

**Royal Astronomical Society**  
**Trustees' Report for the year ended 31 December 2011**

**ROYAL ASTRONOMICAL SOCIETY**

**TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2011**

**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 2011 were:

Professor R. L. Davies (President)  
Professor J.E. Drew (Vice-President until May)  
Professor H. Farideh (Vice-President)  
Professor M. Kendall (Vice-President)  
Professor O. Lahav (Vice-President)  
Professor C. Tadhunter (Vice-President)  
Professor J.C. Zarnecki (Vice-President until May)  
Professor P.G. Murdin (Treasurer until May)  
Professor A.M. Cruise (Treasurer)  
Professor M.A. Barstow (Secretary)  
Dr I.A. Crawford (Secretary)  
Dr L. Fletcher (Secretary)  
Dr H.J. Walker (Secretary until May)  
Ms M. Bailey (Councillor)  
Professor Y. Elsworth (Councillor)  
Dr R.J. Barber (Councillor until May)  
Professor K. Blundell (Councillor)  
Professor P.K. Browning (Councillor until May)  
Dr E. Bunce (Councillor)  
Dr I.F. Corbett (Councillor until May)  
Dr R.T. Holme (Councillor from December)  
Professor A.W. Hood (Councillor)  
Professor D.W. Hughes (Councillor)  
Professor R. Ivison (Councillor until May)  
Professor D.W. Kurtz (Councillor)  
Professor S. Miller (Councillor)  
Dr A. Norton (Councillor)  
Professor D.J. Southwood (Councillor)  
Professor R.E. Spencer (Councillor)  
Mr M. Thompson (Councillor until December)

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**Staff**

Executive Secretary: David Elliott  
Deputy Executive Secretary: Robert Massey  
Accountant: John Struthers  
Librarian: Peter Hingley  
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  
Editor A&G: Sue Bowler (2/3 post)

**Bankers**

HSBC  
West End Corporate Banking Centre  
70 Pall Mall  
London  
SW1Y 5EY

**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

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**2. STRUCTURE, GOVERNANCE AND MANAGEMENT**

The Royal Astronomical Society was founded in 1820 and is incorporated by Royal Charter. The Charter is dated 7<sup>th</sup> March 1831. There is also a Supplemental Charter dated 5<sup>th</sup> June 1915 and a second Supplemental Charter dated 15<sup>th</sup> July 2005. The Byelaws were last revised at the Annual General Meeting, 11<sup>th</sup> May 2007. 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 including solar and solar-terrestrial physics, planetary sciences and the 'new astronomies', such as astro-particle physics and astrobiology. The RAS comprises some 3,675 Fellows and Honorary Fellows, of whom approximately 1/3 are based in some 60 overseas countries; 18% are under the age of 34 and 26% are more than 65; approximately 13.5% of the total membership is female. It is entirely funded by subscriptions from its members, gifts and from the income generated by its activities, 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.

There were no variations from these regulations in 2011.

**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 familiarize themselves with the organization and the staff.

**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, organizing 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, Women in Astronomy and Geophysics) and *ad hoc* committees (e.g.

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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 organization are detailed on the Society's web site [www.ras.org.uk](http://www.ras.org.uk).

### **Networks**

The Society has formal associations with a number of organizations having shared interests, or offering benefits to RAS members, and has less formal arrangements with several other bodies. It is the UK national member organization 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 organizations 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*.

### **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:

- 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 organizing 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 Third World countries. The RAS does not itself (small grants and a number of fully funded post-doctoral scholarships 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 2011 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 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 organizations
- reviewing publishing arrangements for its journals
- organizing the 2011 National Astronomy Meeting
- supporting scientists in developing countries
- 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.

#### **4. ACHIEVEMENTS AND PERFORMANCE**

*Note: Full details are available on the Society's web site [www.ras.org.uk](http://www.ras.org.uk)*

##### **Public Policy & 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:

- *Higher Education in STEM subjects* (House of Lords Science and Technology Subcommittee)
- *Astronomy and particle physics* (House of Commons Science and Technology Committee)
- *Redefinition of UTC* (International Telecommunications Union)
- *National Planning Policy Framework* (Department for Communities and Local Government)

In addition, the Society commissioned a *Demographic survey of the UK astronomy and geophysics research communities* to monitor past, and future, trends in the light of the changing budgetary situation.

