



# UKSEDS

UK STUDENTS FOR THE EXPLORATION AND DEVELOPMENT OF SPACE

## Executive Summary 2015 - 2016

### Committee 2015 - 2016

#### Executive

|            |                     |
|------------|---------------------|
| Chair      | Joseph Dudley       |
| Vice Chair | Robert Garner       |
| Secretary  | David Jones-Gerrard |
| Treasurer  | Ciara McGrath       |

#### Officers

|               |                    |
|---------------|--------------------|
| Careers       | Portia Bowman      |
| Events        | Alex Gee           |
| International | Jack Perrott-Webb  |
| Membership    | James Telfer       |
| Outreach      | Hannah Osborne     |
| Projects      | Samiksha Mestry    |
| PR            | Elisabeth Matthews |
| Sponsorship   | Daniel Erkel       |

It's been a privilege to lead UKSEDS during the year of Tim Peake's launch. Our members all over the country supported outreach events and held parties in Tim's honour, and alumna Libby Jackson, Spaceflight Education Programme Manager at the UK Space Agency, was interviewed on national television. The day was particularly special for us as it also marked the launch of our new website SpaceCareers.uk, full of advice and opportunities for students.

Tim's launch was just one event in our busy calendar of outreach activities, generously supported by the UK Space Agency's Space for All scheme, that included events at the Science Museum, the Natural History Museum, and the Royal International Air Tattoo.

In July, our volunteers supported the UK Space Conference and got the chance to talk to some of the industry's biggest names. In November, we organised our second Careers Event at the Reinventing Space Conference in partnership with the British Interplanetary Society and the Space Generation Advisory Council. We didn't stop there though – the next week we were teaching our members all about radio communications at a workshop at Cranfield University.

Our 3rd National Rocketry Championships were recognised by a Royal Aeronautical Society Centennial Scholarship Award and we have robotics competition in the works.

This fantastic year would not have been possible without the generous support of our volunteers, supporters and friends; in particular our corporate sponsors Printech Circuit Laboratories, and Reaction Engines.

UKSEDS is now in its 28th year and continues to grow. In light of this the committee voted to expand the size of the organising team to give even more opportunities to enthusiastic students looking to gain valuable skills and experience. We are looking forward to another exciting year in 2016.

Joseph Dudley  
Chair

# ACTIVITIES AT A GLANCE

## Careers

With the continued growth and popularity of the UK space sector, we've seen an unprecedented level of interest in our careers resources, and received more enquiries than ever before from students of all ages. Throughout 2015 we were busy developing a new careers resource, and in December we were pleased to launch it. SpaceCareers.uk is a new website full of resources for students from school through to university, demystifying the space industry, and providing information and advice about the huge range of routes into the sector.

We also continued our series of successful partnerships with the British Interplanetary Society, organising a Careers Event at their Reinventing Space Conference in Oxford. See page 5.

# 13885

PAGEVIEWS ON  
SPACECAREERS.UK  
IN FEB 2016

## Membership

This year has been an excellent one for the branches of UKSEDS, with five new societies joining our family, bringing our total membership to just under 2000. Our annual Freshers' Packs were distributed and contained a mix of content from our industrial partners and internal material. We also introduced our first branch leads meeting, a valuable opportunity for us to get feedback from our members and to encourage the sharing of ideas between branches. We aim to increase the collaboration between branches as we move into the next year.

# 34

UNIVERSITY BRANCHES





## Sponsorship

We've enjoyed phenomenal support from industry again this year, beating last year's record sponsorship income. We are delighted to welcome a number of first time sponsors including EUMETSAT, the IET, and Thales Alenia Space UK, and we continue to strengthen our relationship with long-term supporters such as PCL, Reaction Engines, and HE Space. Our conference this year sees a unique partnership with Airbus Defence and Space UK, who chose to bring their annual Student Presentation Competition to the event for the first time.

We are always looking for new partners to support us in our work and help us fulfil our mission to engage and educate young people about space.

# £9055

OF SPONSORSHIP

## International & Alumni

We have improved our ties with international organisations over the past year. In particular, EUROAVIA has joined SEDS-USA and SGAC as an organisation we have formal links with. Three members of our team attended the inaugural European Aerospace Students Meeting for Experimental Rocketry in Milan, an event focused on building links and sharing knowledge between student rocketry groups across Europe, and we are now leading an initiative for a European Rocketry Competition. We also attended the 1st Symposium for Educational Activities in Padua sharing outreach resources and contacts with our European friends.

We formally launched the UKSEDS Alumni Association this year, its form and shape becoming more defined across the year, thanks in a large part to the advice of SEDS-USA. We have also managed to track down many alumni that we had lost contact with, and are organising our first alumni meet-up for later this year.

