

4.4  Martin Baxter to take the stands from Thurai at this meeting.

Action Completed

4.5  Rebecca Donald-Lopez to provide Martin with two gifts for the speakers.

Action Completed

4.6  Paul Gardner to confirm 18th January 2018 is okay with Frank Kirkland, for the Trent Engine lecture.

Action Completed

4.7  Martin Hyman to book a room at MMU and refreshments for 30 after receiving confirmation from Paul regarding the date (18th January 2018).

Action Completed

4.8  Rebecca Donald-Lopez to create the new Trent Engine event advertising from the previous event material and send to the region before the Christmas break.

Action Completed

4.9  Martin Hyman to email Georgina Harris (cc Dr Sravanthi Sashikumar) and ask for the Trent Engine event to be publicised in the University.

Action Completed

4.10  Paul Gardner to tweet the Trent Engine event to the IMechE events team.

Action Completed

4.11  Rebecca Donald-Lopez to ask Clive Winby to push for 21st February for the Easy Jet event, as we now have 2 events in January already.

Action Completed
4.12 **Clive Winby** to ask **Ian Davis** if he is happy with 21st February for the Easy Jet event.

**Action Completed**

4.13 **Rebecca Donald-Lopez** to book the room at Bolton Uni once the date is decided for Easy Jet lecture.

**Action Carried Over**

4.14 **Paul Gardner** to fix a date for a site visit in early to mid 2018 to Safran to see the automated fibre placement machine.

**Action Carried Over**

4.15 **Paul Gardner** to contact **Burnley College** and **David Bailey** from NWAA regarding links with NWAA and possibly spend some money to advertise or sponsor something at an NWAA event.

**Action Carried Over**

4.16 **Martin Hyman** to contact **Martyn Shaw** from Bolton University and see if he would be interested in joining the committee.

There is now a new head of Engineering, Martin Hyman is awaiting a response.

**Action Carried Over**

4.17 **Rebecca Donald-Lopez** to contact **Billy Beggs**, UCLan’s Engineering Innovation Manager for a possible link with the committee.

**Action Carried Over**

4.18 **Paul Gardner** to obtain contact for Blackpool Spitfire simulator.

Paul to query what will be the difference between the IMechE event and events open to the general public.

**Action Carried Over**

4.19 **Andrew Medd** to pass on MBDA contact details to Paul Gardner.

**Action Completed**

4.20 **Paul Gardner** is going into the new MBDA facility to do some ‘bench marking’ and will try to get us a visit to the facility.

**Action Carried Over**

4.21 **Rebecca Donald-Lopez** to suggest 2018 meeting dates.

**Action Completed**
AEROSPACE DIVISION & HQ UPDATES

Paul Gardner reported that there is no report from Aerospace HW as the minutes have not yet been received. There will be a conference call on the 25th January 2018 to discuss the organising of the following three events:
- Electrification of Aircraft
- 2 x Student Lectures
- AMSTAC Composites Event

IMPROVING LINKS WITH ACADEMIA

See sections 4.9, 4.16 & 4.17.

EVENTS & ACTIVITIES PROGRAMME - 2018

The preferred day for events to be held is a Tuesday.

7.1 Emergency Service Drone Use – Event Review

<table>
<thead>
<tr>
<th>Date</th>
<th>Wednesday 10th January 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venue</td>
<td>UCLAN</td>
</tr>
<tr>
<td>Time</td>
<td>13:30 for 14:00</td>
</tr>
<tr>
<td>Organiser</td>
<td>Martin Baxter</td>
</tr>
</tbody>
</table>

Martin Baxter reported that Lancashire Fire & Rescue said that they were very busy but were happy for us to share their event on drone usage. Martin has produced all the advertising material and poster.

It was reported that the event was a success with 75 persons registered to attend. The venue was very good overall however there were issues with parking. The event was split into two parts. The first part discussed the financial benefits of using drones and the second part covered the operational benefits & limitations of using drones.

Action: Martin Baxter to confirm the amount of attendees for the event.

7.2 Trent Engine – Event Review

<table>
<thead>
<tr>
<th>Date</th>
<th>18th January 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaker</td>
<td>Frank Kirkland</td>
</tr>
<tr>
<td>Venue</td>
<td>MMU, Room JDT0.03, John Dalton Building</td>
</tr>
<tr>
<td>Time</td>
<td>6:00 for 6:30</td>
</tr>
<tr>
<td>Organiser</td>
<td>Paul Gardner</td>
</tr>
</tbody>
</table>

61 persons registered to attend the event with 38 persons attending. Approximately 50% of the attendees were students and with the other 50% of attendees were a mix of professionals, enthusiasts and retirees. The presentation was an interesting overview of the evolution of the Trent engine from 1981. The technical content included, why the modifications were made, what safety benefits were attained for the operators and information about the different varieties of the Trent engines. A lot of good questions were
asked at the end of the presentation which Frank Kirkland was able to answer all but one.
The event could be repeated & possibly joint hosted with the RAeS. A condensed version of the lecture could be conducted focusing on the certification of the Trent engines. IMechE were billed £45 for catering.