The Society issued a total of 52 press releases in 2011 and the Deputy Executive Secretary gave 39 radio and 38 television interviews. Social media accounts were set up on Twitter, Facebook and LinkedIn to promote and publicise its activities. There were 677 'likes' for the RAS Facebook page, 2411 Twitter followers of the @royalastroc account and 293 members of the RAS LinkedIn group

##### **Education & Public Outreach**

The Society built on the legacy of the *International Year of Astronomy 2009*, designed to engage young people and the general public in astronomy activities, by:

- providing certificates of achievement for the top 12 students in the country taking *EdExcel GCSE astronomy*
- launching the *Patrick Moore Medal* to recognize outstanding contribution by secondary school teachers of astronomy
- conducting a survey of astronomy education and outreach in the UK
- encouraging professional scientists to give school talks
- arranging a programme of free lunchtime public lectures
- organizing events for some 200 *Friends of the RAS* (additional details at <http://friends.ras.org.uk/>)
- providing astronomy lecturers for *Cunard* cruise liners as part of the on-board *Insights* programme
- participating in *Open House* which enables the public to inspect the architectural features of the Society's listed premises
- making the Society's premises available to outside organizations including the *Society for Popular Astronomy*, *British Astronomical Association*, *Society for the History of Astronomy*, *British Sundial Society* and *British Horological Society*.

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### Meetings

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

- The *National Astronomy Meeting (NAM)* in 2011 was held in a conference centre in Llandudno, North Wales, the first time the event had not be hosted by a university. Organized jointly with the *UK Solar Physics (UKSP)* and *Magnetospheric Ionospheric and Solar-Terrestrial Physics (MIST)* 437 delegates registered to attend plenary talks on topics ranging from *Dark Matter Searches* to *Galactic Archeology* and participate in parallel sessions covering a wide spectrum of interests. The advantages of using a conference centre in an attractive resort included plentiful and varied hotel accommodation and access to event management expertise and state of the art technical facilities; the principal drawback was the lack of academic ambience with a consequent poor attendance at events aimed at the public.
- 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 number of externally organized meetings at the universities of Liverpool John Moores, Cambridge and Durham.

### Grants and Fellowships

- In 2011, the Society awarded grants from the Restricted Funds totalling £126,264. Grants, which are open to non-Fellows, support research or 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 meeting, 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).

For a full list of 2011 grantees see the Appendix.

- In addition to the award of a new *Sir Norman Lockyer Fellowship*, a further tranche of fully - funded *RAS Fellowships* supported 3 career research astronomers and geophysicists whose PhD had been awarded no more than 5 years before. Progress was made identifying a suitable candidate for the *RAS Daphne Jackson Fellow*. Two prizes of £1,000 each, sponsored by *Wiley-Blackwell*, were awarded respectively for the best astronomy and geophysics PhD thesis submitted to a UK university in 2010.

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### **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 2012 medals and awards, including the first recipient of the Patrick Moore Medal, selected in 2011, were: Gold Medals: Professors A.C. Fabian (Cambridge) and J.C. Brown (Glasgow); Chapman Medal: Professor Andrew N. Fazakerley (UCL); Herschel Medal: Professor Mike Irwin (Cambridge); Jackson Gwilt Medal: Professor Joss Bland-Hawthorn (University of Sydney); Fowler Awards: Dr Hiranya Peiris (UCL) and Dr Matt Owens (Reading); Winton Capital Awards: Dr Tom Kitching (Edinburgh) and Dr Juliet Biggs (Bristol); Group Award: UKIDSS; Service Award: Professor Paul Murdin (Cambridge); Honorary Fellowships: Dr Karl Menten (Max Planck Institute), Professor Hiromoto Shibahashi (University of Tokyo), Professor Bob Williams, (Space Telescope Science Institute), Professor Robert Lin (University of California at Berkeley), and Professor Hermann Opgenoorth (International Space Science Institute). In addition, Professor Andrew Collier-Cameron (St Andrews), Professor Bill Chaplin (Birmingham), and Professor Andrew Liddle (Sussex) respectively, were invited to give the Darwin, Harold Jeffreys and Whitrow Lectures. The first recipient of the Patrick Moore Medal was Dr Becky Parker (Head of Physics, Simon Langton Grammar School).

### **International**

Under the direction of the Society's International Committee, support was provided to produce the first ever school level astronomy textbooks in Pashtu to encourage education in Afghanistan. In addition, outline agreement was reached with the *Office of Astronomy for Development* in South Africa to sponsor a joint *Visiting Expert Scheme* to support capacity development in Third World countries. Finally, in-principle agreement was reached with the *European Astronomical Society* to organise a *European Week of Astronomy and Space Science* in the UK in 2014.

