



WUSAT Newsletter

September 2018

University of Warwick Satellite Engineering Team 2017-18

WUSAT OUTREACH & PROMOTION SPECIAL!

Outreach and promotional activity has a high priority for the WUSAT team.



Our outreach/promotional programme is one of our primary activities. This Newsletter aims to highlight the range of activities that WUSAT has been involved with over the past academic year. However, the first question is

OUTREACH – “Who do we do it for, and why?” – (In no particular order!)

- **Our student team members** - are at the heart of all that we do, and we promote their skills and abilities to show all potential employers the quality of graduate engineer they can expect to get from a Warwick Engineering student.
- **The University of Warwick and The School of Engineering** – WUSAT’s high profile Space projects are a major promotional and recruitment feature for both the University and Warwick Engineering. We rely heavily on the support of a large range of Warwick staff in order to operate as we do.
- **Our partner companies and institutions** – our WUSAT partners support us in a wide variety of ways. However, we have a very strong ‘partnership’ mentality towards them, and seek to promote and support them in whatever way we can.
- **The European Space Agency (ESA)** – To date, we have worked on ESA supported projects for eight of our twelve years of existence. This has included technical support and financial support towards travel and launch costs. We are always acutely aware that this support is part of ESA’s own outreach programme. Consequently, we have a duty to promote and disseminate our output to others on ESA’s behalf. We expect this range of activity to extend to other agencies (UK Space Agency, Satellite Catapult, etc) in the near future.

See our range of outreach & promotional activities below!

'WUSAT Team Day' – Harwin – Mon 18th June 2018



Harwin have been a major contributor to the WUSAT programme for many years. We used their high-reliability PCB connectors on WUSAT-2 where they operated perfectly through both the launch and the extremely harsh operating environment of re-entry into the atmosphere as the payload successfully monitored light frequencies and transmitted data to our ground station.

They have also been generous supporters of our end-of-year get-together with the current satellite team and our collaborating partners. We have always referred to this event as our 'WUSAT Sponsors Day'. However, the range of collaborative relationships that we now have are so diverse that the term 'sponsor' is no longer appropriate in many cases. Hence, we have renamed the event '**WUSAT Team Day**'. This fits our philosophy that everyone connected with us is on 'the team', and we

are looking for mutual benefit for all concerned.

This year Harwin were extremely generous in supporting, not only our day of presentations and our meal in the private function room of Scarman House, but they also made a brilliant gift of a back-pack bag with personalised initials, Harwin, and WUSAT logos, and a host of excellent goodies inside. This is a wonderful keepsake for our graduating team, and Julia & I have already adopted ours as our 'bag of choice' when we attend any WUSAT related events from now on! Thanks so much to everyone at Harwin (<https://www.harwin.com/>)

RS – WUSAT Video Planned

We were delighted to see RS Community Manager – UK, Tracey Taylor, at our WUSAT Team Day this year. RS, and Tracey, have been with us since the very beginning in 2006. At Tracey's instigation we are planning to make an RS/WUSAT promotional video in the near future. Our WUSAT lab is full of RS supplied equipment – a real testimony to their generous level of support! (<https://uk.rs-online.com/web/>)



Tracey Taylor
Community Manager – UK
RS Components

Brindle & Green – Presentation – Fri 11th May 2018

Bill and Julia travelled to Derbyshire to give a presentation to Ecological Consultants, Brindle & Green (<http://www.brindlegreen.co.uk>).

Highlighting how the scope of WUSAT-3 and its wildlife-monitoring payload has now extended into areas of sustainability & ecological diversity, etc, we presented the WUSAT-3 mission to Brindle & Green's team of ecologists as part of their programme of staff development. It was a satisfying experience to be able to talk to ecologists about the concept of WUSAT-3. Neil Crofts (Bill's son!) is the MD and founder of Brindle & Green.

Bill & Julia
giving their
presentation



Neil Crofts
MD
Brindle & Green

Julia – Space Universities Network Interview – July 2018



WUSAT Co-Director, Prof Julia Hunter-Anderson, was interviewed by the Space Universities Network about her work on the WUSAT programme and her related background. The interview appeared in their July 2018 Newsletter and is now on the WUSAT website at <https://warwick.ac.uk/fac/sci/eng/meng/wusat/outreach/publicity>

Visit to XCAM – July 2018

XCAM specialises in providing innovative CCD and CMOS-based solutions for challenging imaging applications. (www.xcam.co.uk). WUSAT team member, Michael Kaniou, spent six weeks as an intern with XCAM this summer working on his Warwick Summer Internship funded project '**Finite Element Modelling of a Space-Qualified Particle Fall-Out Monitor**'. Bill & Julia visited XCAM towards the end of Michael's time at XCAM and spent a very interesting day hearing about Michael's work and discussing further possibilities for collaboration between XCAM and WUSAT. We will certainly be considering supporting other internships, and will be seriously considering the possibility of flying an XCAM imaging unit on WUSAT-3 thanks to their generous offer of support. A blog of Michael's work with XCAM can be found at (<http://www.xcam.co.uk/blog-post-michael's-summer-internship-xcam>).



Michael Kaniou with XCAM CEO Karen Holland

WUSAT Sponsors The 'Pam Britton Trust' Golf Charity Day – Wed 13th June 2018



Ever willing to promote WUSAT and our partners in any way we can, we sponsored a hole in a charity golf match at Stoneleigh Deer Park Golf Club. The charity day was in aid of 'The Pam Britton Trust for Dementia' (<https://www.pbrittontrustfordementia.org.uk/>). Pictures show Bill on the tee sporting his WUSAT polo shirt and partner logos! The event was very well attended, and the WUSAT sponsorship provoked plenty of interest and comment.



BBC – Coventry & Warwickshire Radio Interview – 18th Aug 2018

Outreach activity in our local region is very important to us. We are also very aware that Coventry's 'UK City of Culture' (<https://coventry2021.co.uk/>) is scheduled for 2021, and this could be at, or very close, to the launch and operation of our current satellite, WUSAT-3.



We have a way to go yet, and plenty of hurdles to clear, but a launch to the **International Space Station** would be a very newsworthy event for this region, and we are keen for everyone to feel some sense of ownership with it.

Bill gave a live interview to BBC CWR in order to get this concept across. We hope that, given satisfactory progression towards launch, we can incorporate WUSAT-3 into the Coventry UK City of Culture programme.

WUSAT Praised by NASA Chief Technologist – 20th July 2018

Dr Douglas Terrier, the Acting Chief Technologist at NASA, was awarded an Honorary Doctorate of Science at the University's Summer Graduation ceremonies.

WUSAT Co-Directors, Bill & Julia, were delighted to meet and chat to him prior to his award ceremony. Take a look at the impressive article and interview with Dr Terrier at

(https://warwick.ac.uk/newsandevents/pressreleases/nasa_chief_praises/)

It is rewarding to hear the very enthusiastic comments that Dr Terrier made about the WUSAT programme and its benefits to the students and the university in general.



WUSAT Open Day Attendance

During 2018, WUSAT have attended every Engineering Open Day in order to present the high level of engagement that we offer with high-profile Space projects that work with Space Agencies and top-class companies. There is no doubt that WUSAT makes a considerable impression on prospective students.



Dr Bill Crofts & Prof Julia Hunter-Anderson, Co-Directors of the WUSAT Programme, www.warwick.ac.uk/cubesat