

**Royal Astronomical Society
Trustees' Report for the year ended 31 December 2012**

ROYAL ASTRONOMICAL SOCIETY

TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2012

1. REFERENCE AND ADMINISTRATIVE INFORMATION

Patron

Her Majesty the Queen

Council Members

The Council is elected in accordance with the terms and conditions laid down in the Society's Royal Charter and its associated byelaws. Members of Council are the Society's charity trustees. The Officers of the Royal Astronomical Society, who are elected members of Council, comprise the President, the Treasurer and three Secretaries.

The Council members who served during 2012 were:

Professor D. J. Southwood (President from May 2012, G, Imperial College London)
Professor R. L. Davies (President until May 2012, A, University of Oxford)
Professor F. Honary (Vice-President, G, Lancaster University)
Professor M. Kendall (Vice-President until May 2012, G, University of Bristol)
Professor O. Lahav (Vice-President until May 2012, A, University College London)
Professor C. Tadhunter (Vice-President, A, University of Sheffield)
Professor B.E. Parsons (Vice President, G, University of Oxford)
Dr. S.A. Mitton (Vice President, A, University of Cambridge)
Professor A.M. Cruise (Treasurer, A, University of Birmingham)
Professor M.A. Barstow (Secretary, A, University of Leicester)
Professor I.A. Crawford (Secretary, G, Birkbeck College)
Dr L. Fletcher (Secretary, G, University of Glasgow)
Ms M. Bailey (Councillor, A, Keele University)
Professor Y. Elsworth (Councillor, G, University of Birmingham)
Professor K. Blundell (Councillor until May 2012, A, University of Oxford)
Dr E. Bunce (Councillor until May 2012, G, University of Leicester)
Dr R.T. Holme (Councillor until May 2012, G, University of Liverpool)
Professor D.W. Hughes (Councillor, A, University of Sheffield)
Professor D.W. Kurtz (Councillor, A, University of Central Lancashire)
Professor S. Miller (Councillor, G, University College London)
Dr A. Norton (Councillor, A, Open University)
Professor R.E. Spencer (Councillor, A, University of Manchester)
Mr C.E. Barclay (Councillor, A, Marlborough College)
Professor R.J. Davis (Councillor, A, University of Manchester)
Dr. S. Peacock (Councillor, AWE Blacknest)
Dr. H.J. Fraser (Councillor, A, Open University)
Dr. G.H. Jones (Councillor, G, University College London)

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Staff

Executive Secretary: David Elliot until May 2012

Pamela Mortimer from May 2012

Deputy Executive Secretary: Robert Massey

Accountant: John Struthers

Librarian: Peter Hingley until June 2012, Jennifer Higham from August 2012

Facilities Officer: Colin Foster

Editorial Office Manager: Kim Clube

Assistant Editors: Anna Evripidou; Valerie Dennis (½ post); Sylvia Hales; Bella Lock; Keith Smith; Fern Storey (½ post); Claire Williams

Membership Secretary: Fern Storey (½ post)

Events and Awards Officer: Lara Maisey until August 2012, Emily Down from August 2012

Editor A&G: Sue Bowler (2/3 post)

Bankers

HSBC

West End Corporate Banking Centre

70 Pall Mall

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Natwest

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208 Piccadilly

London W1A 2DG

Solicitors

Bristows

3 Lincoln's Inn Fields

London WC2A 3AA

Auditor

Baker Tilly UK Audit LLP

St Philips Point

Temple Row

Birmingham B2 5AF

Investment Advisors

Newton Investment Management Ltd

The Bank of New York Mellon Centre

160 Queen Victoria Street

London EC4V 4LA

Principal and Registered Office

Burlington House

Piccadilly

London W1J 0BQ

Registered Charity Number 226545

2. STRUCTURE, GOVERNANCE AND MANAGEMENT

The Royal Astronomical Society was founded in 1820 and is incorporated by Royal Charter. The Charter is dated 7th March 1831. There is also a Supplemental Charter dated 5th June 1915 and a second Supplemental Charter dated 15th July 2005. The Byelaws were last revised at the Annual General Meeting in May 2012.

Since 1874 the Society has occupied premises in the courtyard of Burlington House, a Grade 2* listed government-owned building.

The Royal Astronomical Society ('RAS') was established to promote the study of astronomy and geophysics, this now includes solar and solar-terrestrial physics, planetary sciences and the 'new astronomies', such as astro-particle physics and astrobiology. The RAS comprises some 3,700 Fellows and Honorary Fellows, of whom approximately 1/3 are based in some 60 overseas countries; 21% are under the age of 34 and 27% are more than 65; approximately 14.5% of the total membership is female.

It is entirely funded by subscriptions from its members, gifts from donors, and the income generated by its activities and investment, largely from its scientific journals. The control of the Society rests with the General Meeting of Fellows. Subject to that, direction and management is the responsibility of the Council. The Council consists of a President, a Treasurer and three Secretaries (collectively referred to as the Officers), together with four Vice-Presidents and twelve Councillors, all being Fellows and Trustees. Members of the Council are elected by ballot at the Annual General Meeting, for the following normal and maximum terms of office: President, two years; Vice-Presidents, two years; Treasurer and Secretaries, five years; Councillors, three years. A Fellow who has completed a normal term of office as President, as a Vice-President, or as a Councillor, is ineligible for election to that office until the expiry of one year from the termination of office. The Treasurer and Secretaries may be re-elected for a second, consecutive, term of office, but shall then be ineligible for that office until the expiry of one year from the termination of office. Each year there must be an election for at least two Vice-Presidents and at least four Councillors. A new Council has to contain at least four Fellows who have not served on the previous Council.

An error was made during the 2012 election process. Due to previous appointments being curtailed five Councillor positions were appointed in 2012. Following RAS byelaws on replacement Councillors, one of the newly appointed Councillors should have been appointed for one year only however all were appointed for full 3 year terms. This error was not noticed by the Executive, Council or scrutineers at the time. This error will be rectified through a number of short term appointments being made for Councillors over the next few years. The regular annual process of 4 Councillors leaving Council after serving a 3 year term and 4 Councillors being appointed for 3 year terms will be re-established in 2016.

Trustee Induction and Training

Following the announcement of the election results (see above), information is sent to all new Trustees and they are invited to attend an induction programme before their first Council meeting. This covers information about trustee liabilities and responsibilities, financial control, management of conflict of interests, membership, committees, activities and risks. It is also an opportunity for new trustees to ask questions and familiarise themselves with the

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organisation and the staff. New members of Council are asked to complete a conflict of interest declaration. These are reviewed annually for all members of Council.

Management

The RAS Council normally meets 6 times during the year and its function is to direct, on behalf of the Society, all the affairs and business of the Society. The Officers are responsible for leading on strategic planning, organising scientific meetings and formulating RAS policy for the consideration of Council. The President and Vice-Presidents are responsible for chairing meetings, and representing the RAS externally. The Treasurer is responsible for the Society's financial affairs. Council appoints standing committees (Publications Management, Editorial (for each journal), Education, Finance, International, Membership, Library, Astronomical Heritage, Committee for Diversity in Astronomy and Geophysics and *ad hoc* committees (e.g. Awards)) to forward its objectives.

In addition the *British Geophysical Association* is jointly sponsored by the RAS and the *Geological Society of London* to represent solid Earth geophysicists whose interests fall within the remits of both parent societies.

The Council also appoints the Executive Secretary, its employee, to whom it delegates responsibility for day to day running of the Society and for providing leadership, strategic direction and management in liaison with the Officers. In addition to the permanent staff the Society appoints the managing editors and editors of the Society's research journals, *Monthly Notices of the Royal Astronomical Society* and *Geophysical Journal International* who provide their services, as does the Treasurer, for an honorarium.

The Society also administers the *Paneth Meteorite Fund* under the direction of the Paneth Fund trustees.

The RAS's Charters, Byelaws and Committee organisation are detailed on the Society's web site www.ras.org.uk.

Networks

The Society has formal associations with a number of organisations having shared interests, or offering benefits to RAS members, and has less formal arrangements with several other bodies. It is the UK national member organisation of the *International Astronomical Union* and the *European Astronomical Society* and is represented on the UK Panel of the *International Union of Radio Science*. It has 'affiliated' status, which involves an agreed Memorandum of Understanding, with the *Deutsche Geophysikalische Gesellschaft* (with which it co-publishes *Geophysical Journal International*), *Geological Society of London*, *British Sundial Society*, *Society for the History of Astronomy*, *Antiquarian Horological Society* and *Institute of Physics*. It is a trustee of the *Herschel House Museum*, Bath.

In addition the Society is represented on a number of organisations including the *Science Council*, the *Parliamentary and Scientific Committee* and the *Campaign for Science and Engineering*.

Finally, for a modest annual fee, the Society offers members of the public, who wish to be more closely associated with it through attendance at popular lectures and visits to observatories, an opportunity to become a *Friend of the RAS*.

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Risk Management

The RAS Council annually identifies and reviews the major risks to which the Society is exposed, and systems have been established to mitigate those risks. This is now a regular agenda item for the Finance Committee. A major risks register is in place, which sets out the likelihood and impact of various risks and the measures being taken to manage them. The most important are:

- Adapting the RAS business model in response to changing Government policy on Open Access publishing.
- Maintenance of the quality of and income from publications (by rigorous peer review and a robust business model for production and sales).
- Maintenance of returns from investments (by regular performance reviews).
- Maintenance of the size of the membership (by regular review of services and subscriptions).
- Maintenance of the (listed) premises (by regular repair and refurbishment).

3. OBJECTIVES AND ACTIVITIES

The RAS exists to advance, and to record the history of, our understanding of the Earth, the solar system, the galaxies and the nature of the universe. It does this by promoting astronomy and geophysics, interdisciplinary sciences that encompass, and further, physics, chemistry, mathematics, biology, engineering and computer science to answer deep questions about the origin and fate of the cosmos, and man's place in it. Through this the Society contributes to the growth and dissemination of knowledge and thereby fulfills its charitable object of serving the public interest. In particular, the RAS does this by organising scientific meetings (including meetings for the general public), publishing journals (its single biggest activity), awarding grants, prizes and medals, maintaining a library, assisting the teaching of school level astronomy and geophysics in the UK, providing the media with expert commentary on newsworthy astronomy topics, contributing to the formulation of the UK Government's science policy and supporting the activities of affiliated bodies including, *via* the *International Astronomical Union*, capacity development in the least developed countries. The RAS does not itself (small grants and a number of fully funded post-doctoral Fellowships apart) fund or undertake teaching or research, which is the task, largely, of educational institutions, funding agencies and research councils. Members (styled Fellows) of the Society are professional scientists, based in the UK and overseas, together with students, advanced amateurs and historians of astronomy. This broad membership allows the RAS to represent the interests of the community to the Government as well as to other national and international bodies. Application for membership of the Society is welcomed from anyone over the age of 18 with a serious interest in astronomy or geophysics.

Over and above its regular activities, which are outlined in the remainder of this report, the main objectives for 2012 were to:

Promote the interests of the UK based professional community of astronomers and geophysicists, whether or not Fellows, and the next generation of scientists, on whom the advancement and dissemination of new knowledge depends, by:

- Arguing the case with Government, Parliament (especially the Science and Technology Committee of the House of Commons) and the Research and Funding

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Councils for sustained and significant public funding of astronomy and geophysics research, not least curiosity driven or 'blue-skies' research, and teaching.

- Providing more career development support for younger research scientists.
- Enhancing support for school level science teaching.
- Engaging more deeply with relevant European and international organisations.
- Reviewing publishing arrangements for its journals.
- Organising the 2012 National Astronomy Meeting.
- Supporting scientists in developing countries via the IAU Development Fund.
- Engaging with the general public.