### **Library**

The Society's library is an important repository of over 3,000 ceased journals (though those which are rarely or ever consulted will be disposed of during 2012) and, books (in addition to some 10,000 more recent items, over 5,000 published before 1851). Under an arrangement with the *Science Photo Library*, the Society's collection of images comprising photographs and scanned portraits is available for licensed use.

The Librarian, with the Library and Astronomical Heritage Committees, maintain oversight over the historic books, instruments and other artifacts either on the premises or on loan. The latter included Caroline Herschel's 7ft-telescope at the *Science Museum*; a Harrison clock at the *National Maritime Museum*; a 15" refracting telescope at the *University of Central Lancashire*; various items loaned to the Herschel House Museum's exhibition on the Great Comet of 1811 and a portrait loaned to a Turner exhibition in Margate.

### **Publications**

#### **A. Journals**

The RAS owns 2 research journals, both published by *Wiley-Blackwell (W-B)*

- *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



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original research in positional and dynamical astronomy, astrophysics, radio astronomy, cosmology, space research and the design of astronomical instruments. Electronic versions of all papers appear on the publisher's web site immediately after completion while a paper edition is produced every 10 days. Although based in the UK, it is an international journal and derives three quarters of its content from outside the UK.

- *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 organization with appropriate expertise and access to the necessary capital resources. 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 recognizes that while its present policy fulfils the objective of supporting scientific activity within charitable principles, it places nearly all the costs of publications on subscription charges and that there is mounting pressure to provide 'open access' to the results of publicly funded research. In anticipation of this outcome 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*).

Notice was served to *W-B* that the current contract would not be renewed on its expiry in December 2012.

Professor R.F. Carswell remained Editor-in-Chief of *MNRAS*. During 2011 the number of papers submitted for publication in *MNRAS* increased by 10%; the median period from receipt at *W-B* to a paper appearing as an electronic publication changed from 16 days in 2010 to 18 days in 2011 for *MNRAS* Letters, and from 34 days to 37 days for *MNRAS* Main Journal. The median publication time for articles in the first eight 2012 issues of *MNRAS* Main Journal is 29 days. The impact factor changed from 5.103 in 2010 to 4.888 in 2011. The number of article downloads for 2011 (for all usage platforms excluding ADS) was 711,878,

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an increase of 26% on 2010. ADS usage increased from 981,619 in 2010 to 1,307,210 in 2011, an increase of 33%. The total number of downloads in 2011 was 2,019,088, an increase of 31% compared to 2010. The 2011 institutional subscription rate was 97% of that in 2010, for the Main Journal, and 86% (loss of one subscription, 7 down to 6) for MNRAS Letters.

Professor Jeannot Trampert continued as Editor-in-Chief of GJI. There was an 11% increase in the number of submissions compared with 2010. The number of published articles remained steady; there were 414 articles published in 2011 compared to 431 in 2010. The impact factor changed from 2.435 in 2010 to 2.411 in 2011. There were 346,873 full text downloads in 2011, an increase of 30% compared to 2010. There was a 96% renewal rate in institutional subscriptions.

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. Full text usage on the W-B platform for 2011 was 30,337, an increase of 47% compared to 2010. There was a 94% renewal rate in institutional subscriptions (primarily print subscriptions).

In 2011, 4,144 libraries had access to MNRAS and 4,084 to MNRAS Letters through the W-B licensed sales programme. 4,346 libraries had access to GJI and 4,042 to A&G. The RAS journals were also available free or at low cost to 434 institutes in the developing countries, through the Philanthropic initiative INASP

### **B. Books**

The RAS-Springer Series aims to identify potential books which are of interest to its fellows, and others, but which, without the support of the Society, would otherwise be unlikely to attract commercial publishers. The next titles are expected to appear in 2012.

## **5. FINANCIAL REVIEW**

Net incoming resources for the year were £169,406 (£202,617 for 2010) on total incoming resources of £3,780,588 (£3,590,480 for 2010).

### **Reserves Policy**

The Society's Reserves Policy was set in 2003 on the basis that the largest risk was the loss of the premises but with the implementation of the new lease this risk has now been retired as an immediate prospect and the Building Fund is used to cover the long-term risk as well as providing for the maintenance of the building. Other important risks considered in 2003 included the risks of under-performance of the final salary pension fund, under-performance of the publications and the overall risk of having to wind up the Society. Since these major risks were assessed, and to some extent mitigated, one risk has become more immediate: that of the possible collapse of the current business model for learned publishing due to various forms of Open Access. Since income from publishing accounts for about 60% of the Society's total funding a serious change in the financial model for publishing could have devastating effects on the programme of activities to which members have grown accustomed. The extent to which our core programme now depends on the publication surplus can be judged by calculating the membership subscription necessary to make up for a 50% fall in the publication surplus: it would have to rise from £98 to well over £250. The fact

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that the Society is tendering its publications contract in 2012 makes this issue timely.

