IMechE Aerospace North West

Meeting Minutes

A meeting of the IMechE Aerospace North West committee was held on Monday 5th March 2018 at David Lloyd Club, Chorley. The meeting commenced at 18:30 till 20:30.

<table>
<thead>
<tr>
<th>Chairman</th>
<th>Paul Gardner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice Chairman</td>
<td>VACANCY</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>
</tr>
<tr>
<td></td>
<td>Martin Hyman</td>
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<td></td>
<td>Andrew Medd</td>
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<td></td>
<td>Thurai Rahulan</td>
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<td></td>
<td>Clive Winby</td>
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<td>Dave Entwistle</td>
</tr>
</tbody>
</table>

1 ATTENDEES

Paul Gardner  
Safran Nacelles / Chairman IMechE ANW
Manuel Donald-Lopez  
BAE SYSTEMS / Hon Treasurer IMechE ANW
Andrew Medd  
Education Advisory Group
Dave Entwistle  
BAE SYSTEMS
Joseph Soltan  
Solvay
Clive Winby  
SILCOMS Ltd.
Ian Bannister  
Milbrook

2 APOLOGIES WERE RECEIVED FROM

Martin Baxter  
BAE SYSTEMS
Ivan Dean  
Past Chairman IMechE ANW
Rebecca Donald-Lopez  
BAE SYSTEMS / Hon Secretary IMechE ANW
Thurai Rahulan  
University of Salford / Royal Aeronautical Society
Martin Hyman  
Business Consultant

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 Complete

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

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

4.4 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

4.5 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. I has been decided not to further pursue links with NWAA. Paul will continue to pursue links with Burnley College. Action Carried Over

4.6 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

4.7 Rebecca Donald-Lopez to contact Billy Beggs, UCLan’s Engineering Innovation Manager for a possible link with the committee. Action Carried Over

4.8 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. Paul has obtained a contact but needs to follow up. Action Carried Over

4.9 Paul Gardner is going into the new MBDA facility to do some ‘benchmarking’ and will try to get us a visit to the facility. Paul’s contacts were all based at other sites so this needs to be pursued with Andrew Medds contacts.
Action Carried Over

4.10  **Paul Gardner** to check with **Rebecca** what date the posters for the Unmanned Aerial Vehicles (UAV) event must be sent out to be in the regional update.

**Action Complete**

4.11  **Rebecca Donal-Lopez** to confirm that the room at David Lloyd Chorley has been booked for the Unmanned Aerial Vehicles (UAV) event on Wednesday 21st March 2018.

**Action Complete**

4.12  **Rebecca Donald-Lopez** to confirm the capacity of the room where the Unmanned Aerial Vehicles (UAV) event will be held at David Lloyd Chorley.

**Action Complete**

4.13  **Andrew Medd** to enquire about IMechE Lancashire area biannual newsletter including information for IMechE Aerospace North West.

Andrew reported that any input is welcome and items should be sent to Amy Turner. This can be used to report on past events and advertise future events.

**Action Complete**

4.14  **Dave Entwistle** to enquire about possible events which could be held at BAE ASK.

David contacted Grace Chadwick who seem receptive to putting up promotional material and advertising events.

**Action Complete**

4.15  **Joseph Soltan** to enquire about a potential visit to Solvay in Wrexham

Joseph reported that a visit is possible it would be a lecture followed by a tour around the R&D labs. This would be in Wrexham so may require a minibus to get people there. The visit would be for 20 people who would need to be UK passport holders. It was suggested that this could be an event in the September time frame.

**Action Complete**

**Further Action.** Confirm a visit data in September so that further arrangements can be made.
5  TREASURERS REPORT

Manuel Donald-Lopez reported the opening balance for the year was £4206.53.

We had some outstanding bills from 2017 for the UAS Challenge and FAAM lectures which were £428.58 and £412.50 respectively.

The Drone lecture in January cost £180

Some gifts for speakers were purchased consisting of 4 sets of Whiskey Glasses and 4 Tankards which came to £205.12

The January meeting cost £79.60 so the current running balance is £2900.73.

Based on the planned events so far the expected year-end balance is £1230 assuming that no grant is provided.

If a grant is provided then the year-end balance is expected to be closer to £2500.