Public Benefit

We have referred to the guidance in the Charity Commission's general guidance on Public Benefit when reviewing our aims and objectives and in planning our future activities and Trustees have considered how planned activities will contribute to the aims and objectives they have set. These disclosures comply with the Charities Act 2011. Activities which the trustees consider are directly for public benefit include the public lecture series, contribution to GCSE curriculum development and awards to school teachers as well as the grants scheme and summer bursaries that can be awarded to any applicant.

4. ACHIEVEMENTS AND PERFORMANCE

Improved Facilities in Burlington House

The Society improved the electronic infrastructure in Burlington House for the benefit of members and the public. The audiovisual equipment in the lecture theatre was upgraded and plans to install dedicated single source broadband during 2013 were agreed.

A number of key management systems were reviewed to improve corporate governance and actively encourage the involvement of staff in the development of the Society, including developing a staff training programme covering both personal development and essential corporate requirements (such as training in Health, Safety, Fire and First Aid) and ensuring that reliable, up to date, human resource management information is readily available.

A significant improvement programme for the library was approved for implementation in 2013 with progress made during 2012 on making the library collection more accessible to the public, improving the reader experience and management of the rare books (through improved security and climate control measures). Progress was also made in assessing and planning for the removal of material stored in the library annexe.

Public Benefit, Outreach and Education

The Society strived to engage young people and the general public in astronomy and geophysics activities by:

- Expanding the public lecture series; this is proving to be very popular with numbers exceeding the capacity of the lecture theatre in Burlington House. The location was changed to Fyvie Hall, University of Westminster to facilitate more public attendance.

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- Building upon the success of the Friends of the RAS programme. The number of Friends of RAS reached 200 during 2012. A review was carried out and improvements planned for 2013.
- Providing astronomy lecturers for *Cunard* cruise liners as part of the on-board *Insights* programme.
- Making the Society's premises available to outside organisations including *Society for Popular Astronomy*, *British Astronomical Association*, *Society for the History of Astronomy*, *British Sundial Society*, *Antiquarian Horological Society*, *Anatomical Society of Great Britain*, *Society for Asian Affairs*, *Wiley-Blackwell* and *The Webb Society*.

The Society has a significant Education programme that:

- Provides certificates of achievement for the top 12 students in the country taking *EdExcel* GCSE astronomy.
- Awards the *Patrick Moore Medal* to recognise outstanding contribution by secondary school teachers of astronomy.
- Maintains an overview of the ongoing astronomy and geophysics education and outreach activities in the UK.
- Encourages professional scientists to give school talks.

Public Policy and the Professional Community

The Society, occasionally in association with the *Astronomy Forum* (an independent group of professors from UK universities undertaking significant research or teaching) or the *British Geophysical Association*, contributed evidence to the following inquiries and consultations:

- Science and Society strategy (Department for Business, Innovation and Skills)
- Inquiry into Postgraduate Education (Higher Education Commission)
- Consultation on student numbers and teaching funding (HEFCE)
- Shortage Occupation List (Migration Advisory Committee)
- British Antarctic Survey / National Oceanographic Centre (NERC)

Also the Society:

- Published its policy on Publishing including its response to the changing position on implementing Open Access.
- Made progress towards updating the publication '*A New View of the Universe: Big Science for the Big Society*' on the impact of astronomy and drafting an equivalent booklet on the impact of geophysics. The new astronomy booklet is set to be published in the early summer of 2013 with the title '*Beyond the Stars: Why Astronomy Matters*'.
- Reviewed the remit of the Committee for Women in Astronomy and Geophysics, reorienting to become the (renamed) Committee for Diversity in Astronomy and Geophysics.
- Supported the establishment of a Geophysics Forum that would act independently in a similar way to the Astronomy Forum. Planning meetings were held with interested parties including the Challenger Society, Royal Meteorological Society, British Hydrological Society and the Geological Society to determine the remit and

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management arrangements. Two separate fora will be established in 2013 to cover Solid Earth Geophysics and External Geophysics.

The Society issued a total of 67 press releases in 2012 and the Deputy Executive Secretary gave 20 radio and 30 television interviews and a number of radio podcast interviews. Social media engagement to promote and publicise the Society's activities doubled in 2012 with 1288 'likes' for the RAS *Facebook* page, 5157 Twitter followers of the @royalastrosoc account and 87 followers of the newly established RAS library twitter account, @astro_librarian. There were 875 members of the RAS *LinkedIn* group, (nearly a three time increase).

The Society continued to organise, or sponsor, scientific meetings, mostly for the research community.

- The *National Astronomy Meeting (NAM)* 2012 was a combined meeting with German Astronomical Society, Deutsche Astronomische Gesellschaft held in Manchester that attracted a larger attendance over previous years.
- A monthly programme of meetings, (excluding the Summer break between June and September) was held in Burlington House, comprising parallel Specialist Discussion meetings (covering topics in astrophysics, solid-earth geophysics, solar-terrestrial physics, and planetary sciences), followed by the A&G ('Ordinary') meeting, with a broader programme of more general interest open to the public. Meeting reports were published, with financial assistance from the RAS, by the *Observatory* journal. Typically audiences for the Specialist Discussion meetings exceeded 50 and for the A&G ('Ordinary') meeting 100.
- In addition the Society supported a meeting on Gamma Ray Bursts at the Liverpool John Moores University.

Grants and Fellowships

- In 2012, the Society awarded grants from the Restricted Funds totalling £201,821. Grants, which are open to non-Fellows, support research or short term study in any area of astronomy and geophysics (including their history), encompassing, but not restricted to, study, research or educational projects, engagement of temporary help, overseas conference visits and the purchase of instruments. In addition to facilitating attendance of expert speakers at the Society's own scientific meetings, RAS grants were targeted at people ineligible for grants from the Research Councils or equivalent overseas bodies (for example, postgraduate, undergraduate, and other students; individuals who were not in permanent academic posts; teachers and amateur scientists); and for work, or for sums, not normally directly supported by the Research Councils (e.g. undergraduate research bursaries). During 2012 there was a significant increase in expenditure on travel grants to the IAU conference in Beijing and as a result of the demise of the Nuffield Bursaries.
For a full list of 2012 grantees see the Appendix.
- Two RAS Research Fellowships, (supporting career research astronomers and geophysicists whose PhDs had been awarded no more than 5 years before) were awarded during 2012. Dr Nick Wright took up his appointment at the University of Hertfordshire in October 2012, and Dr Sarah Badman will start her appointment at the University of Leicester in 2013.

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- Dr Hilary Kay, the first RAS Daphne Jackson Fellowship (for professionals returning to work after a career break), took up her position in October 2012.
- Two prizes of £1,000 each, sponsored by Oxford University Press (OUP), were awarded respectively for the best astronomy (Dr Ryan Cooke) and geophysics (Dr David Kipping) PhD thesis submitted to a UK university in 2011.

Medals and Awards

The Society's awards and medals continued to be highly valued by their recipients representing, as they do, the recognition by their peers of outstanding achievement. The recipients of the 2013 medals and awards, selected in 2012, will be: Gold Medals: Professors Roger Blandford (Stanford) and Chris Chapman (Schlumberger Gould Research); Chapman Medal: Professor Stephen Milan (Leicester); Eddington Medal: Professor James Binney (Oxford); Herschel Medal: Professor Michael Kramer (Manchester); Jackson Gwilt Medal: Professor Vikram Dhillion (Sheffield); Price Medal: Professor Kathryn Whaler (Edinburgh); Patrick Moore Medal: Dr Bernie Tedd (King Edward High School for Girls); Fowler Awards: Drs Iain Hannah (Glasgow) and Mark Swinbank (Durham); Winton Capital Awards: Drs Baojiu Li (Durham) and Katherine Joy (Manchester); Group Achievement Awards: the SAURON Team and the UK MHD Consortium; Service Award: Professor Mike Hapgood (RAL Space); Honorary Fellowships: Professors Francoise Combes (Observatoire de Paris), Sandra Faber (UCO Lick) and George Miley (Leiden Observatory) and Dr Alik Ismail-Zadeh (Russian Academy of Sciences). In addition, Professors Eline Tolstoy (Groningen), Peter Cargill (Imperial College/St Andrews) and Bob White (Cambridge) respectively, were invited to give the George Darwin, James Dungey and Harold Jeffreys Lectures.

The new lecture named for Professor James Dungey was planned to take place in January 2013 to celebrate his 90th birthday.

The process for award nomination and approval was reviewed and improvements planned for subsequent years.

International

The Society awarded two travel grants in support of the OAD (Office of Astronomy for Development of the IAU) visiting scientist programme designed to stimulate the development of astronomy in target regions in the developing world.

Links with the American Astronomical Society (AAS) and Pacific Astronomical Society were reinvigorated and plans made to reinstate the RAS sponsored receptions at the AAS winter meetings and offer reciprocal invitations to top Astronomy Award winners to present at each other's annual conferences.

A successful author workshop, working with the publishers from the US and Europe, was held at the IAU meeting in Beijing, this was to encourage and improve the quality of papers from Chinese authors to our publications.

Donations

The formulation of an RAS donor strategy was delayed in preference to essential work required on changes in our publication arrangements and the transition to Open Access.

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However a generous donation to encourage and support students engaged in instrumental science was received and a thesis prize established. Arrangements for other future donations were explored with potential donors.

Library

The Society was saddened by the death of its librarian Peter Hingley who had been due to retire in 2012. Peter had established a world-wide reputation for his knowledge of historical astronomical literature. It welcomes his successor Jennifer Higham who has taken forward work to improve the researcher experience by launching a new online catalogue of books and journals on the RAS website, as well as improving the security and preservation of the historic book, archive and artefact collections, and beginning a large-scale project to re-organise the annexe storage area above the Geological Society.

The Society's library is a world-class repository of over 35,000 volumes, including a collection of modern books borrowable by Fellows; over 5,000 pre-1850 printed books; a large collection of current and historic journals; and archives covering the 18th, 19th and 20th centuries, including the papers of William, Caroline and John Herschel. Under an arrangement with the *Science Photo Library*, the Society's collection of images, comprising mainly portraits and photographs of astronomical equipment and phenomena is available for licensed use.

The librarian, with the Library and Astronomical Heritage Committees, oversees the maintenance and development of the Society's historic collections, either on the premises or on loan. In 2012 the RAS was the major contributor to the Museum of the History of Science, Oxford's exhibition on Renaissance astronomy. Loans included the first edition of Copernicus' *De Revolutionibus* (1543) and the Schöner globe, the latter of which is to remain in Oxford on long term display. Other long term loans include Caroline Herschel's 7ft-telescope at the *Science Museum* and a Harrison clock at the *National Maritime Museum*.

Publications

A. Selection of Publisher

The Society issued an invitation to tender for the Society's journals publishing contract with effect from January 2013. After a rigorous market testing process undertaken over the months from December 2011 to May 2012 the contract was awarded to Oxford University Press (OUP), with contract signature on the 27th June 2012.

Transfer from Wiley Blackwell to OUP over the period to December 31st 2012 went well following a standard transfer protocol.

B. Journals

The RAS owns 2 research journals, published by Wiley-Blackwell during 2012.

- *Monthly Notices of the Royal Astronomical Society (MNRAS)*, is one of the world's leading primary research journals in astronomy and astrophysics covering the results of original research in positional and dynamical astronomy, astrophysics, radio astronomy, cosmology, space research and the design of astronomical instruments.