The Society is fortunate in having reserves and annual surpluses which it can deploy to minimise these risks. These reserves are divided into Restricted Funds, whose use is set by previous conditions (e.g. in a bequest) and Designated Funds, set up for particular administrative purposes (the Burlington House Fund and the Building Fund – explained in the Notes to the Financial Statements, Accounting Policies f) and finally the General Funds which provide investment income to be used in furtherance of charitable objectives and provide liquid cover for risks to the operation of the Society. At the time the Reserves Policy was last reviewed in 2003 the reserve needed was estimated at 4 years' income of the Society (excluding publication income), this providing time to disengage from commitments and restructure or even terminate the operation of the Society in an orderly way.

The requirement to cover the timely wind-down of the Society is currently estimated to ramp down from a little over £1M p.a. over 4 years, suggesting that a reserve of about £3M is prudent and conservative for this purpose alone. At the end of 2009 the reserves stood somewhat above this level, although these are held in liquid assets whose value is dependent on stock-market conditions which have been quite volatile in recent years- a further risk which itself must be managed. Nevertheless, the Council in 2010 announced a plan to commit to approximately £1.2M of expenditure from reserves in the form of a fellowship programme. This represents an extension of the Society's activities and has been widely welcomed by the membership.

The continuing stockmarket recovery of 2010/11, with its beneficial effect on the value of the reserves, the improving financial health of the Society due to the increasing membership numbers and the continuing commercial success of the publications programme have all increased the financial power at Council's disposal. A remarkable feature of the past three years of financial turmoil has been the relatively constant income from investment dividends and so it is plausible to plan on increased reserves providing increasing income- even in difficult times "Cash is King". The choice is therefore either to have a larger future programme or protect the programme we have, at least until the economic trends become more positive.

The free reserves of the Society as at 31st December 2011, defined as being unrestricted, undesignated funds not represented by tangible fixed assets, were £2,252,312 (£2,302,650 a year earlier).

### **Heritage Assets**

Heritage Assets have been included in the financial statements in the current year. This is due to the existence of a reliable archive and valuations in 2011 and as a result £9,589,749 have been brought into the Tangible Fixed Assets of the Society and made a designated fund; see Note 2a.

### **Investment policy**

The Society holds cash on deposit, and investments. As selected by the Finance Committee, the funds available for investment are managed by Newton Investment Managers to be invested mainly in their *Growth and Income Fund for Charities*. The mixture of investments is determined by the Investment Manager on the basis of the guidelines of the Fund, which is

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to retain a balance between generating income to spend on immediate charitable objectives and preserving capability in the future. The return of the main fund for 2011 was -0.7%, being the result of a drop in capital value of 5.0% and the payment of dividends of 4.3%. Provided the total capital value is well above that necessary for the timely wind-down of the Society, the risk to the Society's overall programme can be reduced by increasing our reserves in order to reduce our dependence on publication surpluses.

The investment performance is measured against a bespoke composite market-index-based benchmark, representing the average investor with our investment policy, rather than the average charity, as was the case when we benchmarked against the *WM Total Charities Universe*, which is essentially the performance of the average charity. The main fund underperformed against the new benchmark by 0.7%. The fund manager has explained that the defensive posturing which helped protect the portfolio in the negative markets over the summer months was maintained in the recovery in markets in the final quarter, leading to a (just) sub-benchmark return.

The Society's charter makes no restrictions on investments on ethical grounds though Council has ruled against investments which act against scientific, principally astronomical or geophysical, interests. In addition, as stated, the bulk of funds are held in CIFs, which themselves are structured as charities.

### **Review Process**

The Finance Committee regularly keeps the financial health of the Society under review through an Operations Plan drawn up by the Treasurer. Council sets the overall financial framework of the Society. It decides the Annual Subscription rates that will be proposed to the May AGM and confirms the subscription rates for the journals. For the latter, it is guided by recommendations from the Publications Management Committee. Council is advised about financial matters throughout the year by the Finance Committee, which in April each year reviews the accounts for the previous year and the reports on the year from both the auditors and the honorary auditors. A plan to substantially increase our reserves in order for the enhanced investment income to reduce our dependence on publication surpluses would require debate at Finance Committee and afterwards by Council.