See appendix 2 for further information

6  AEROSPACE DIVISION & HQ UPDATES

Paul Gardner reported that next meeting will be Tuesday 13th of March but he would be unable to attend.

The HQ lecture after the AGM would be Electrification of Aircraft

There is plans for a seminar on Graphene which may be held in Manchester but HQ is also considering holding it at the NEC due to another event at the NEC close to the proposed date.

There are plans for free webinars, one in April about transmission systems and another in October about Additive layer manufacturing.

There will be a student seminar in September on Propulsion.

There is talk of IMechE getting more involved in Space as there is a perceived gap in the market.

7  IMPROVING LINKS WITH ACADEMIA

See relevant actions in Section 4

8  EVENTS & ACTIVITIES PROGRAMME - 2018

The preferred day for events to be held is a Tuesday.
8.1 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.

Clive reported that the previous speaker has left Easy Jet and now works for Iberia in Barcelona. It was decided to shelve this event for now and concentrate on other possible events.

8.2 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.  
**Action** Paul Gardiner to get Stands to lecture  
**Action** Manuel Donald-Lopez to get Gifts for Speakers to the lecture

8.3 SAFRAN Nacelles Visit

Date: **TBC** early to mid 2018  
Venue: SAFRAN Nacelles Burnley  
Time:  
Organiser: Paul Gardner  
Paul reported that he still needs to confirm a date. This would be a clean room visit for a maximum of 15 people.

8.4 Other Event Ideas

Manchster Airport Modifications – a talk about what is happeing to the terminal buildings – **Action Clive Winby** to see if any of his contacts would be suitable
F35 – Ship Trials on Queen Elizabeth Class carrier. This will take place later in 2018 so would be a good time for a talk. **Action Manuel Donald-Lopez** to talk to contacts and see if anyone can provide a lecture.

9  ANY OTHER BUSINESS

9.1 Note of Thanks
The committee would like to say Thank You to Arreyhon Alemi for acting in the role of Vice Chairman.

10  DATE OF NEXT MEETING

Next meeting: **Monday 16th April 2018** at David Lloyd Club, Whittle le Woods, Chorley at 18:15 for 18:30.

11  DATE OF PROPOSED IMECHE 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:**
Manuel Donald-Lopez
Hon Treasurer IMechE Aerospace North West
5th March 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>
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<tbody>
<tr>
<td>Wednesday 10 January 2018</td>
<td>13:30 for 14:00</td>
<td>UCLAN</td>
<td>Emergency Service Drone Use</td>
<td>Martin Hyman</td>
<td>Joint with Fire Service</td>
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<tr>
<td>Thursday 18 January 2018</td>
<td>18:00 for 18:30</td>
<td>MMU Room JDT0.03 John Dalton Building</td>
<td>Trent Engine</td>
<td>Frank Kirkland</td>
<td>Paul Gardner</td>
</tr>
<tr>
<td>Wednesday 21 March 2018</td>
<td>18:00 for 18:30</td>
<td>David Lloyd Club Chorley</td>
<td>Unmanned Aerial Vehicles (UAV) - British Antarctic Survey</td>
<td>TBD</td>
<td>Martin Hyman</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>
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<tr>
<td>September 2018</td>
<td></td>
<td>Solvay Wrexham</td>
<td>Visit to Solvay Wrexham facility</td>
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<td>Joseph Soltan</td>
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Appendix 2

Treasurers Report

<table>
<thead>
<tr>
<th>Nat West Account Ledger</th>
<th>Credit</th>
<th>Debit</th>
<th>Running Balance</th>
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<tbody>
<tr>
<td>Opening Balance</td>
<td></td>
<td></td>
<td>£4206.58</td>
</tr>
<tr>
<td>Payment for 2017 FAAM Lecture</td>
<td>£412.50</td>
<td></td>
<td>£3794.09</td>
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<tr>
<td>Payment for 2017 UAS Challenge Lecture</td>
<td>£428.58</td>
<td></td>
<td>£3365.45</td>
</tr>
<tr>
<td>Use of Drones in Fire Service Lecture</td>
<td>£180.00</td>
<td></td>
<td>£3185.45</td>
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<tr>
<td>Gifts for Speakers</td>
<td>£205.12</td>
<td></td>
<td>£2980.33</td>
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<td>January Committee Meeting</td>
<td>£79.60</td>
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<td>£2900.73</td>
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**TOTAL**                  |        |           | £2900.73        |
### Projected Expenditure for period January 2018 to December 2018