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- *Geophysical Journal International (GJI)* is one of the world's leading primary research journals in geophysics and the leading solid-earth geophysics journal based in Europe. The monthly journal aims to promote the understanding of the earth's internal structure, physical properties, evolution and processes. Editorial management of *GJI* is shared with the *Deutsche Geophysikalische Gesellschaft*. As with its sister journal, electronic versions of all papers appear on the publisher's web site immediately after completion.

The Society also publishes a news and reviews journal *Astronomy and Geophysics (A&G)*. This is a topical, full-colour magazine, carrying news and reviews on major developing themes in astronomy and geophysics in succinct, readable and accessible form.

Strategic co-ordination is provided by the Publications Management Committee, comprising representatives of the publisher along with the editors and Officers and staff of the Society.

The Society owns the journals and the scientific review process, for which it relies on the cooperation of the community, but it contracts out the processes for production, sale and distribution. This delegates the non-scientific aspects of publication to a commercial organisation with appropriate expertise and access to the necessary capital resources.

The Society issued a short statement on its publishing policy including consideration of issues arising from Open Access publishing.

With regard to the research journals, the Society's publishing policy has been to focus on high quality papers through rigorous peer review and high scientific standards, and as far as practicable, to provide authors with free publication on the scientifically-oriented principle that scientists should be able to publish good papers irrespective of financial ability. This differentiates the Society's journals from many others, where author-payments are the norm.

The Society recognises that while the policy extant throughout 2012 fulfilled the objective of supporting scientific activity within charitable principles, it places nearly all the costs of publications on subscription charges and that the Government has directed that there is now a requirement to provide 'open access' to the results of publicly funded research. This will set in motion a major change in the business model for academic publishing, but the details are not yet clear.

Both *MNRAS* and *GJI* offer authors the option to pre-pay to ensure an article is made freely available without waiting for the usual embargo period to lapse (while *MNRAS* authors are encouraged to deposit pre-print copies of their papers in the physics open repository *arXiv*).

Professor David Flower took over the role of Editor-in-Chief of *MNRAS* in July 2012. The number of papers submitted for publication in *MNRAS* in 2012 increased by 5%. During 2012 the median period from receipt of papers by Wiley-Blackwell to Early View publication fluctuated between 16 and 25 days for Letters and from 21 to 49 days for Main Journal

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submissions. The median period to publication on paper fluctuated between 82 and 189 days for Main Journal papers.

The impact factor remained steady (4.888 in 2010 and 4.900 in 2011.) The 2012 institutional subscription rate was 93% of that in 2011. As we are still in the early stages of working with OUP we do not have the usual details relating to circulation and online usage. OUP will be able to provide us with these details next year.

Professor Jeannot Trampert continued as Editor-in-Chief of *GJI*. There was a 1% decrease in the number of submissions compared with 2011. There were 464 articles published in 2012 compared to 414 in 2011. Just over half of the papers were in Seismology. Similarly the impact factor remained steady (2.411 in 2010 and 2.420 in 2011). From January to October 2012 *GJI* articles were downloaded on Wiley Online Library 337,048 times. This represents a 27% increase on the same period in 2011.

A&G, comprising articles, news items, letters, obituaries and book reviews, edited by Dr S Bowler, was supplied free of charge to all members and offered for general sale. During 2012 *A&G* continued to attract quality papers from authors and to report on the Society activities including digests of the Ordinary Meetings.

C. Books

The RAS-Springer Series aims to identify potential books which are of interest to the Society's Fellows and others, but which, without the support of the Society, would otherwise be unlikely to attract commercial publishers. Thomas Gold's *Taking the back off the watch: a personal memoir* (Astrophysics and Space Science Library, Vol. 381) was published in 2012.

5. FINANCIAL REVIEW

The Society's total funds increased from £17,068,721 to £17,286,603 during the year, both figures including a large contribution from the Society's heritage assets (rare books, clocks, telescopes and fine art) which remain valued at £9,589,749. The Society's expenditure rose from £3,611,182 to £4,027,306 as a result of higher grant spending in support of our membership and the public.

Reserves Policy

The reserves policy has remained unchanged from 2011. The most important risk is still seen as potential changes to the business model for academic publishing brought about by the advent of Open Access. Making provision for this possibility, the Society established a designated fund to ease the transition to a new business model when such a thing is established. The Society's previous and current publishers both advise that a "mixed economy" will continue and that high quality journals such as *MNRAS* and *GJI* may well continue with a subscription income substantially exceeding any Open Access charges.

The year 2012 has seen a more stable national financial environment for the Society to address, albeit one in which growth is still poor. The increasing financial pressure felt by the Research Councils and Universities affects the RAS through higher demands for grants,

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fellowships and travel funding. The small grants scheme is now making up for the lack of university departmental funds in many ways. On a more positive note the Society has seen its investments increase in book value as a result of the general increase in equity prices through the year.

In December 2011 a small working group was assembled to oversee the market testing of the Society's publishing contract, Wiley-Blackwell having been our publishers (under various names) for 47 years during which they had provided a high quality service. Six high quality academic publishers were invited to bid for the contract and their responses were used to down-select to two companies, Wiley-Blackwell and Oxford University Press, for detailed negotiations. In May the Council accepted the proposal from the working group that OUP be offered the contract. As a rather smaller, not for profit, publisher OUP were able to offer a significantly better financial framework than Wiley-Blackwell. From the signing of the new contract in June the OUP team have been working hard with the RAS to be ready for the handover on January 1st 2013. From the author point of view there was essentially no change to the submission and editorial process and the first volumes of *MNRAS* and *GJI* were ready on time for publication at the start of 2013.

The Society pension schemes (one "defined benefit" and one "defined contribution") had their last valuation in 2010, at a time of low investment book values. As a result the "defined benefit" scheme was found to be underfunded and the Society took steps to rebalance the funds from its annual income over five years. The next revaluation is due for January 1st 2013 with the results becoming known later in the year. The financial situation for these funds may be rather different from the previous valuation due both to the improvement in book value of investments and the very unfortunate and unexpected death of one of the remaining three active members of the defined benefit fund, Mr Peter Hingley. Initial outcomes from the revaluation show an increase in assets by more than £300,000.

Historically the publishing income has supported about 60% of the Society's activities. During the year both the Minister for Universities and RCUK have made public statements outlining their policy towards Open Access publishing in academia, including proposals for the funding flow enabling these changes in the UK. The immediate result of the move of the Society's publishing to OUP is a substantial increase in the publishing surplus, from around £650k to £1,100k per annum. These new funds are being used in part to update some of the facilities in Burlington House to provide better services to members and the public. The Finance Committee gave clear advice to Council that a significant part of this increase (ca 50%) should be set aside to provide funds to ease the transition to an Open Access format for the Society's journals as a well understood business model becomes apparent.

Provisions for Burlington House appear in several places in the financial report. The total cost of rent, rates, utilities and maintenance (£223k) is shown in the expenditure in the statement of financial activities. Hiring rooms in Burlington House for meetings provided an income (£30k). In addition there are two designated funds associated with the premises. The Burlington House Fund provides for any future need for accommodation if the leasing arrangements are radically changed by the landlords and the Building Fund makes provision for a future major refurbishment such as that undertaken in 2007.

The marked increase (ca £300,000) in grants expenditure results from a number of issues. When the Society awards a two or three year fellowship it is making a commitment of the total sum in the year of the award. The increase this year results from the award of a Daphne

Royal Astronomical Society Trustees' Report for the year ended 31 December 2012

Jackson Fellowship (two years) and an RAS Research Fellowship (three years) as well as increased expenditure on summer bursaries (£13k) and travel cost relating to attendance at the IAU in Beijing (£20k).

The free reserves of the Society as at 31st December 2012, defined as being unrestricted, undesignated funds not represented by tangible fixed assets, were £2,038,248 (£2,252,312 a year earlier).

Heritage Assets

The Society's collection of rare books, fine art, telescopes and clocks was valued in 2011 at about £9.5 million and these have been included in the Society's accounts as a result of changes in accounting practice introduced by the government. The RAS does not regard these as assets which can be converted to their cash value except in the most dire circumstances.

Investment Policy

The Society has made no change to its investment policy, with the invested funds being managed by Newton Investment Management. A formal "Investment Policy" may be discussed by Council in 2013 to make its view of investment issues publicly accessible.

Review Process

The Finance Committee keeps the financial health of the Society under regular review. It reports to Council on the Operations Plan, the balance of spend from any Publications Surplus and the choice of financial advisors and auditors.

Banking Arrangements

The Society continues with HSBC as its major banker but has decided to retain an account with Natwest as a backup in case of service breakdown by any one provider.

6. PLANS FOR THE FUTURE

The Society will continue to provide leadership for UK-based career astronomers and geophysicists (whether or not they are members of the Society) engaged in research and cater for all of its membership whilst delivering 'public benefit' under its charitable obligations. It will hold a 'Strategic Away Day' in June 2013 to agree a long term financial plan that will set out plans to support the Society's efforts in the following areas:

- Reviewing the business model to embrace and benefit from the move towards Open Access publishing.
- Providing Research Fellowship funding.
- Engaging the younger generation (school age and young adults in the community).
- Working alongside community organisations to support those engaged in outreach and schools activities.
- Developing and supporting programmes to use astronomy and geophysics as levers to promote science and education in the wider community, including overseas and IAU led programmes supporting the least developed countries.
- Continuing to support the IAU.

Royal Astronomical Society Trustees' Report for the year ended 31 December 2012

- Developing links with international astronomy and geophysics communities to align, complement and share programmes of activities to improve the understanding and appreciation of astronomy and geophysics.
- Improving the benefits available to the membership based overseas.
- Maintaining a renowned programme of specialist discussion meetings, hosted in the recently improved RAS lecture theatre in Burlington House.
- Encouraging an increase in the geophysics membership of the Society and increased involvement of G members in ongoing activities.

Improved Facilities in Burlington House

To benefit the members and the public the Society will:

- Endeavour to provide adequate disabled access to Burlington House.
- As part of an improvement to the electronic infrastructure programme that will update staff computer equipment and the RAS Main server, the Society will provide an RAS webserver that will host websites for astronomy and geophysics community organisations.

Public Benefit, Education and Outreach

To further the engagement of the wider public (particularly members of currently under-represented groups) with astronomy, space science and geophysics the Society will:

- Continue to support the successful 'Friends of the RAS' programme with a series of dedicated meetings and visits held annually. The website will be improved and linked to the RAS website. (Additional details at <http://friends.ras.org.uk/>.)
- Promote and expand the successful public lectures series that will hold monthly lectures from October to May in a venue capable of holding 150+ people; targeted advertising will seek to increase public awareness and participation.
- Establish beneficial working relationships with leading community organisations such as the British Astronomical Association, the Society for Popular Astronomy and the Federation of Astronomical Societies.
- Enhance its support of school level science through representation on the Science Council's Education Programme Coordinating Group.
- Work with the European Space Education Resource Office (ESERO) to disseminate materials and build support networks for school educators, for example by developing online databases and resource maps.
- Introduce a History of Astronomy schools visiting program to Burlington House, aligned to the GCSE curriculum content and engaging a new audience with the RAS Library's historic collections.
- Make the Burlington House facilities available for teacher training events.
- Continue to make the RAS Library collections more accessible to researchers by adding 19th century material to the public online catalogue.
- Curate and display small exhibitions of RAS historic collections within Burlington House, to link in with events and meetings.

