

Department of Electrical & Computer Engineering

Airborne Sampling/Sensing of Distal Volcanic Ash

Project Group Meeting #12

Agenda

Date: Friday July 1st 2016

Time: 3pm

Venue: VH 457

Chair: Ryan Taylor

Secretary: Jamie Van de Laar

1. Apologies

Parth Thakur

2. Minutes

(Attached)

3. Matters arising

* DTA wind tunnel logistics

4. Correspondence

All CC’d in all correspondence

5. Progress Reports:

* Ryan – Ash sample capture – cyclone separator
* Mike – Telemetry
* Jamie – Sensor testing
* Jake – Temperature monitoring and airflow

6. Other business:

* Next meeting – 8th July?

Minutes from last meeting below:



Department of Electrical & Computer Engineering

Airborne Sampling/Sensing of Distal Volcanic Ash

Project Group Meeting #11

Minutes

**Minutes of the weekly meeting 10th June 2016**

**Present:**

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

**1. Apologies:**

* NIL

**2. Minutes from last meeting**

* (look at Minutes, June 3 2016)

**3. Matters arising**

* OPC sensors have arrived.

**4. Correspondence**

**5. Progress Reports:**

* Jamie Van de Laar
  1. Cheaper sensor is working and takes reading in set amount of 0.3, 0.5, 1.0, 2.5, 5 and 10 micros. It can be compared to the OPC-N2.
  2. Testing to happen with real Ash within the next week.
* Jake Campbell
  1. Looking into the possibility of using a dead zone on the surface of a plane to sample ash from.
* Mike Shanaher
  1. Mission planner is running on Mike’s mac. Testing to happen within the next week. Raspberry pi is put forward as sensor cpu and encoder for data.
* Parth Thakur
  1. Circuit is functioning and reads voltage. Reducing the noise is the next issue.
  2. Meeting on Monday the 13th with Kelvin about the CAA regulations.
* Ryan Taylor
  1. Mini cyclone testing sounds like a good idea, and is a common in the aviation industry. So getting a prototype to 3D print in the next week.
* Adrian
  1. Wind tunnel 1.5mx2.5m, ready to ship down and a decision needs to be made in the next week.
  2. DTA is in Christchurch on the 28th of June.

6. **Other business:**

* NIL

**Meeting ACTION LIST**

|  |  |  |
| --- | --- | --- |
| **ACTION** | **ASSIGNED TO** | **DUE DATE** |
| Test sensors with ash | Jamie | Next meeting |
| 3D print cyclone separator | Ryan | Next meeting |
| Decide on DTA wind tunnel | All | 17th June |