7.3 Easy Jet
Title: Ash to Ash, Dust to Dust
Speaker: Ian Davies, Head of Engineering, Easy Jet
Date: TBC 21st of Feb 2018
Venue: Bolton University
Time: 18:00 for 18:30
Organiser: Clive Winby

It was concluded that the proposed date was too close without all actions being completed for the event to be run.

7.4 Unmanned Aerial Vehicles (UAV) - British Antarctic Survey
Title: Unmanned Aerial Vehicles (UAV) - British Antarctic Survey
Speaker: TBD
Date: Wednesday 21st March 2018
Venue: David Lloyd Club Chorley
Time: 18:00 for 18:30
Organiser: Martin Hyman

Room is booked and access is acceptable to get UAV into the David Lloyd club.

7.5 SAFRAN Nacelles Visit
Date: TBC early to mid 2018
Venue: SAFRAN Nacelles Burnley
Time:
Organiser: Paul Gardner

8 ANY OTHER BUSINESS
8.1 Due to relocating Arreyhon Alemi will no longer attend IMechE committee meetings.
8.2 IMechE to buy some ‘make your own jet engine’ sets for local schools. These retail at approximately £50 per unit.

http://nearyou.imeche.org/near-you/UK/North-Western/Aerospace-North-West

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9  DATE OF NEXT MEETING

Next meeting:  **Monday 5th March 2018**— at David Lloyd Club, Whittle le
Woods, Chorley at **18:15 for 18:30.**

10  DATE OF PROPOSED IMECHA COMMITTEE MEETINGS 2018

- Monday 22 January 2018
- Monday 5 March 2018
- Monday 16 April 2018
- Monday 21 May 2018
- Monday 2 July 2018
- Monday 3 September 2018
- Monday 15 October 2018
- Monday 3 December 2018

**Minutes taken by:**
Arreyhon Alemi
Vice Chair IMechE Aerospace North West
22nd January 2018
Appendix 1

IMechE ANW 2018 Programme

* TUESDAY is the preferred day for events to be held

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>VENUE</th>
<th>TITLE</th>
<th>LECTURER</th>
<th>ORGANISER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday 10 Jan</td>
<td>13:30 for</td>
<td>UCLAN</td>
<td>Emergency Service Drone Use</td>
<td>Martin Hyman</td>
<td>Joint with Fire Service</td>
</tr>
<tr>
<td>2018</td>
<td>14:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday 18 Jan</td>
<td>18:00 for</td>
<td>MMU Room JDT0.03</td>
<td>Trent Engine</td>
<td>Frank Kirkland</td>
<td>Paul Gardner</td>
</tr>
<tr>
<td>2018</td>
<td>18:30</td>
<td>John Dalton Building</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday TBC 21</td>
<td>18:00 for</td>
<td>Bolton University</td>
<td>Ash to Ash, Dust to Dust</td>
<td>Ian Davies</td>
<td>Clive Winby</td>
</tr>
<tr>
<td>Feb 2018</td>
<td>18:30</td>
<td></td>
<td></td>
<td>Easy Jet</td>
<td></td>
</tr>
<tr>
<td>Wednesday 21 Mar</td>
<td>18:00 for</td>
<td>David Lloyd Club Chorley</td>
<td>Unmanned Aerial Vehicles (UAV) - British</td>
<td>TBD</td>
<td>Martin Hyman</td>
</tr>
<tr>
<td>2018</td>
<td>18:30</td>
<td></td>
<td>Antarctic Survey</td>
<td></td>
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<tr>
<td>TBD 2018</td>
<td></td>
<td>SAFRAN Nacelles Burnley</td>
<td>Visit to SAFRAN Nacelles</td>
<td></td>
<td>Paul Gardner</td>
</tr>
</tbody>
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http://nearyou.imeche.org/near-you/UK/North-Western/Aerospace-North-West

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Appendix 2

Wish List of Future Events

- Samlesbury ASK Facility Visit
- Uber Vertical Taxi
- Jet Suit – Richard browning
- Airbus Beluga XL
- Clean Sky 2 - compound helicopter
- Rolls Royce Engine Lecture
- Aero Gearbox International
- Wind Turbine Blades - Siemens have recently opened a factory in Hull.
- Manchester Airport Black Museum Visit – Clive Winby WIP
- Concorde & Son of Concorde – Next generation supersonic aircraft & Concorde Visit
- Subsidized visit to Concorde only – Aviation viewing park
- Nimrod replacement talk & visit – Aviation viewing park
- Helicopters – accidents in the North Sea (RAeS to cover in February)
- Model Aircraft
- UAV’s
- Maintenance
- Aircraft ducting
- Aircraft de-icing
- Aerodynamics
- Hawk hook on AC carriers
- Hawk systems into a new airframe
- F35 Aircraft Carrier operations
- Hot Air Balloon lecture possibly combined with Balloon Festival
- Hand Glider Material
- Woodford Flight Simulator – Oxford Aviation
- Rolls Royce Engine Lecture (2021 development and 2025 Ultrafan)
- Aerial Survey/Google Maps
- New MBDA factory tour
- Rolls Royce Engine Lecture (2021 development and 2025 Ultrafan)
- Space Tourism
- The Crash Detectives (book by Christine Negroni)
- Use of Drones in Fire and Police
- Avionics Lecture