Royal Astronomical Society Trustees' Report for the year ended 31 December 2012

Professional Communities

The Society will continue to argue the case with Government for sustained and significant public funding of astronomy and geophysics research and teaching without which the UK risks losing its world ranking (currently second after the USA), engaging with the Research Councils and relevant Government departments and agencies. The Society will:

- Publish documents demonstrating the quantifiable impact of astronomy and geophysics on the economy.
- Prepare for the forthcoming *Comprehensive Spending Review (CSR)* of 2015 and any interim spending measures generated by Government. In particular, the Society will endeavour to persuade decision takers of the value of curiosity driven or 'blue-skies' research and argue against linking the allocation of funds to hypothesised outcomes since, by definition, in the case of fundamental research, they cannot be predicted.
- Demonstrate its value to its communities by continuing to host and arrange meetings of the *Astronomy Forum* and the soon to be established geophysics fora.
- Continue to support the academic community by organising monthly scientific meetings.

International

The Society will deepen its engagement with international organisations to encourage a shared vision of the importance of astronomy and geophysics by:

- Continuing to support the *Visiting Expert Scheme* with the South Africa based *Office of Astronomy for Development* of the International Astronomical Union and looking for opportunities to expand this to other African Nations and elsewhere.
- Exploring options to ensure that astronomy and geophysics are effectively represented in European policy deliberations including enhancing the role of the European Astronomical Society.
- Where opportunities arise, building on the success of the author workshop (held at the IAU meeting in Beijing) by providing a similar service to other international partners.

Publications

Appreciating the importance of the dissemination of scientific results and of the need for continued profitability of its research journals to sustain its operations, the Society will:

- With our publishers, OUP, monitor and adapt to market and associated management pressures arising as a result of the move to Open Access publishing.
- Maintain subscription income at the level required to support the Society's charitable purposes while setting subscription rates at affordable levels and at the same time to ensure the highest standards of peer review and author relationships are met.
- Seek to expand and diversify the remit of the *Astronomy and Geophysics* publication, to increase its circulation and appeal to a wider audience through online facilities.

Royal Astronomical Society Trustees' Report for the year ended 31 December 2012

Meetings

Recognising the value of meetings for the development of science and scientists, in addition to supporting 'regular' meetings in Burlington House and elsewhere, the Society will:

- Sponsor the 2013 National Astronomy Meeting (NAM) to be held in St. Andrews in July.
- Administer the payment of STFC grants (largely to facilitate attendance by students) to the organisers of NAM meetings in 2013 (and 2014).
- The 'James Dungey' lectureship will become an annual event.

Grants and Fellowships

The Society, in addition to providing small grants and fully funded fellowships, will seek to sustain its support of students and early career scientists by:

- Considering the development of a donor strategy to raise the funds needed to put a substantial fellowships programme on a long-term sustainable basis.
- Consider supporting a second RAS Daphne Jackson Fellowship for a scientist returning to work after a career break.

People

Through the Committee for Diversity on Astronomy and Geophysics the Society will consider ways to improve diversity amongst potential astronomers and geophysicists in particular in regards to increasing participation in under represented socio-economic and ethnic communities.

Additionally the Society will investigate how it can promote greater gender, ethnic and socio-economic diversity within its own structures, including the composition of Council.

The Society will review the staff structure and remuneration levels (salaries and other benefits) during 2013. It will appoint a new Finance Manager/Accountant to replace John Struthers who will retire in August 2013.

7. TRUSTEES' RESPONSIBILITIES IN THE PREPARATION OF FINANCIAL STATEMENTS

The trustees are responsible for preparing the Trustees' Report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The law applicable to charities in England & Wales requires the trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charity and of the incoming resources and application of resources of the charity for that period. In preparing these financial statements, the trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities SORP;
- make judgments and estimates that are reasonable and prudent;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;

**Royal Astronomical Society
Trustees' Report for the year ended 31 December 2012**

- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in business.

The trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charity and enable them to ensure that the financial statements comply with the Charities Act 2011 and the provisions of the trust deed. They are also responsible for safeguarding the assets of the charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities. The trustees are responsible for the maintenance and integrity of the charity and financial information included on the charity's website.

The Council of the Society believes that it has carried out these requirements.

Auditors

After having received more than 25 years of valued service from its current auditors Baker Tilly (Fraser Russell before the merger) and following a re-tendering process, it has been decided that there should be a change. A resolution to appoint Buzzacott will be proposed at the Annual General Meeting.

Approved by the Council and signed on its behalf by:

Professor D.J. Southwood
President
10 May 2013

Royal Astronomical Society

Independent Auditor's Report to the members of the Royal Astronomical Society

We have audited the financial statements of the Royal Astronomical Society for the year ended 31 December 2012 on pages 20 to 39. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

This report is made solely to the Society's trustees as a body, in accordance with the Charities Act 2011. Our audit work has been undertaken so that we might state to the Society's trustees those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Society and the Society's trustees as a body, for our audit work, for this report, or for the opinions we have formed.

Respective responsibilities of trustees and auditor

As explained more fully in the Statement of Trustees' responsibilities set out on page 18 the trustees are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view.

We have been appointed as auditors under section 144 of the Charities Act 2011 and report in accordance with regulations made under section 154 of that Act. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's (APB's) Ethical Standards for Auditors.

Scope of the audit of the financial statements

A description of the scope of an audit of financial statements is provided on the APB's website at www.frc.org.uk/apb/scope/private.cfm

Opinion on financial statements

In our opinion the financial statements:

- give a true and fair view of the state of the Society's affairs as at 31 December 2012 and of its incoming resources and application of resources for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Charities Act 2011.

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Charities Act 2011 requires us to report to you if, in our opinion:

- the information given in the Trustees' Report is not consistent with the financial statements; or
- the Society has not kept sufficient accounting records; or
- the Society financial statements are not in agreement with the accounting records and returns; or
- we have not received all the information and explanations we require for our audit.

BAKER TILLY UK AUDIT LLP

Statutory Auditor

St Philips Point

Temple Row

Birmingham

B2 5AF

Date

Royal Astronomical Society

STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31ST DECEMBER 2012

	Notes	Unrestricted funds	Restricted funds	2012 Total funds	2011 Total funds
		£	£	£	£
Incoming resources (IR)					
IR from generated funds					
Voluntary income		1,496	1,312	2,808	109,484
Investment income	6	141,230	58,301	199,531	215,814
IR from charitable activities					
Publications	7	3,127,624		3,127,624	3,131,126
Scientific meetings		2,301		2,301	3,564
Membership		265,906		265,906	251,484
Educational		-	317	317	1,333
Library		6,000		6,000	6,339
Public Policy		159		159	1,025
Burlington House		30,022		30,022	28,643
Other incoming resources		27,379		27,379	31,776
Total incoming resources		3,602,117	59,930	3,662,047	3,780,588
Resources expended (RE)					
Costs of generating funds					
Investment management costs		321	129	450	400
Charitable activities					
Publications	}7	2,639,136		2,639,136	2,545,399
Scientific meetings	}	94,281		94,281	75,580
Grants	}	418,290	196,373	614,663	304,086
Membership	}	49,522		49,522	48,649
Educational	} 8	30,028	50	30,078	34,826
Library	}	126,147	1,077	127,224	136,535
Public policy	}	78,792		78,792	93,543
Burlington House	}	222,612		222,612	215,625
Governance costs	}	163,716		163,716	150,297
Other resources expended		6,301	531	6,832	6,242
Total resources expended		3,829,146	198,160	4,027,306	3,611,182
<i>Net (outgoing)/incoming resources before transfers</i>		(227,029)	(138,230)	(365,259)	169,406
Gross transfers between funds	14	(105,000)	105,000	-	-
<i>Net (outgoing)/incoming resources before other recognised gains & losses</i>		(332,029)	(33,230)	(365,259)	169,406
Other recognised gains & losses					
Gains/(Losses) on investment assets	12	216,454	91,687	308,141	(237,931)
Actuarial Gains/(losses) on defined Benefit pension scheme	10	275,000	-	275,000	(54,000)
Heritage Assets	2a	-	-	-	9,589,749
Net movement of funds		159,425	58,457	217,882	9,467,224
Reconciliation of funds					
Total funds brought forward		15,403,193	1,665,528	17,068,721	7,601,497
Total funds carried forward		15,562,618	1,723,985	17,286,603	17,068,721

All gains and losses for the year are recognised in the above statement.

Activities are classed as continuing.

The notes on pages 23 to 39 form part of these financial statements.

Royal Astronomical Society

BALANCE SHEET AS AT 31ST DECEMBER 2012

	Notes	Total Funds	Total Funds
		2012	2011
		£	£
Fixed Assets			
Tangible Assets: Heritage assets	2a	9,589,749	9,589,749
Other assets	2b	1,429,164	1,507,675
Investments	3	5,089,993	4,782,212
<i>Total fixed assets</i>		16,108,906	15,879,636
Current Assets			
Debtors	4	255,423	1,546,382
Cash at bank and in hand		2,698,569	1,307,867
<i>Total current assets</i>		2,953,992	2,854,249
Liabilities			
Creditors:			
Amounts falling due within one year	5(a)	2,085,295	1,675,164
<i>Net current assets</i>		868,697	1,179,085
Creditors:			
Amounts falling due in more than one year	5(b)	132,000	79,000
<i>Net assets excluding pension asset</i>		16,845,603	16,979,721
Pension asset	1(s), 10	441,000	89,000
<i>Net Assets including pension asset</i>		17,286,603	17,068,721
The funds of the Society			
Unrestricted income funds			
Designated funds	14	11,654,206	11,554,206
General unrestricted income funds before pension excess		3,467,412	3,759,987
Pension asset		441,000	89,000
General unrestricted income funds after pension excess		3,908,412	3,848,987
Restricted income funds	13	1,723,985	1,665,528
<i>Total Funds</i>	12	17,286,603	17,068,721

The financial statements were approved by Council on 10th May 2013 and signed on its behalf by

Professor A.M. Cruise
Treasurer
10th May 2013

The notes on pages 23 to 39 form part of these financial statements.

Royal Astronomical Society

CASH FLOW STATEMENT FOR THE YEAR ENDED 31st DECEMBER 2012

	2012		2011	
	£	£	£	£
Net incoming resources before revaluations & disposal of investment assets		(365,259)		169,406
Adjusted for				
Depreciation Charge	101,604		130,490	
Profit on disposal of fixed assets	-		-	
Investment income	(199,531)		(215,814)	
Debtor/payments in adv. decrease/(increase)	1,290,959		(157,035)	
Creditors movement (increase)/decrease	463,131		245,582	
Net FRS17 pension movements, excluding actuarial gain or loss.	(77,000)		(82,000)	
		1,579,163		(78,777)
Net Cash inflow from operating activities		1,213,904		90,629
Returns on investment and servicing of finance				
Investment income received: Dividends	195,993		214,037	
Bank Interest	3,538		1,777	
Net cash inflow from returns on investment		1,410,435		306,443
Capital expenditure and financial investment				
Payments to acquire investments	-		(45,200)	
Payments to acquire tangible fixed assets	(23,093)		(11,074)	
Receipts from sale of investments	360		45,421	
Receipts from sale of fixed assets	-		-	
Net movement in cash on deposit with broker	-		(55)	
		(22,733)		(10,908)
Increase in cash in the year		1,390,702		295,535
Reconciliation of Net Funds				
Increase in cash		1,390,702		295,535
Net funds at 1 January		1,307,867		1,012,332
Net funds at 31 December		2,698,569		1,307,867

The notes on pages 23 to 39 form part of these financial statements.