# 9

INTERNATIONAL  
PARTNERS

# ACTIVITIES AT A GLANCE

## PR

This year we launched a new careers-focused mailing called Liftoff to complement Ecliptic, our long-standing newsletter. Our mailing list sees an opening rate of 35% compared to the industry standard of just 21%. On social media we've gained 600 Facebook likes and more than 700 new Twitter followers this year, bringing our social media audience to almost 6000.

# 5706

FOLLOWERS ON SOCIAL  
MEDIA

## Outreach

2015 was our most successful year of outreach, and saw us taking part in 18 events across the country, including several simultaneous events for the launch of Tim Peake's Principia mission, and engaging with thousands of students from all age ranges, at both large and small events.

This year's outreach was made possible by a £2500 Space for All grant from the UK Space Agency, and we have secured an additional £4000 grant for the next year to further develop our outreach programme and SpaceCareers.uk.

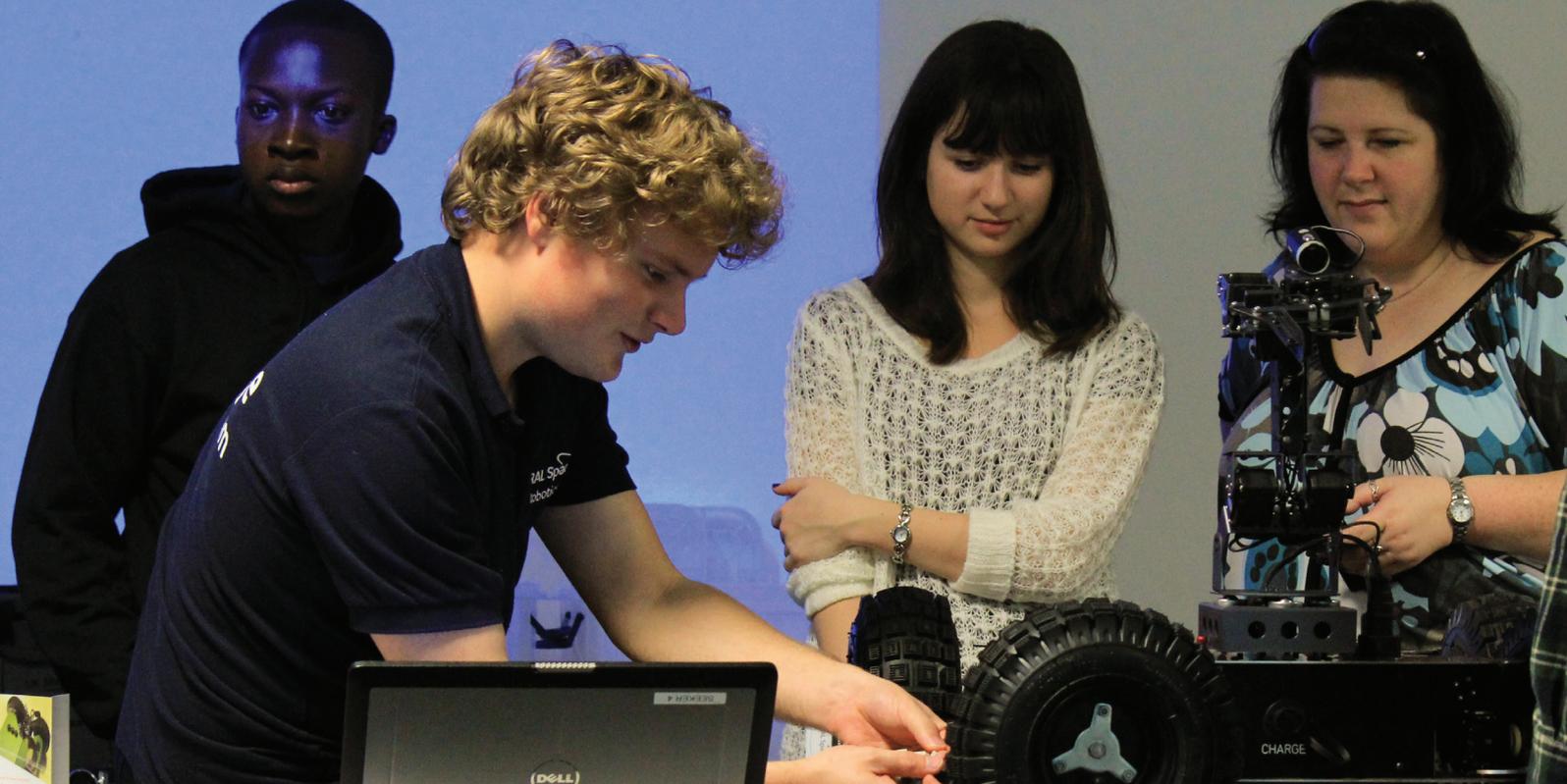
# 18

OUTREACH EVENTS

## Projects

Groundwork for a robotics competition similar to the NRC (see opposite) has been laid, with connections to several organisations with interests in space robotics being made. Several experts have been consulted on the rules, to set them at an achievable but flexible level. The launch of our national robotics competition will be announced soon for the next academic year.