### **Banking arrangements**

In 2008, the Council decided to transfer its banking arrangements to HSBC. This was completed during 2009, with the exception that accounts at NatWest linked to the collection of membership subscriptions were left in place until the implementation of software, oriented towards collection of payments electronically through PayPoint.net and HSBC Merchant Services. This is now working very successfully and it is planned to close the NatWest Accounts in 2012.

## **6. PLANS FOR THE FUTURE**

While continuing to cater for all of its membership, including those based overseas, emphasising the need to support those engaged in outreach and schools activities, and while delivering 'public benefit' under its charitable obligations, the over-riding aim of the Society will remain to provide leadership for UK-based career astronomers and geophysicists (whether or not they are members of the Society) engaged in research.

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**6.1 Professional Communities**

- The Society will 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). The professional community depends on stable levels of public funding mostly from the *Department of Business Innovation and Skills* (BIS). For research this comes via the STFC and NERC; for relevant missions, through the newly created *UK Space Agency* (UKSA) and for teaching, mostly through the *Higher Education Funding Councils*. The outcome of the *Comprehensive Spending Review* (CSR) of 2010 resulted in enforced disengagement from a number of important activities while the impact of the change to the tuition fee regime on university teaching and student recruitment remains unpredictable.
- In preparation for the next CSR the Society will continue 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. However, to demonstrate impact where that is possible, it will up-date the publication *A New View of the Universe: Big Science for the Big Society* which give examples of the contributions astronomy and space science can make to wider society and produce a similar publication for geophysics. The Society, though, will emphasise that scientific excellence should remain the determining criterion for funding research while stressing the way astronomy and geophysics are capable of inspiring younger people to opt to study STEM subjects at school and beyond.
- The Society will demonstrate its value to its communities by, in addition to its regular activities, continuing to host and arrange meetings of the *Astronomy Forum* and increasing its engagement with solid Earth geophysicists (SEG). In connection with the latter, the annual *Harold Jeffreys Lecture* will in future consist entirely of SEG related topics while better communications with relevant university departments will be improved by the appointment of additional 'points of contact'. Finally, further efforts will be made to establish whether the SEG community, and NERC, see benefit in creating a *Geophysics Forum* to deepen their mutual relationship.

**6.2 School Education and Outreach**

In recognition of the importance of securing the 'pipeline' of future research scientists and the need to enjoy public support for funding of its disciplines the Society will:

- enhance its support of school level science through representation on the Science Council's Education Programme Coordinating Group and on *Pearson's* (publisher and owner of *Edexcel* exams) Science Strategic Advisory Committee
- produce an interactive guide to astronomy and geophysics education and outreach activities in the UK and facilitate public access to them
- present the *Patrick Moore Medal* to its first recipient at the National Astronomy Meeting

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**6.3 International**

The Society will deepen its engagement with international and European organizations which share its vision of the importance of astronomy and geophysics by:

- rolling out the *Visiting Expert Scheme* with the South Africa based *Office of Astronomy for Development* of the International Astronomical Union. Facilitating visits by UK based experts to developing regions to assist with research, education at all levels and public understanding of science will not only benefit the target country but also broaden the perspectives of the UK scientists involved.
- exploring the scope for expanding the role of the *European Astronomical Society* such that it can more effectively represent professional astronomers in European, especially EU, institutions and organizations.
- exploiting the opportunity afforded by the General Assembly of the IAU meeting in Beijing to deepen its relations with scientists in China, the fastest growing 'science country', initially by facilitating their closer involvement in *MNRAS* and *GJI*.

**6.4 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:

- issue a call for contract proposals for the publication of its journals from appropriate publishers, including *Wiley-Blackwell*. These will be judged against their ability to 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 while developing the scope and content of the journals and accommodating developments in open access publishing.
- identify a new Managing Editor for *MNRAS* following the retirement of Professor Carswell.

**6.5 Meetings**

Recognizing 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 2012 National Astronomy Meeting (NAM), arranged by the University of Manchester with the *Astronomische Gesellschaft*
- administer the payment of STFC grants (largely to facilitate attendance by students) to the organizers of NAM meetings in each of the next 3 years
- administer the payments of STFC grants to facilitate attendance by post-doctoral students and early career scientists at the General Assembly of the IAU in Beijing.

## **Royal Astronomical Society Trustees' Report for the year ended 31 December 2011**

- establish a new annual 'James Dungey' lectureship for topics in solar physics, solar-terrestrial physics or planetary sciences.