Royal Astronomical Society

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012

1. ACCOUNTING POLICIES

The accounting policies adopted by the Society are as follows:

(a) **Accounting convention**

The accounts are prepared under the historical cost convention as modified by the inclusion of investments at market value. Applicable accounting standards and the Statement of Recommended Practice (SORP) 'Accounting and Reporting by Charities', issued in March 2005, have been followed in preparing the annual report and financial statements of the charity.

(b) **Investments**

All investments in the Newton Global Growth and Income Fund and the Common Investment Fund are valued at their market value ruling at the balance sheet date, which gives rise to unrealised gains and losses, which are included in the Statement of Financial Activities (SOFA). Investment income is taken into the financial statements. The Designated Funds are not allocated any investment income directly as they are just designated for the information of the trustees. Gains/losses on the revaluation and disposal of investment assets are separately identified in the SOFA.

(c) **Fixed Assets**

Heritage Assets were included in the financial statements, as required by FRS 30, for the first time in 2011, as a designated fund (see note 14).

There are two main classes of heritage assets that the Society possesses that are;

Rare Books and Manuscripts

Fine Art and Collectibles – Historic books, portraits, busts, instruments and antique furniture .

The Society's rare book and manuscript collection is reported in the Balance Sheet at the latest valuation by Christies in 1996, with a number of items re-valued by Quaritch in 2011 as part of an on-going process over several years, by which the collection is being re-valued, if the Trustees decide that the benefits of doing so outweigh the cost. The valuation basis was High Auction Estimate.

The Society's fine art and collectibles are reported in the Balance Sheet at the latest valuation by Bonhams in 1992, including index linking, with a number of items revalued by Bonhams in 2011.

The rare book collection is preserved by storing in an air-conditioned, temperature-controlled environment; the fine art and collectibles are also continually preserved in order to maintain their values.

The majority of heritage assets have been acquired by donation. In the early days, the Society purchased some rare books and manuscripts, using a fund, established for this purpose.

Certain heritage assets are on public display at exhibitions. The Society's Librarian controls access to those heritage assets that are kept at Burlington House.

Royal Astronomical Society

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

1. ACCOUNTING POLICIES (continued)

(d) Capitalisation Policy

The Society seeks to capitalise significant assets (cost > £250), but write off those that are deemed to be of no long term value to the Society. The cost of furniture and fixtures is treated as Burlington House revenue expense in the SOFA.

(e) Depreciation Policy

Tangible fixed assets are depreciated on cost from the date of acquisition, over their expected useful lives as follows: Telephone and security system and computer equipment over 4 years straight line and Leasehold Improvements (Burlington House Fund) over 20 years straight line.

Depreciation is not charged on heritage assets due to immateriality, based on their extremely long useful lives and high residual values. An annual impairment review is conducted.

(f) Unrestricted Funds

It is a requirement of the SORP that restricted and unrestricted funds are shown separately. The Society regards the majority of the general fund as expendable and intends to keep it fully invested.

Under lease agreements signed in 2005 with the Department of Communities and Local Government (previously Office of the Deputy Prime Minister - ODPM), the Society and four others in the Burlington House courtyard secured future occupancy on the basis of paying rent and additionally, being responsible for the external fabric of the building, following a renovation programme, carried out by the ODPM in mid 2006. In 2006-7, the Society executed a refurbishment project on the interior of the apartments. Expenditure incurred on the project has been capitalized and designated as the Burlington House Fund.

The Council, as trustees, confirm that the following funds be continued as designated funds:

(i) Building Fund.

The repairs and maintenance of the exterior of the building, its insurance and some security costs from 2007 are carried out by the landlord for all the occupants, and a proportion recharged to the Society. The Building Fund should provide for internal and external maintenance of the building and provide for the possibility, in approximately 80 years, at the end of lease, if necessary, to obtain a building for the Society's use. The Finance Committee will recommend how much more to accumulate to this fund and at what rate.

(ii) Burlington House Fund

Refurbishment Project (final cost £2.06m) is being charged to the Fund and has been depreciated, commencing from 1st January 2008 (full occupation of the building resumed mid-December 2007). (Note 14)

Royal Astronomical Society

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

1. ACCOUNTING POLICIES (continued)

New Funds:

(i) Open Access Fund

A fund has been established to provide against the risk of the possible collapse of the current business model for learned publishing due to various forms of Open Access.

(ii) Heritage Asset Fund

A fund has been established to include the Society's heritage assets and their associated costs.

(g) Restricted Funds

The Restricted Funds are consolidated into five groups, to serve the Council's priorities, and address modern needs; Research & Grants, Benevolent, Library, Education and Lectures & Awards.

(h) Connected Charities

From 2001, the Society has been the administration agents for the Trustees of FA Paneth Meteorite Collection, as a charity connected to the Royal Astronomical Society. The Paneth Trustees decided that its income should support research in Cosmochemistry, by graduate and postdoctoral students. The accumulated expenditure less income, £15,328 (£9,695 for 2011), is included in Other Creditors (Note 5).

The Society, together with The Royal Society, University of Bath, Bath Preservation Society and a representative of the Wm. Herschel Society, has been a Trustee of the Herschel House Museum since 1987.

(i) Voluntary Income

Voluntary Income is comprised of legacies and cash donations (but not donations in kind). These are credited to the SOFA in the year of receipt and when the charity is legally entitled to the legacy or donation.

(j) Membership Income

Membership Income comprises Annual Subscriptions, which are accounted for in the year to which they relate.

(k) Grants Payable

Grants payable for the support of research or study in any areas of astronomy and geophysics are recognised in the financial statements as soon as the obligation has been authorised by the Grants Committee, which meets twice-yearly (ca. March and September) to allocate funds. The recipient has a reasonable expectation that they will receive a grant and any condition attaching to the grant is outside the control of the Society.

Royal Astronomical Society

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

1. ACCOUNTING POLICIES (continued)

(l) Costs of Generating Funds

The costs of generating funds consist of Investment Management Fees.

(m) Resources Expended

Liabilities are recognised as resources expended as soon as there is a legal or constructive obligation committing the charity to the expenditure. All expenditure is accounted for on an accruals basis and has been classified under headings that aggregate all costs related to the category.

(n) Charitable Activities

Publications, Scientific Meetings, Grants, Membership, Educational, Library, Public Policy and Burlington House (Grade 2 listed building) comprise the Society's Charitable Activities, which are clearly identifiable, facilitating the allocation of costs.

(o) Other Support Costs

Expenses, not separately shown under direct charitable expenditure in the SOFA, e.g. collection of subscriptions, Policy Development, Press, Finance and Information Technology, are apportioned, based on staff cost or floor area.

(p) Governance Costs

Costs relating to the general running of the charity, including audit, legal advice for trustees and costs associated with constitutional and statutory requirements, e.g. cost of trustee meetings and preparing statutory accounts as well as costs associated with the strategic management of the Society.

(q) Taxation

The Society is a registered charity and no liability to taxation arises on the results of its activities as applied for charitable purposes, with the exception of investment income, which is taxed at source.

(r) Operating Leases

Rentals under operating leases are charged to the SOFA on a straight-line basis over the term of the lease.

(s) Pension Costs

The Society operates two pension schemes for employees. The assets of the schemes are held separately from those of the Society.

It operates a defined benefits pension scheme for employees, who joined its service before 1st January 2002, providing benefits based upon final pensionable earnings. Scottish Life manages the pension scheme, with the investments now 100% held by Scottish Life.

The Society, advised by Towry Financial Services Limited, has established a second pension scheme (a targeted defined contribution scheme) for employees who began service with the Society after 1st January

Royal Astronomical Society

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

1. ACCOUNTING POLICIES (continued)

2002. The amount charged in the Statement of Financial Activities in respect of pension costs is the contributions payable to AVIVA in the year.

(t) Investment Income

Investment income is recognised in the SOFA on an accruals basis.

(u) Publications Income

Publications income, based on Wiley-Blackwell's annual journals' financial statements and consolidated with the Society's added value, is recognised in the accounting period to which it relates.

(v) Foreign Currencies

Monetary assets and liabilities denominated in foreign currencies are translated at the rate of exchange ruling at the Balance Sheet date. Transactions in foreign currencies are recorded at the rate ruling at the date of the transaction. All differences are taken to the SOFA.

(w) Stocks

No value is included in the accounts for stocks of publications.

(x) Going concern

The Society has sufficient financial resources for its commitments and the Trustees believe that it is well placed to manage its business risks successfully despite the current uncertain economic outlook. The Trustees have a reasonable expectation that the Society has adequate resources to continue in operational existence for the foreseeable future. Thus, they continue to adopt the going concern basis in the preparation of these financial statements.

Royal Astronomical Society

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

2. **FIXED ASSETS**

2a Heritage assets

Valuation (1c)	Rare Books & Manuscripts £	Fine Art & Collectibles £	Total £
At 31 st December 2011 (After adoption of FRS 30)	5,051,500	4,538,249	9,589,749
At 31 st December 2012	5,051,500	4,538,249	9,589,749

2b Other assets

	Leasehold Improvements (Burlington House Fund) £	Telephone & Security System £	Computer Equipment** £	Portraits* £	Total £
Cost at 1 st Jan.	1,832,470	36,415	187,453	9,466	2,065,804
Additions	-	-	23,093	-	23,093
Disposals	-	-	(6,718)	-	(6,718)
Cost at 31 st December	1,832,470	36,415	203,828	9,466	2,082,179
Depreciation at 1 st Jan.	361,949	36,203	159,977	-	558,129
Charge for period	91,682	202	9,720	-	101,604
Depreciation on Disposals	-	-	(6,718)	-	(6,718)
Depreciation at 31 st Dec.	453,631	36,405	162,979	-	653,015
Net Book Value at 31 st Dec. 2012	1,378,839	10	40,849	9,466	1,429,164
Net Book Value at 31 st Dec. 2011	1,470,521	212	27,476	9,466	1,507,675

* Past Presidents' Portraits

** Includes a computer, purchased by the Sir Norman Lockyer Fellowship.

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NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

3. INVESTMENTS

	General Fund £	Restricted Funds £	Total 2012 £	Total 2011 £
<u>Quoted General Fund Investments</u> (Common Investment Funds from 2002)				
Newton Global Growth & Income Fund	3,575,442	1,514,551	5,089,993	4,782,212
Market Value 1st January	3,359,243	1,422,969	4,782,212	5,020,254
Additions at cost	-	-	-	45,200
Disposals at opening market value	(255)	(105)	(360)	(45,421)
Net unrealised investment gains/losses	216,454	91,687	308,141	(237,821)
Market value 31st December	3,575,442	1,514,551	5,089,993	4,782,212
Cash on Deposit with Broker	-	-	-	-
Investments – Total	3,575,442	1,514,551	5,089,993	4,782,212
Historic Cost as at 31st December	3,465,292	1,450,026	4,915,318	4,915,690

Total Investments includes the following which are greater than 5% of the portfolio valuation:

Fund	2012		2011	
	£	%	£	%
Newton: Global Growth and Income Fund	5,089,993	100.0	4,782,212	100.0

4. DEBTORS

	2012 £	2011 £
Trade Debtors	80,024	1,316,510
Prepayments and Accrued Income	71,211	156,913
Other Debtors	104,188	72,959
	<u>255,423</u>	<u>1,546,382</u>

5. CREDITORS

	2012 £	2011 £
(a) Amounts falling due within 1 year		
Trade Creditors	45,574	15,160
Accruals	122,046	55,333
Grants Committed	407,102	198,861
Other tax and Social Security	210,890	212,178
Deferred Income	1,185,197	1,114,762
Other Creditors	114,486	78,870
	<u>2,085,295</u>	<u>1,675,164</u>