## Radio Workshop

**November 2015**

2015 saw our first workshop on the subject of Amateur Radio, held at Cranfield University. This was a fun event where we demonstrated the basics of radio technology and its applications for both space and hobbyist communications. Participants used makeshift antennae and hand-held radios to locate a small hidden transmitter, learnt about the applications of software defined radio in satellite communications, experienced some of the practical activities that form part of the foundation license exams, and had the opportunity to speak to other amateurs on the air. While this required quite a lot of logistical and equipment support, it was a worthwhile event that we hope to run again in the future.

**62**  
EVENT ATTENDEES

## Reinventing Space Careers Event

**November 2015**

Following up on the successful Reinventing Space Careers Event in 2014, UKSEDS once again got together with SGAC and the British Interplanetary Society to organise an event at RISpace 2015, held in Oxford in November. The programme of speakers was chosen to represent all parts of the industry, and included Prof. Chris Lintott (Sky at Night and University of Oxford), Michael Lawrence (ElecNor Deimos), Mark Thomas (CEO of Reaction Engines), Mike Lawton and Shefali Sharma (Oxford Space Systems), and Prof. Kate Robson-Brown (UK Space Life and Biomedical Sciences Association).

**10**  
NRC 2015  
TEAMS

## 3rd National Rocketry Championships

The end of 2015 saw the launch of the third National Rocketry Championships (NRC) which now has 10 teams competing. We were awarded a £2200 grant from the Royal Aeronautical Society's Centennial Scholarship scheme for the competition, and an accompanying rocketry event to be held in the summer.

# NATIONAL STUDENT SPACE CONFERENCE

Our National Student Space Conference is the premier student space event in the UK, bringing together students, academics, and professionals from across the world to share knowledge of space, discuss the challenges facing the sector, and create new links between groups. It features talks by leading space science and industry figures, a careers fair, and opportunities to take part in discussions and networking events.

This year's event takes place at the University of Sheffield and is hosted by Sheffield SpaceSoc, one of our most active branches. The conference has seen record levels of interest from students, and we have involved a number of organisations for the first time.

Our keynote speaker this year is Prof. Mark McCaughrean, the Senior Science Advisor in the Directorate of Science & Robotic Exploration at ESA. We have also introduced two new sessions in lieu of our traditional second keynote; a panel on *The Future of the UK Space Sector* and a discussion on *Developing the Space Skills Pipeline*. These sessions have been created to encourage a dialogue between our supporters and sponsors from the sector and the student community.

# 335

ATTENDEES

# 25%

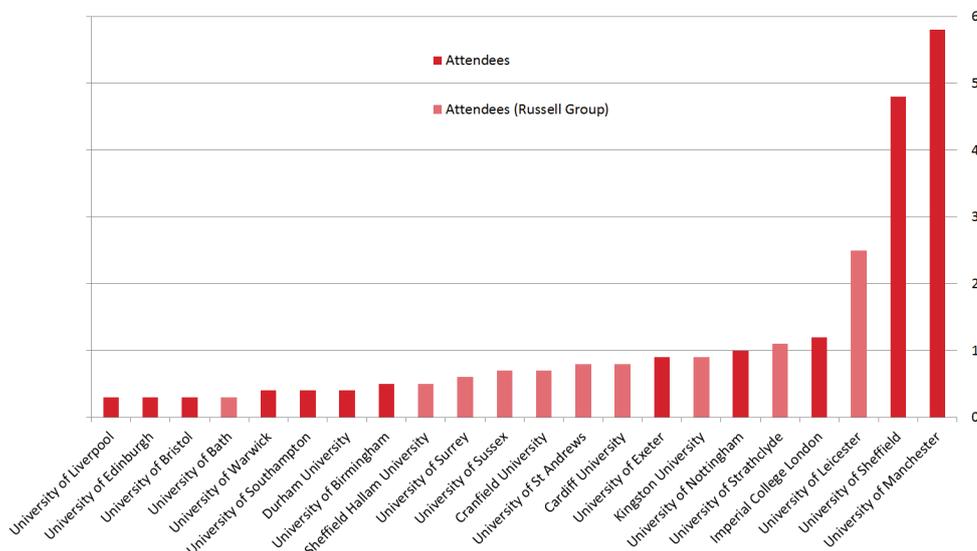
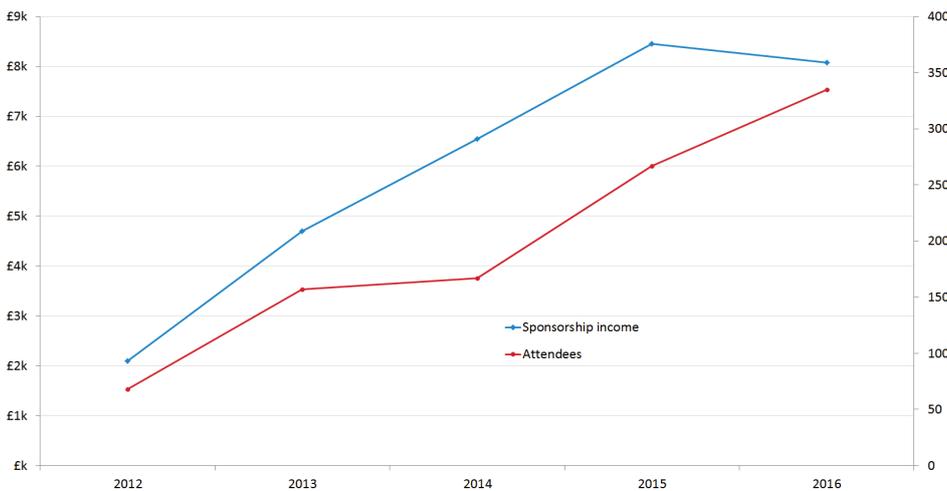
INCREASE IN ATTENDANCE ON  
LAST YEAR