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Expense Description</th>
<th>Credit ($)</th>
<th>Debit Predicted ($)</th>
<th>Balance Predicted ($)</th>
<th>Debit Actual ($)</th>
<th>Balance Actual ($)</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Dec-17</td>
<td>End Balance from 2017</td>
<td></td>
<td></td>
<td></td>
<td>4206.53</td>
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<td>4206.53</td>
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<tr>
<td>Jan-18</td>
<td>Payment for 2017 FAAM Lecture</td>
<td>Venue Hire and Catering</td>
<td>400.00</td>
<td>3866.53</td>
<td>412.50</td>
<td>3794.03</td>
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<tr>
<td>Jan-18</td>
<td>Payment for 2017 UAS Challenge Lecture</td>
<td>Venue Hire and Catering</td>
<td>400.00</td>
<td>3406.53</td>
<td>428.58</td>
<td>3368.45</td>
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<tr>
<td>Jan-18</td>
<td>Committee Meeting</td>
<td>Venue Hire and Catering</td>
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<td>79.60</td>
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<tr>
<td>Jan-18</td>
<td>Use of Drones in Fire Service Lecture</td>
<td>Catering</td>
<td>180.00</td>
<td>3148.53</td>
<td>180.00</td>
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<td>Jan-18</td>
<td>Rolls Royce Trent Lecture</td>
<td>Venue Hire and Catering</td>
<td>400.00</td>
<td>2748.53</td>
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<td>3105.85</td>
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<tr>
<td>Feb-18</td>
<td>N/A</td>
<td>Gifts For Speakers</td>
<td>200.00</td>
<td>2548.53</td>
<td>205.12</td>
<td>2900.73</td>
<td>4 Pairs of Whiskey Glasses and 4 Tankards</td>
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<tr>
<td>Mar-18</td>
<td>Committee Meeting</td>
<td>Venue Hire and Catering</td>
<td>78.00</td>
<td>2470.53</td>
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<td>Mar-18</td>
<td>UAV</td>
<td>Over Weight and Over Here’ The Prion Mk3</td>
<td>400.00</td>
<td>2070.53</td>
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<td>2900.73</td>
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<td>Apr-18</td>
<td>Easy Jet Lecture</td>
<td>Venue Hire and Catering</td>
<td>300.00</td>
<td>1770.53</td>
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<td>2900.73</td>
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<td>Apr-18</td>
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<td>Venue Hire and Catering</td>
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<td>1692.53</td>
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<td>May-18</td>
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<td>1614.53</td>
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<tr>
<td>May-18</td>
<td>Safran Nacelles</td>
<td>Venue Hire and Catering</td>
<td>0.00</td>
<td>1614.53</td>
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<td>Committee Meeting</td>
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<td>1536.53</td>
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<td>2900.73</td>
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<tr>
<td>Dec-18</td>
<td>Committee Meeting</td>
<td>Venue Hire and Catering</td>
<td>150.00</td>
<td>1230.53</td>
<td></td>
<td>2900.73</td>
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</tr>
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</table>

| | Total Meeting Costs | 696.00 | 79.60 |
| | Total Events Costs | 2080.00 | 1021.08 |
| | Total Equipment Costs | 200.00 | 205.12 |
| | Total Expenditure for Year | 2576.00 | 1305.60 |
| | Year End Balance | 1230.53 | 2900.73 |
Appendix 3

Wish List of Future Events

- Samlesbury ASK Facility Visit
- Uber Vertical Taxi
- Jet Suit – Richard Browning
- Airbus Beluga XL
- Clean Sky 2 - compound helicopter
- Aero Gearbox International
- Wind Turbine Blades - Siemens have recently opened a factory in Hull.
- Manchester Airport Upgrade Plans – 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
- Model Aircraft
- 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
- Space Tourism
- The Crash Detectives (book by Christine Negroni)
- Avionics Lecture