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NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

5. CREDITORS (Cont.)

(b) Amounts falling due in more than 1 year	2012	2011
	£	£
Grants Committed	132,000	79,000

Deferred Income

Balance as at 1 st January 2012	1,114,762
Income received from Fellows in advance	50,197
Released to income	(1,114,762)
STFC Grants towards cost of booklets	10,000
National Astronomy Meeting income received in advance	25,000
Publications income received in advance	1,100,000
Balance as at 31 st December 2012	1,185,197

6. INVESTMENT INCOME

	General Fund £	Trust Funds £	2012 Total £	2011 Total £
<u>Dividends received:</u>				
Unitized/Structured Investments (Other)	134,690	57,043	191,733	205,626
Alternative Investments - Property	-	-	-	793
Cash Fund	3,041	1,218	4,259	7,618
Sub-Total	137,731	58,261	195,992	214,037
Interest from Bank	3,485	31	3,516	1,759
Interest from Stockbroker	13	9	22	18
Totals	141,229	58,301	199,530	215,814

7. PUBLICATIONS

	2012	2011
	£	£
INCOMING RESOURCES		
Monthly Notices of the Royal Astronomical Society	2,219,912	2,196,909
Monthly Notices of the Royal Astronomical Society : Letters	11,710	15,458
Geophysical Journal International	817,565	839,070
Astronomy & Geophysics	72,399	73,625
Other	6,038	6,064
TOTAL	3,127,624	3,131,126
RESOURCES EXPENDED		
Monthly Notices of the Royal Astronomical Society	1,875,945	1,791,342
Monthly Notices of the Royal Astronomical Society : Letters	12,343	14,777
Geophysical Journal International	640,275	646,218
Astronomy & Geophysics	101,612	87,572
Other	8,961	5,490
TOTAL	2,639,136	2,545,399

Royal Astronomical Society

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

8. RESOURCES EXPENDED

BREAKDOWN OF COSTS OF CHARITABLE ACTIVITY

Activity	Direct Costs £	Support Costs £	2012 Total £	Direct Costs £	Support Costs £	2011 Total £
Publications	2,575,838	63,298	2,639,136	2,479,391	66,008	2,545,399
Scientific Meetings	55,583	38,698	94,281	38,917	36,663	75,580
Grants	381,223	37,067	418,290	139,784	38,038	177,822
Membership	-	49,522	49,522	-	48,649	48,649
Educational	809	29,219	30,028	4,430	29,396	33,826
Library	82,011	44,136	126,147	94,652	40,710	135,362
Public Policy	28,911	49,881	78,792	42,542	51,001	93,543
Burlington House	126,076	96,536	222,612	127,396	88,229	215,625
Sub-Total	3,250,451	408,357	3,658,808	2,927,112	398,694	3,325,806
Governance	69,760	93,956	163,716	62,322	87,975	150,297
Total	3,320,211	502,313	3,822,524	2,989,434	486,669	3,476,103

Cost allocation - Support Costs – disclosed by Function.

Function	2012 Cost £	2011 Cost £
Executive	92,209	87,033
Finance	39,557	35,725
Facilities	65,724	59,279
Membership	28,052	24,405
IT	21,681	40,484
Policy Development & Press	54,844	59,155
Non-Attributable	106,290	92,613
Sub-Total	408,357	398,694
Governance	93,956	87,975
Total	502,313	486,669

Staff Time (based on a review of staff time apportionment) and Floor Area, are used as alternative bases of apportioning Support Costs over Charitable Activities and Governance. Membership income and expenditure is included as a Charitable Activity from 2010, as this reflects a more appropriate presentation.

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NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

Governance (and Constitutional) costs (previously Management and Administration Expense)

Function	2012 Cost £	2011 Cost £
Audit Fees – Current Year	19,000	17,000
Audit Fees – Prior Year	363	1,225
Pension scheme	2,280	2,960
Consultancy	-	4,000
Regulatory	-	600
Trustees' Expenses	15,831	13,149
Trustees' Remuneration	4,853	1,780
AGM Expenses	3,972	3,835
Committee Expenses	2,965	4,430
Staff Time Apportioned	63,897	64,412
Other Expenses	50,555	36,906
Total	163,716	150,297

Governance is 4.1 % of Resources Expended (2011 : 4.2%).

Bases of Apportionment of Support Staff Time to Governance, by individual.

Role	2012 % of Total	2011 % of Total
Executive Secretary	30	30
Deputy Executive Secretary	20	20
Events & Awards	10	10
Accountant	40	40

9. NET INCOMING RESOURCES FOR THE YEAR

The net incoming resources for the year are stated after charging:

		2012 £	2011 £
Depreciation		101,604	130,490
Auditor's Remuneration:	Audit	14,013	14,075
	Consultancy	-	4,000
	Pension Scheme	5,350	4,150
Other Professional Services	Final Salary Pension Scheme	1,898	1,800
	Stakeholder Pension Scheme	1,167	1,083
	Final Salary Pension Scheme: FRS 17 Val'n	2,280	2,960
	Investment Management Fees	450	401
Operating Lease Rentals	Plant & Machinery	10,299	6,429

Note: The amounts payable in the next year in respect of operating leases are shown below, analysed according to the expiry date of the leases:

	2012 £	2011 £
Lease expiring within two to five years – Plant & Machinery	10,808	6,429

Royal Astronomical Society

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

10. STAFF COSTS

Staff costs, including taxable benefits are:

	2012	2011
	£	£
Salaries and wages	524,676	474,756
Taxable benefits (LVs)	240	1,562
Employer's National Insurance	52,833	48,864
Pension, Employer's Contributions:		
- Stakeholder Pension Scheme	46,003	98,520
- Death in service contributions	4,760	6,134
- Final Salary Scheme: Other pension costs	40,608	38,599
Annual Premium to eliminate deficit	53,000	53,000
	722,120	721,435

During the year no individual employee of the Society earned more than £60,000. The average number of employees was 15 (Administration 4, Editorial 7, Library 1, House 2, Press & Policy 1) (2011 was 14).

Pension costs

A qualified actuary carried out a triennial review of the scheme as at 1st January 2010; the actuarial valuation showed that the market value of the Scheme's assets as at 1st January 2010 was £733,000, which represents 74% of the benefits that accrued to members after allowing for expected future increases in earnings. The Scheme Actuary recommended that the Trustees request the Society to pay a single premium of £292,000 in the 2011 scheme year to eliminate the deficit and increase the rate it contributed to the Scheme, from 26.9% to 35.6% of pensionable earnings, commencing 1st January 2011. Council, whilst approving the increased contribution rate, and mindful of the stockmarket recovery that occurred in 2010, decided to eliminate the deficit over a 7 year period, paying £53,000 annually into the scheme in addition to the normal contributions, subject to reviewing the recovery plan at the next triennial review as at 1st January 2013. In 2011, the immediate past Treasurer, at the request of Council, reviewed the staff reward structure including annual salary increases linked to the Retail Price Index and the ratio of the Employer's to the Employees' pension contributions; Council accepted the review's recommendation that:

- salary increases should be linked to RPI and be subject to annual approval by the Council and that to inform the Council's annual decision on an annual salary increase, the Society should carry out a study of the market comparability of staff salaries every few years (this will happen in 2013).
- Employees continue to contribute at the rate of 5% (5% for 2010).

In contrast to triennial review, the latest FRS17 valuation, at 31st December 2012, shows an excess to be recognised of £441,000 (2011 £89,000), due mainly to the fact that there was a death in service during the year, which meant the scheme repaid the deceased's contributions plus interest, whilst the death benefit was insured outwith Scottish Life, i.e. with Friends Life.

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NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

10. STAFF COSTS (continued)

Pension costs (continued)

For the defined benefit scheme the amount charged to the income and expenditure account in respect of pension costs is the estimated regular cost of providing the benefits accrued in the year, adjusted to reflect variations from that cost. The difference between Premium paid, compared with Current service costs, interest costs and expected return on assets are included within other incoming resources in the Statement of Financial Activities, and for 2012 amounted to £24,000.

	2012
	£
Expected return on scheme assets	32,000
Interest cost on scheme liabilities	(29,000)
Employer Contributions	41,000
Current service cost	(20,000)
	24,000

Actuarial gains/(losses) arising from new valuations and from updating valuations to the balance sheet date are recognised in the Statement of Financial Activities under the heading of actuarial gains/(losses) on defined benefit pension scheme.

A pension scheme liability is recognised on the balance sheet to the extent that the charity has a legal or constructive obligation to settle the liability.

Pension costs comprise £93,608 (Including £53,000 towards eliminating the deficit) (2011 £91,599) in respect of the defined benefit pension scheme; £46,003 (2011 £98,520) in respect of the targeted defined contribution scheme and £4,760 (2011 £6,134) in respect of Death in Service contributions. The components of the defined benefit pension scheme costs are as follows:

Analysis of the amount charged to charitable activities

	2012	2011
	£'000	£'000
Current service cost	20	20

The best estimate of the contributions expected to be paid to the Scheme by the Society for the year ended 31st December 2013 is £26,430 (The Trustees are withholding payment of the 3rd annual payment to eliminate the deficit, owing to the FRS17 surplus).

Analysis of the amount credited to other finance income (included within charitable expenditure)

Expected return on pension scheme assets	32	42
<i>Interest on pension scheme liabilities</i>	(29)	(33)
	3	9

Retirement Benefits Disclosure under FRS17

The amounts recognised in the balance sheet are as follows:

	2012	2011
	£'000	£'000
Present value of funded obligations	407	672
Fair value of scheme assets	848	761
Excess in scheme at end of the year and available to the Society	441	89

Royal Astronomical Society

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

10. STAFF COSTS (continued)

Pension costs (continued)

The excess in the scheme (£441,000) is compared with the future service cost for all members over all their expected remaining service lifetimes less the expected employee contributions over the same period (£441,000).

Changes in the present value of the defined benefit obligations are as follows:

	2012	2011
	£'000	£'000
Opening defined benefit obligation	672	605
Service cost (net of employee contributions)	20	20
Interest cost	29	33
Actuarial (gain)/loss	(64)	9
Employee contributions	6	5
Benefits paid	(256)	0
Closing defined benefit obligation	407	672

Changes in fair value of scheme assets are as follows:

	2012	2011
	£'000	£'000
Opening scheme assets	761	666
Expected return	32	42
Actuarial (loss)/gain	211	(45)
Contributions by employer	94	93
Employee contributions	6	5
Benefits paid	(256)	-
Closing scheme assets	848	761

The amounts recognised in income and expenditure are as follows:

	2012	2011
	£'000	£'000
Current service cost (net of employee contributions)	(20)	(20)
Interest on obligation	(29)	(33)
Expected return on scheme assets	32	42
Total	(27)	(11)

The actual return on scheme assets was £243k (2011: (£3k)).