# 45

UNIVERSITIES  
REPRESENTED BY  
STUDENTS

# 61%

OF STUDENT ATTENDEES FROM RUSSELL  
GROUP UNIVERSITIES

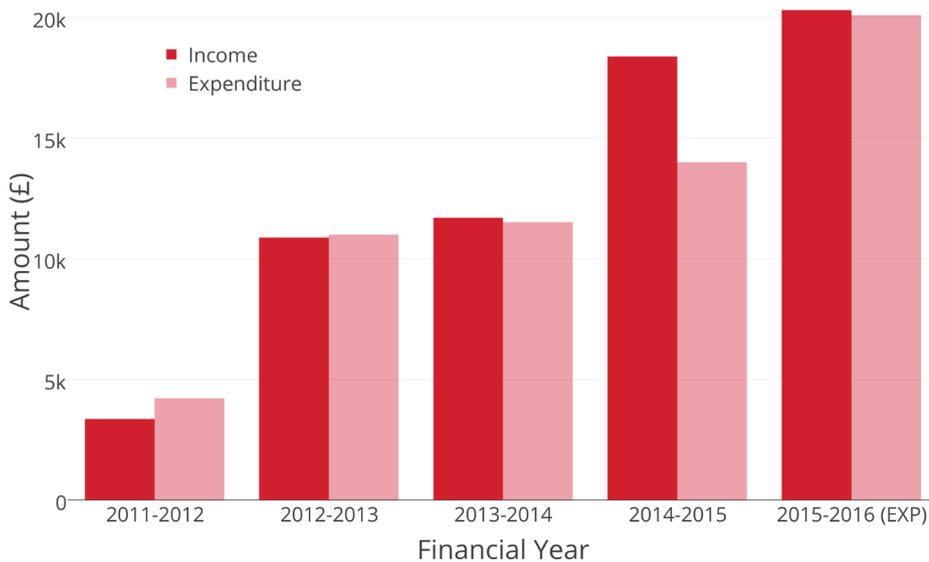


# FINANCES

Financially, we continue to be in an excellent position. The large growth in our conference income (and expenditure), along with a larger grant from the UKSA Space For All scheme are the main source of the 50% increase in income from FY13-14 to FY14-15 (the UKSEDS financial year runs from 1st December to 30th November). This allowed us to make a large surplus of £3,636 with an end of year balance of £11,122. This will be reinvested into our membership over the coming years. Part of this will also be retained as a reserve for high expenses such as deposits and equipment replacement.

The financial outlook for FY15-16 is also very good. Income and expenses from the National Student Space Conference 2016, which is expected to make a small surplus and grants from both the UKSA Space For All scheme and the Royal Aeronautical Society Centennial Scholarship scheme have been included in the expected FY15-16 numbers below.

Income and Expenses 2011 - 2015 (expected)



# 50%

INCOME INCREASE FROM  
FY13-14 TO FY14-15

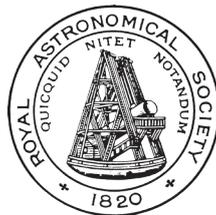


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