

Department of Electrical & Computer Engineering  
Airborne Sampling/Sensing of Distal Volcanic Ash  
Project Group Meeting #14

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## Agenda

Date: Friday July 8th 2016  
Time: 3pm  
Venue: VH 457  
Chair: Jake Campbell  
Secretary: Ryan Taylor

1. Apologies  
No apologies
2. Minutes  
(Attached)
3. Matters arising  
No matters arising from previous meeting
4. Correspondence  
Reply from UC Finance regarding airspeed sensor purchase
5. Progress Reports:
  - Ryan – Ash sample capture – cyclone separator
  - Mike – Telemetry
  - Jamie – Sensor testing
  - Jake – Temperature monitoring and airflow
  - Parth - Electrostatic sensor
6. Other business:

Minutes from last meeting below:

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## Minutes

### Minutes of the weekly meeting 22 July 2016

#### **Present:**

Maan Alkaisi, Adrian Weller, Jamie Van de Laar, Jake Campbell, Parth Thakur, Mike Shanaher

#### **1. Apologies:**

- Ryan Taylor

#### **2. Minutes from last meeting**

- (look at Minutes, July 15 2016)

#### **3. Matters arising**

- Arrival of telemetry gear
  - Can begin testing the telemetry and where to place on aircraft
- Size of testable ash
  - The size of ash wanted for testing was decided to be around the 30 micrometre range.
  - Needs to represent distal ash as accurately as possible.
  - Will have to be further sieved down.
- Depending on CAA approval, the UAV might need a parachute for safe descent on system failure.
- Adrian's arrival time at uni set around 9-9:30 am.

#### **4. Correspondence**

- All are CC'd in emails

#### **5. Progress Reports:**

- Jamie Van de Laar
  - a. Got the wind tunnel working
  - b. Can get up to 10 amps before the controller cuts out.
  - c. Decided that 3 minutes at full throttle is enough for testing.

- d. Emailed Patrick about the wind tunnel, should be able to borrow wind speed sensors.
  - e. Able to do dry runs of wind tunnel without ash.
  - f. Written code for OPC-N2 on RPi.
- Jake Campbell
  - a. Finished the designs for the OPC-N2 sensor, RPi and PIXHAWK housings.
- Mike Shanaher
  - a. Working on code for the autopilot.
  - b. The SD card fixed the problems.
  - c. Up to testing the newly arrived equipment.
- Parth Thakur
  - a. Working on electrostatic sensor.

6. **Other business:**

**Meeting ACTION LIST**

<b>ACTION</b>	<b>ASSIGNED TO</b>	<b>DUE DATE</b>
Send copy of circuit to Maan and Adrian	Parth	29-07-16

**Next meeting date: Friday 5 August 1030hrs**