The amounts recognised in other recognised gains and losses are as follows:

	Current year		Cumulative	
	2012	2011	2012	2011
	£'000	£'000	£'000	£'000
Actuarial gains/(losses)	275	(54)	(104)	(379)

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NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

10. STAFF COSTS (continued)

Pension costs (continued)

The major categories of scheme assets as a percentage (or value) of total scheme assets and the expected rate of returns are as follows (the assets are all invested in a policy of insurance):

	Fair value of scheme assets		Expected rate of return	
	2012	2011	2012	2011
	%	%	%	%
Equities	39	41	6.0	5.5
Bonds	49	47	4.0	3.2
Property	12	12	2.7	3.7
Cash	-	-	3.0	3.0
	100	100	4.2	4.2

Principal actuarial assumptions at the balance sheet date (expressed as a weighted average):

	2012	2011
Discount rate at 31 December	4.5%	4.8%
Expected return on scheme assets at 31 December	4.2%	4.2%
Future salary increases	2.9%	3.0%
Future pension increases –pension earned before 6 th April 1997	0.0%	0.0%
Future pension increases –pension earned after 6 th April 1997	2.6%	2.7%
Proportion of employees opting for early retirement	0.0%	0.0%
Inflation (RPI)	2.8%	2.9%

The current mortality rate assumptions include sufficient allowance for future improvements in mortality rates. The assumed life expectancy for a pensioner retiring at 65 on the balance sheet date is:

	2012	2011
Retiring now		
Male	22.2	22.1
Female	24.4	24.3
Retiring in 20 years		
Male	23.5	23.4
Female	25.9	25.9

Amounts for the current and previous four periods are as follows:

Defined benefit pension scheme:

	2012	2011	2010	2009	2008
	£'000	£'000	£'000	£'000	£'000
Defined benefit obligations	407	672	605	685	441
Scheme Assets	848	761	666	733	581
Excess/(shortfall)	441	89	61	48	140
Experience adjustments on scheme liabilities – gain/(loss)	211	(45)	14	9	(61)
Experience adjustments on scheme assets – gain/(loss)	78	(34)	19	73	(79)

Royal Astronomical Society

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

11. TRANSACTIONS WITH TRUSTEES

The Trustees receive reimbursement for travel expenses actually incurred in attending meetings, the amount reimbursed during the year for 21 Trustees was £15,831 (£13,149 for 2011). Remuneration, total £4,853, was paid to a Trustee during 2011 (£1,780 for 2011). Legal authority for this payment has been obtained from the Charity Commission.

12. ANALYSIS OF NET ASSETS BETWEEN FUNDS

	General & Designated Funds £	Restricted £	Total 2012 £
Fund Balances at 31st December 2011 are represented by:			
Tangible fixed assets	1,428,659	505	1,429,164
Heritage assets	9,589,749	-	9,589,749
Investments	3,575,444	1,514,549	5,089,993
Current assets – cash at bank and in hand	2,460,846	237,723	2,698,569
- other	154,948	100,475	255,423
Current liabilities	(2,088,028)	(129,267)	(2,217,295)
Defined benefit pension scheme asset	441,000	-	441,000
Total Net Assets	15,562,618	1,723,985	17,286,603
Unrealised gains included above On investment assets			
Total Unrealised Gains at 31 st December 2012	102,192	64,523	166,715
 Reconciliation of Movements in Unrealised gains on Investment Assets			
	£	£	£
Net losses arising on revaluations in year	-	-	-
Net movement in year	216,454	91,687	308,141
Unrealised gains at 1st January 2012	(114,262)	(27,164)	(141,426)
Unrealised Losses at 31 st December 2012	102,192	64,523	166,715
 Gains on the revaluation of Investment Assets:			
	£	£	£
Realised losses during year	(9)	(4)	(13)
Movement in unrealised gains during year	216,463	91,691	308,154
Total per Statement of Financial Activities	216,454	91,687	308,141

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NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

13. RESTRICTED FUNDS

	Balance 01-Jan-12 £	Incoming resources £	Resources expended £	Transfers £	Unrealised gains, losses/ on sales £	Balance 31-Dec-12 £
Research & Grants Fund	1,422,328	50,838	192,905	105,000	79,870	1,465,131
Benevolent Fund	60,752	2,114	884	-	2,952	64,934
Library Fund	30,934	1,077	1,077	-	1,503	32,437
Education Fund	51,758	2,118	50	-	2,515	56,341
Lectures & Awards Fund	99,756	3,783	3,244	-	4,847	105,142
Grand Totals	1,665,528	59,930	198,160	105,000	91,687	1,723,985

£105,000 was transferred from Unrestricted to Restricted Funds to increase the resources available within the Restricted Funds, for making grants.

The purpose of the funds is unchanged from the purposes stated on the Society's website:

http://www.ras.org.uk/index.php?option=com_content&task=view&id=260&Itemid=27

Research & Grants Fund

AG Stillhamer Trust Fund (1937)
 EW Brown Trust Fund (1939)
 Plummer Bequest (1946)
 Victor Nadarov Fund (1950)
 Sir Norman Lockyer Memorial Trust (1990)
 Hosie Bequest (2000)
 Mrs. J.M. Jelley-Freeman Bequest (2000)
 CAG Bearpark Trust (2000)
 Patricia Tomkins Fund (2011)
 Special Purposes Fund
 General

Benevolent Fund

Lee & Jansen Trust Fund (1834/1879)
 Gerald Merton Fund (1986)
 Donald R. Barber Fund (2001)

Library Fund

Turnor Fund and Horrocks Memorial Fund (1853/1876)
 Harry Watson Memorial Fund (1923)
 Ian Ridpath Conservation Fund (2006)

Education Fund

Newbigen Fund (1990)
 Michael Penston Memorial Fund (1991)
 Sir William Hunter McCrea Memorial Fund (2000)
 Education Committee

Lectures & Awards Fund

Hannah Jackson-Gwilt Trust Fund (1861/1893)
 George Darwin Lectureship Fund (1926)

 Ditto Support Fund
 AS Eddington Commemoration Fund (1948)
 Harold Jeffreys Lectureship Fund (1962)
 Roger Tayler Memorial Fund (1998)
 AT Price Medal Fund (1999)
 Gerald Whitrow Memorial Lecture Fund (2001)
 Fowler Prizes Fund (2004)

Warin Bushell Fund (1964)
 Gaythorp Bequest (1969)

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NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2012 (Continued)

14. UNRESTRICTED FUNDS

	----- Designated Funds -----					
	Burlington House Fund £	Building Fund £	Open Access Fund £	Heritage Asset Fund £	Unrestricted General Fund £	Total £
Balance 1st January 2012	1,470,521	393,936	100,000	9,589,749	3,848,987	15,403,193
Total Incoming Resources	-	-	-	-	3,602,117	3,602,117
Total Resources Expended	-	-	-	-	(3,829,146)	(3,829,146)
Other recognised gains & losses						
Gain on Pension Scheme	-	-	-	-	275,000	275,000
Gains on investment assets	-	-	-	-	216,454	216,454
Heritage Assets	-	-	-	-	-	-
Gross transfers between funds						
Transfer (to)/from general unrestricted fund	(91,683)	91,683	100,000	-	(205,000)	(105,000)
Balance 31st December 2012	1,378,838	485,619	200,000	9,589,749	3,908,412	15,562,618

15. GRANTS COMMITTED

Grants to the value of £102,000 have been committed for future payment, subject to certain conditions, specified by the Society, having been met (2011: £195,000). These grants were not approved or communicated to the recipients until after the year end and therefore have not been accounted for in the year ended 31 December 2012.

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APPENDIX

2012 GRANTEES - RESTRICTED FUNDS (Including expenditure committed, to be claimed)

Grants – Institutions			
Date	Institution	Detail	£
01/12	University of Nottingham	Research Fellowship	9,229
02/12	University of Oxford	Where Do Galaxies Merge?	1,080
03/12	The Share Initiative	Gill-100	1,080
03/12	University of Leeds	Studentship, Formation of Meteoric Smoke in Planetary Atmospheres	1,080
03/12	Society for Popular Astronomy(SPA)	Diamond Jubilee of the SPA	3,500
03/12	University of Glasgow	Travel Grant, National Solar Observatory, Arizona	890
03/12	Children's Radio	Deep Space High	2,500
03/12	Keele University	Travel Grant, IAU General Assembly	900
03/12	University of Bradford	Global Collaboration to Observe the Transit of Venus	2,500
03/12	University of Central Lancashire	N-Body Simulations	1,080
03/12	University of Leeds	Travel Grant, Cities on Volcanoes' Conference	685
03/12	University of Leeds	Studying the Mass Loss from Mass Accreting Stars	1,080
04/12	University of Glasgow	Solar Prominence Properties Over the Last Solar Cycle	1,080
04/12	University of Kent	Undergraduate Research Bursary	1,080
04/12	Newcastle University	Travel Grant, Collaboration on GPS Satellite Orbit Modelling	898
04/12	University of Warwick	Instabilities in Solar Coronal Mass Ejections	1,080
04/12	University of Glasgow	Early Phase of Solar Flares	1,080
04/12	City and Islington College	Islington Science Festival	1,500
04/12	Durham University	Effect of Stars on the Fate of Galaxies	1,080
04/12	Institute for Advanced Study	Exoplanet Smartphone App.	2,000
04/12	Queen's University Belfast	Attendance, Conference on MHD Waves and Seismology of the Solar Atmosphere	500
04/12	University of Central Lancashire	Reconnection Rate for an X-Class Flare Observed by the Solar Dynamics	1,080
04/12	University of Kent	Undergraduate Research Bursary	1,080
04/12	University College London, MSSL	Support PhD Student's Visit to MSSL	400
04/12	University of Nottingham	Research Fellowship	10,060
05/12	University of Glasgow	Study of Solar Microflares with RHESSI and SDO	1,080
05/12	University of Southampton	Far IR Study of X-ray Binaries in the SMC	1,080
05/12	University of Southampton	Undergraduate Research Bursary, Radio Emission from Protostellar Jets	1,080
05/12	University of Southampton	Travel Grant, Japan Collaboration Visit	500

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05/12	University of Warwick	Extragalactic Astrophysics Explored Through Public Engagement	1,080
05/12	University of Glasgow	Coronal Loop Oscillations	1,080
05/12	University of Leicester	Travel Grant, IAU General Assembly	800
06/12	Lancaster University	Remote-Sensing of Magnetspheric Substorms Via Auroral Imaging	1,080
06/12	University of Bristol	Electrons and Ions in Magnetised Plasmas	1,080
06/12	University of St. Andrews	Comparing Star Formation in Model and Real Merging Galaxies	1,080
06/12	University of St. Andrews	Applying New Data on TiO ₂ Clusters Computation to the Dust Nucleation Processes of Cloud Formation in Brown Dwarfs and Exoplanets	1,080
06/12	University of Exeter	Binary Fraction of Brown Dwarfs and the L-to-T transition	1,080
06/12	University of Exeter	Attendance, Signposts of the Planets Conference	750
06/12	University of Southampton	Radio Emission from Accerting Black Holes	1,080
06/12	University of Sheffield	Searching for Benchmark Brown Dwarfs in the WIRED Survey	1,080
06/12	University College London	Neural Networks Used as Probability Function Estimators for the Photo-z Project	1,140
06/12	Queen's University Belfast	Support for 17 th International Conference on Atomic Process in Plasmas	1,250
06/12	University of Sussex	Construction of Light-cones from Massive Simulated Datasets	1,080
06/12	University of Oxford	Building a Web Based Interface to Explore the HUDF	900
07/12	University of Manchester	Student Summer Project: Galfacts	1,080
07/12	University of Sussex	Optimising the Dark Energy Survey Strategy (using X-ray Clusters)	1,080
07/12	University College London (MSSL)	Measuring Water Vapour in the Atmosphere of Mars using ExoMars/PanCam	1,080
07/12	University of Glasgow	A Robust method of Probing Galaxy Luminosity Evolution	1,080
07/12	University of Leeds	Symposium, Study of the Earth's Deep Interior	3,000
07/12	University of Durham	Visualising the Cosmos	1,080
07/12	University of Nottingham	How Many Galaxies are there in the Universe?	500
07/12	University of Nottingham	Research Fellowship	9,592
07/12	University of Portsmouth	IAU Symposium 295, The Intriguing Life of Massive Galaxies	1500
07/12	Liverpool John Moores University	Continued Collaborations with UCSD on Data from the Solar Mass Ejection Imager (SMEI)	450

