

Department of Electrical & Computer Engineering

Airborne Sampling/Sensing of Distal Volcanic Ash

Project Group Meeting #22

Agenda

Date: Friday September 23rd 2016

Time: 10.30 am

Venue: UC James Hight Library Room 212A

Chair: Ryan Taylor

Secretary: Jamie Van de Laar

1. Apologies

Parth Thakur

2. Minutes

(Attached)

3. Matters arising

* Adrian’s visit for final designs

4. Correspondence

All CC’d in all correspondence

5. Progress Reports:

* Ryan – Ash sample capture, plane ash chamber
* Mike – Telemetry
* Jake – Funnel type inlet design
* Jamie – Wind tunnel OPCN2 testing (inlet configurations)

6. Other business:

NIL

Minutes from last meeting below:











Department of Electrical & Computer Engineering

Airborne Sampling/Sensing of Distal Volcanic Ash

Project Group Meeting #21

Minutes

**Minutes of the weekly meeting 9th September 2016**

**Present:**

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

**1. Apologies:**

**2. Minutes from last meeting**

* (refer to Minutes, August 26 2016)

**3. Matters arising**

**4. Correspondence**

* All are CC’d in emails

**5. Progress Reports:**

* Mike Shanaher
  1. No testing yet but is ready to go when weather clears
  2. Electronics ready
* Ryan Taylor
  1. Waiting on 3D printing parts should arrive Monday
  2. Testing outlet for small particles
* Jake Campbell
  1. Using the mini talon is best option
  2. Found another group using vertical assent with plane mounted vertically
  3. Pixhawk should be able to have another “ascent” flight mode
* Parth Thakur
  1. Electrostatic testing showing results, not very large. Signal to noise ratio isn’t very good. Needing to isolate noise.
  2. Copper needs to not effect telemetry
  3. If larger area is needed, a large copper sheet could be attached to the balloon and not the plane.
  4. Test with larger surface area in wind tunnel
* Jamie Van de Laar
  1. Wind tunnel testing looks good, is able to test ash and no ash. On the second test the concentration was correct.
  2. Needing to test different inlet option

6. **Other business:**

**Meeting ACTION LIST**

|  |  |  |
| --- | --- | --- |
| **ACTION** | **ASSIGNED TO** | **DUE DATE** |
| Test telemetry | All | ASAP |
|  |  |  |
|  |  |  |

**Next meeting date: 23rd September (no meeting on inspection day)**