### **6.6 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:

- developing a donor strategy to raise the funds needed to put a substantial fellowships programme on a long-term sustainable basis
- appointing the first *RAS Daphne Jackson Fellow* designed to facilitate return to work by a scientist on career break
- administering a grant from STFC to facilitate attendance at the General Assembly of the International Astronomical Union in Beijing.

### **6.7 Burlington House**

The Society will improve its services to scientists and others by:

- extending the reach of/facilitate attendance at Burlington House meetings by installing video-conferencing facilities
- providing additional accommodation for meetings and/or other purposes by refurbishing the 'Annexe' currently used as a library store.

### **6.8 People**

- Following the 2011 Demographic Survey of astronomers and geophysicists in the UK the Society will investigate how it can promote greater gender and ethnic diversity both within the community and within its own structures, including the composition of Council
- The Society will appoint a new Executive Secretary and Librarian following the retirements of respectively David Elliott and Peter Hingley.

## **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:

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**Trustees' Report for the year ended 31 December 2011**

- 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;
- 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**

A resolution to reappoint Baker Tilly UK Audit LLP will be proposed at the Annual General Meeting.

Approved by the Council and signed on its behalf by:

Professor R.L. Davies  
President  
11 May 2012



# 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 2011 on pages 18 to 42. 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 15 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](http://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 2011 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 31<sup>ST</sup> DECEMBER 2011

	Notes	Unrestricted funds	Restricted funds	2011 Total funds	2010 Total funds
		£	£	£	£
<b>Incoming resources (IR)</b>					
IR from generated funds					
Voluntary income		89,984	19,500	109,484	47,227
Investment income	6	152,365	63,449	215,814	215,042
IR from charitable activities					
Publications	7	3,131,126	-	3,131,126	3,041,046
Scientific meetings		3,564	-	3,564	2,328
Membership		251,484	-	251,484	237,989
Educational		-	1,333	1,333	2,284
Library		6,339	-	6,339	4,601
Public Policy		1,025	-	1,025	5,022
Burlington House		28,643	-	28,643	25,834
Other incoming resources		31,776	-	31,776	8,757
<b>Total incoming resources</b>		<b>3,696,306</b>	<b>84,282</b>	<b>3,780,588</b>	<b>3,590,480</b>
<b>Resources expended</b>					
Costs of generating funds					
Investment management costs		286	114	400	255
Charitable activities					
Publications	}7	2,545,399	-	2,545,399	2,422,351
Scientific meetings	}	75,580	-	75,580	77,061
Grants	}	177,822	126,264	304,086	200,499
Membership	}	48,649	-	48,649	59,893
Educational	} 8	33,826	1,000	34,826	33,611
Library	}	135,362	1,173	136,535	145,880
Public policy	}	93,543	-	93,543	72,314
Burlington House	}	215,625	-	215,625	219,508
Governance costs	}	150,297	-	150,297	150,169
Other resources expended		5,725	517	6,242	6,322
<b>Total resources expended</b>		<b>3,482,114</b>	<b>129,068</b>	<b>3,611,182</b>	<b>3,387,863</b>
<i>Net incoming resources before transfers</i>		214,192	(44,786)	169,406	202,617
<b>Gross transfers between funds</b>	14	(55,000)	55,000	-	-
<i>Net incoming resources before other recognised gains &amp; losses</i>		159,192	10,214	169,406	202,617
<b>Other recognised gains &amp; losses</b>					
(Losses)/Gains on investment assets	12	(150,970)	(86,961)	(237,931)	361,416
Actuarial Gains/(losses) on defined Benefit pension scheme	10	(54,000)	-	(54,000)	5,000
Heritage Assets (Included for the 1 <sup>st</sup> time)	2a	9,589,749	-	9,589,749	-
<b>Net movement of funds</b>		<b>9,543,971</b>	<b>(76,747)</b>	<b>9,467,224</b>	<b>569,033</b>
<b>Reconciliation of funds</b>					
Total funds brought forward		5,859,222	1,742,275	7,601,497	7,032,464
<b>Total funds carried forward</b>		<b>15,403,193</b>	<b>1,665,528</b>	<b>17,068,721</b>	<b>7,601,497</b>

All gains and losses for the year are recognised in the above statement. Activities are classed as continuing. The notes on pages 21 to 42 form part of these financial statements.