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07/12	Liverpool John Moores University	Attendance 5 th Southern Cross Concert, Multiwavelength Surveys; a Vintage Decade	800
07/12	Liverpool John Moores University	Attendance, Galactic Scale Star Formation; Observation Meets Theory, Conference, Heidelberg	360
07/12	University of Glamorgan	Teacher Training for GCSE Astronomy	4,200
07/12	University of Hertfordshire	Conferences in 2012	500
07/12	University of Manchester	Radio Emission from Nova Outbursts	1,080
07/12	Herefordshire & Worcestershire Earth Heritage Trust	Educational Materials for the Earthquake Observatory Project	1,800
07/12	Telescope Technologies Ltd.	Attendance, IAU General Assembly	800
08/12	Durham University	Undergraduate Research Bursary	1,080
08/12	University of Sussex	Statistical Identification of Counterparts to Herschel Galaxies	1,080
08/12	Campaign for Science & Engineering	Subscription	500
09/12	University College London (MSSL)	Travel Grant, IAU General Assembly	800
09/12	University of Oxford	The Youngest Radio Sources	1,080
09/12	University of Oxford	Travel Grant, IAU General Assembly	800
09/12	Liverpool John Moores University	Contribution to GammaRay Bursts Conference	2,000
09/12	Open University		300
09/12	University of Bristol	Attendance, IAU General Assembly	800
09/12	University of Bristol	Attendance, IAU General Assembly	800
09/12	University of St. Andrews	Attendance, IAU General Assembly	800
09/12	University of Sheffield	Dynamical Evolution of Star-forming complexes	1,080
10/12	Glenelg & Arnisdale Development Trust	Terrestrial Celebration of NASA's Curiosity Rover in Martian Glenelg	1,000
10/12	Queen's University Belfast	Attendance, 17 th Cambridge Workshop on Cool Stars, Stellar Systems and the Sun	700
10/12	University College London (MSSL)	Undergraduate Research Bursary	1,080
10/12	University of Southampton	Attendance, IAU General Assembly	800
10/12	Loughborough University	Support for PhD Student, Research Trip to Non-UK funded University	527
10/12	University of Glasgow	Attendance, IAU General Assembly	509
10/12	University of Nottingham	Research Fellowship	9,604
11/12	Lancaster University	Attendance AGU Fall Meeting	800
11/12	Royal Astronomical Society Club	Visiting Speakers	2,561
12/12	Astrobiology Society of Britain	Support, 2013 Astrobiology Conference	1,500
12/12	Carisbrook Castle Museum	Professor John Milne, Anniversary Exhibition	2,000
12/12	Northumbria University	Travel Grant, BUKS 2012, Crete – MHD Waves and Seismology of the Solar Atmosphere	550
12/12	Northumbria University	Travel Grant, BUKS 2012, Crete – MHD Waves and Seismology of the Solar Atmosphere	550

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		Sub-Total	131,185
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2012 GRANTEES – RESTRICTED FUNDS (Including expenditure committed, to be claimed)

Expenditure Committed – To be Claimed			
02/11	University of Central Lancashire	Undergraduate Research School 3 year Plan	1,000
02/11	University of Glasgow	X-ray and UV Study of Solar Flares	1,080
02/11	Imperial College London	Attendance, Cassini/MAPS Workshop 2011	500
02/11	Natural History Museum (NHM)	Support for Meteoritical Society Plenary/Public Talk at NHM	1,000
08/11	University of Birmingham	Attendance, LIGO/Virgo Collaboration Meeting	538
08/11	University of Nottingham	Attendance, IAU Symposium 280	300
02/12	Shetland Isles	Astronomy Lecture Series	700
02/12	Liverpool John Moores University	Attendance, IAU General Assembly	1,000
02/12	The Cavendish Laboratory	Support for Amateur Stargazing Groups During Stargazing Live	2,000
02/12	University of Glasgow	Flare Accelerated Electrons from the Sun to the Earth	1,080
02/12	University of Edinburgh	Support to Present Results at AbSciCon 2012, Atlanta, USA	1,000
08/12	University of Aberdeen	Attendance, AGU Fall Meeting	961
08/12	University of Oxford	Support for an Extended Research Visit to the USA	900
08/12	University of St Andrews	1 st Doha International Astronomy Conferene	3,000
08/12	University College London	Characterising Exoplanets: the Next Decade – Support for Young Scientists	3,000
08/12	Imperial College	Feedback Regulated Star Formation	1,000
02/13	University of Edinburgh	The UKCA-NASA Astrobiology Summer Acadwny	1,000
12/11	University of Nottingham	Research Fellowship	88,000
		Sub-Total	108,059
01/12	Expenditure Committed, to be claimed	B/F	-66711
		Sub-Total – Institutions	172,533
Grants and Awards – Restricted Funds – Individuals			
01/12	Research & Grants	Attendance, AGU Fall Meeting	388
02/12	Research & Grants	Attendance, International Conference, Japan	850
02/12	Research & Grants	Attendance, 219 th AAS Meeting	833
04/12	Research & Grants	Attendance, National Astronomy Meeting	277
04/12	Research & Grants	Attendance, Conference, Trieste, Italy	160
05/12	Research & Grants	Collaborative Visit to Stanford University	600
05/12	Research & Grants	Travel Grant, IAU General Assembly	800
05/12	Research & Grants	Travel Grant, IAU General Assembly	690

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06/12	Research & Grants	Attendance, 13 th Study of the Earth's Deep Interior (SEDI)	264
06/12	Research & Grants	Attendance, 13 th SEDI	267
07/12	Research & Grants	Attendance, 2012 International Pulsar Timing Array, Sydney, Australia	1,000
07/12	Research & Grants	Attendance, 17 th Cambridge Workshop on Cool Stars, Stellar Systems and the Sun	600
07/12	Research & Grants	Attendance 5 th Southern Cross Concert, Multiwavelength Surveys; a Vintage Decade	878
07/12	Research & Grants	Attendance, EPSC-DPS Joint Meeting 2011	500
08/12	Research & Grants	Attendance, Asteroids, Comets, Meteors, Japan	800
08/12	Research & Grants	Attendance, Galactic Scale Star Formation; Observation Meets Theory, Conference, Heidelberg	800
08/12	Research & Grants	Archival Work Related to Cassiopeia A	1,100
08/12	Research & Grants	Attendance, Annual Conference, Meteoritical Society, Cairns, Australia	751
08/12	Research & Grants	Travel Grant, IAU General Assembly	800
08/12	Research & Grants	Travel Grant, IAU General Assembly	800
08/12	Research & Grants	Travel Grant, Study at UK ATC, Edinburgh	857
08/12	Research & Grants	Attendance, Annual Conference, Meteoritical Society, Cairns, Australia	850
08/12	Research & Grants	Travel Grant, IAU General Assembly	799
09/12	Research & Grants	Travel Grant, IAU General Assembly	800
09/12	Research & Grants	Travel Grant, IAU General Assembly	800
09/12	Research & Grants	Travel Grant, IAU General Assembly	750
09/12	Research & Grants	Travel Grant, IAU General Assembly	400
09/12	Research & Grants	Travel Grant, IAU General Assembly	800
09/12	Research & Grants	Travel Grant, BUKS 2012, Crete – MHD Waves and Seismology of the Solar Atmosphere	445
09/12	Research & Grants	Travel Grant, for Conference	500
09/12	Research & Grants	Travel Grant, IAU General Assembly	680
09/12	Research & Grants	Travel Grant, IAU General Assembly	800
09/12	Research & Grants	Travel Grant, IAU General Assembly	800
09/12	Research & Grants	Embedded Star Clusters in the Magellanic Clouds with the VMC Survey	400
09/12	Research & Grants	Travel Grant, IAU General Assembly	800
09/12	Research & Grants	Attendance, AGU Fall Meeting	697
10/12	Research & Grants	Attendance, European Planetary Science Congress, Madrid	531
10/12	Research & Grants	Travel Grant, IAU General Assembly	530
10/12	Research & Grants	Travel Grant, IAU General Assembly	800
10/12	Research & Grants	Attendance, 50 Years of Brown Dwarfs, Ringberg, Germany	680
11/12	Research & Grants	Attendance, European Planetary Science Congress, Madrid	500

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11/12	Research & Grants	Travel Grant, IAU General Assembly	800
11/12	Research & Grants	Attendance, Galactic Nuclei and their connection to the stars and the environment	850
11/12	Research & Grants	Attendance, Space Generation Congress	352
11/12	Research & Grants	Development of a Solar and Stellar Spectrometer	1,200
		Sub-Total	30,579
	Expenditure Committed – To be Claimed		
02/11	Research & Grants	Attendance, 42 nd Lunar and Planetary Science Conference	400
08/12	Research & Grants	MEDIAN – Experiment selected for OEWf (Austrian Space Forum) Mars	1,000
08/12	Research & Grants	Biomedical and Astronomical Signal Processing Frontiers	580
08/12	Research & Grants	Stellar Novae: Past and Future Decades	600
08/12	Research & Grants	Attendance, IAU Symposium 297	463
03/12	Research & Grants	Travel Grant, IAU General Assembly	800
03/12	Research & Grants	Travel Grant, IAU General Assembly	800
02/13	Research & Grants	Attendance, Characterising Exoplanets, Scientific Discussion Meeting	150
02/13	Research & Grants	Attendance, UK Planetary Forum 10 th Early Career PlanetARY Scientist Meeting	250
		Sub Total	5,043
01/12	Expenditure Committed, to be claimed	B/F	-10,150
		Sub-Total – Individuals	25,472
	Benevolent Fund		884
	Lecturers and Awards Fund		2,932
		Sub-Total – Individuals	29,288
		GRAND TOTAL	201,821

2012 GRANTEES – GENERAL FUND - Research Fellowships

Grants – Institutions/Individuals			
07/12	Herschel House Trust	Annual Grant	750
07/12	Research & Grants	Visiting Expert Programme	1,000
09/12	Daphne Jackson Trust	Research Fellowship	29,836
12/12	University of Cambridge	Research Fellowship	48,492
12/12	University of Durham	Research Fellowship	48,742
12/12	University of St Andrews	Research Fellowship	43,113
10/12	Research & Grants	Visiting Expert Programme	1,000
		Sub-Total	172,933

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Expenditure Committed – To be Claimed			
12/12	Liverpool John Moores University	Research Fellowship (3 rd Year)	44,000
12/12	Imperial College London	Research Fellowship (2013)	44,000
12/12	Durham University	Research Fellowship (Part 1 st year; 2 nd & 3 rd Years)	88,000
12/12	University of St. Andrews	Research Fellowship (2 nd & 3 rd Years)	88,000
12/12	University of Leicester	Research Fellowship (1 st Year)	44,000
12/12	University of Oxford	Research Fellowship (1 st Year)	44,000
12/12	University of Hertfordshire	Research Fellowship (1 st Year)	44,000
12/12	Daphne Jackson Trust	Research Fellowship (2 nd Year)	30,000
		Sub-Total	426,000
01/12	Expenditure Committed, to be claimed	B/F	-223,095
	Charitable Activities – Grants (General Fund)	TOTAL	375,838
	Charitable Activities – Grants	TOTAL	577,659
12/12	Royal Astronomical Society Library	Support for Library	1,077
	Charitable Activities - Library	TOTAL	1,077
	GENERAL & RESTRICTED FUNDS	GRAND TOTAL	578,736