## Royal Astronomical Society

### BALANCE SHEET AS AT 31<sup>ST</sup> DECEMBER 2011

	Notes	Total Funds	Total Funds
		<b>2011</b>	<b>2010</b>
		£	£
<b>Fixed Assets</b>			
Tangible Assets: Heritage assets	2a	9,589,749	-
Other assets	2b	1,507,675	1,627,091
Investments	3	4,782,212	5,020,309
<i>Total fixed assets</i>		15,879,636	6,647,400
<b>Current Assets</b>			
Debtors	4	1,546,382	1,389,347
Cash at bank and in hand		1,307,867	1,012,332
<i>Total current assets</i>		2,854,249	2,401,679
<b>Liabilities</b>			
Creditors:			
Amounts falling due within one year	5(a)	1,675,164	1,460,582
<i>Net current assets</i>		1,179,085	941,097
Creditors:			
Amounts falling due in more than one year	5(b)	79,000	48,000
<i>Net assets excluding pension asset</i>		16,979,721	7,540,497
Pension asset	1(s), 10	89,000	61,000
<i>Net Assets including pension asset</i>		17,068,721	7,601,497
<b>The funds of the Society</b>			
Unrestricted income funds			
Designated funds	14	11,554,206	1,868,481
General unrestricted income funds before pension excess		3,759,987	3,929,741
Pension asset		89,000	61,000
General unrestricted income funds after pension excess		3,848,987	3,990,741
Restricted income funds	13	1,665,528	1,742,275
<i>Total Funds</i>	12	17,068,721	7,601,497

The financial statements of pages 18 to 42 were approved by Council on 11<sup>th</sup> May 2012 and signed on its behalf by

Professor A.M. Cruise  
Treasurer  
11<sup>th</sup> May 2012

The notes on pages 21 to 42 form part of these financial statements.

## Royal Astronomical Society

### CASH FLOW STATEMENT FOR THE YEAR ENDED 31<sup>st</sup> DECEMBER 2011

	2011		2010	
	£	£	£	£
<b>Net incoming resources before revaluations &amp; disposal of investment assets</b>		169,406		202,617
Adjusted for				
Depreciation Charge	130,490		132,354	
Profit on disposal of fixed assets	-		(536)	
Investment income	(215,814)		(215,042)	
Debtor/payments in adv. decrease/(increase)	(157,035)		137,214	
Creditors movement	245,582		156,996	
Net FRS17 pension movements, excluding actuarial gain or loss.	(82,000)		(8,000)	
		(78,777)		202,986
<b>Net Cash inflow from operating activities</b>		<b>90,629</b>		<b>405,603</b>
<b>Returns on investment and servicing of finance</b>				
Investment income received: Dividends	214,037		212,451	
Bank Interest	1,777		2,591	
<b>Net cash inflow from returns on investment</b>		<b>306,443</b>		<b>215,042</b>
<b>Capital expenditure and financial investment</b>				
Payments to acquire investments	(45,200)		(6,208)	
Payments to acquire tangible fixed assets	(11,074)		(21,660)	
Receipts from sale of investments	45,421		6,508	
Receipts from sale of fixed assets	-		1,702	
Net movement in cash on deposit with broker	(55)		730	
		<b>(10,908)</b>		<b>(18,928)</b>
<b>Increase in cash in the year</b>		<b>295,535</b>		<b>601,717</b>
<b>Reconciliation of Net Funds</b>				
Increase in cash		295,535		601,717
Net funds at 1 January		1,012,332		410,615
Net funds at 31 December		1,307,867		1,012,332

The notes on pages 21 to 42 form part of these financial statements.

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011

#### 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 are 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, which 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, which are kept at Burlington House.

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011 (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 1<sup>st</sup> 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 31<sup>ST</sup> DECEMBER 2011 (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, £9,695 (£3,473 for 2010), 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 recognized in the financial statements as soon as the obligation has been authorized 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 31<sup>ST</sup> DECEMBER 2011 (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 1<sup>st</sup> 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 1<sup>st</sup> January



## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011 (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.

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011 (Continued)

#### 2. FIXED ASSETS

##### 2a Heritage assets

Valuation (1c)	Rare Books & Manuscripts £	Fine Art & Collectibles £	Total £
At 31 <sup>st</sup> December 2011 (After adoption of FRS 30)	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 <sup>st</sup> Jan.	1,832,470	36,415	176,379	9,466	2,054,730
Additions	-	-	11,074	-	11,074
Cost at 31 <sup>st</sup> December	1,832,470	36,415	187,453	9,466	2,065,804
Depreciation at 1 <sup>st</sup> Jan.	270,266	33,875	123,498	-	427,639
Charge for period	91,683	2,328	36,479	-	130,490
Depreciation at 31 <sup>st</sup> Dec. 2011	361,949	36,203	159,977	-	558,129
Net Book Value at 31 <sup>st</sup> Dec. 2011	1,470,521	212	27,476	9,466	1,507,675
Net Book Value at 31 <sup>st</sup> Dec. 2010	1,562,204	2,540	52,881	9,466	1,627,091

\* Past Presidents' Portraits

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

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011 (Continued)

#### 3. INVESTMENTS

	General Fund £	Restricted Funds £	Total 2011 £	Total 2010 £
<u>Quoted General Fund Investments</u>				
<u>(Common Investment Funds from 2002)</u>				
Newton Global Growth & Income Fund	3,359,243	1,422,969	4,782,212	4,974,910
Universal Liquidity Fund	-	-	-	3,000
Alternative Investment – Property	-	-	-	42,344
	3,359,243	1,422,969	4,782,212	5,020,254
<u>Movement in Quoted investments</u>				
Market Value 1st January	3,510,302	1,509,952	5,020,254	5,020,254
Additions at cost	44,481	719	45,200	6,208
Disposals at opening market value	(44,680)	(741)	(45,421)	(6,508)
Net unrealised investment gains/losses	(150,860)	(86,961)	(237,821)	361,416
<b>Market value 31st December</b>	<b>3,359,243</b>	<b>1,422,969</b>	<b>4,782,212</b>	<b>5,020,254</b>
Cash on Deposit with Broker	-	-	-	55
<b>Investments – Total</b>	<b>3,359,243</b>	<b>1,422,969</b>	<b>4,782,212</b>	<b>5,020,309</b>
Historic Cost as at 31st December	3,465,556	1,450,134	4,915,690	4,923,861

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

Fund	2011		2010	
	£	%	£	%
Newton: Global Growth and Income Fund	4,782,212	100.0	4,974,910	99.1

#### 4. DEBTORS

	2011 £	2010 £
Trade Debtors	1,316,510	1,159,312
Prepayments and Accrued Income	156,913	154,264
Other Debtors	72,959	75,771
	1,546,382	1,389,347

#### 5. CREDITORS

**(a) Amounts falling due within 1 year**

	2011 £	2010 £
Trade Creditors	15,160	36,296
Accruals	55,333	45,026
Grants Committed	198,861	154,694
Other tax and Social Security	212,178	171,895
Deferred Income	1,114,762	976,805
Other Creditors	78,870	75,866
	1,675,164	1,460,582

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011 (Continued)

#### 5. CREDITORS (Cont.)

<b>(b) Amounts falling due in more than 1 year</b>	<b>2011</b>	<b>2010</b>
	£	£
Grants Committed	79,000	48,000

#### Deferred Income

Balance as at 1 <sup>st</sup> January 2011	976,805
Income received from Fellows in advance	39,568
Released to income	(976,805)
National Astronomy Meeting income received in advance	25,000
Publications income received in advance	1,050,194
Balance as at 31 <sup>st</sup> December 2011	1,114,762

#### 6. INVESTMENT INCOME

	General Fund £	Trust Funds £	<b>2011</b> Total £	<b>2010</b> Total £
<u>Dividends received:</u>				
Unitized/Structured Investments (Other)	144,478	61,148	205,626	209,629
Alternative Investments - Property	793	-	793	2,819
Cash Fund	5,383	2,235	7,618	3
Sub-Total	150,654	63,383	214,037	212,451
Interest from Bank	1,698	61	1,759	2,569
Interest from Stockbroker	13	5	18	22
Totals	152,365	63,449	215,814	215,042

#### 7. PUBLICATIONS

	<b>2011</b>	<b>2010</b>
	£	£
<b>INCOMING RESOURCES</b>		
Monthly Notices of the Royal Astronomical Society	2,196,909	2,083,905
Monthly Notices of the Royal Astronomical Society : Letters	15,458	22,104
Geophysical Journal International	839,070	863,987
Astronomy & Geophysics	73,625	66,565
Other	6,064	4,835
<b>TOTAL</b>	<b>3,131,126</b>	<b>3,041,396</b>
<b>RESOURCES EXPENDED</b>		
Monthly Notices of the Royal Astronomical Society	1,791,342	1,658,591
Monthly Notices of the Royal Astronomical Society : Letters	14,777	17,229
Geophysical Journal International	646,218	654,661
Astronomy & Geophysics	87,572	86,320
Other	5,490	5,550
<b>TOTAL</b>	<b>2,545,399</b>	<b>2,422,351</b>

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011 (Continued)

#### **8. RESOURCES EXPENDED**

##### **BREADOWN OF COSTS OF CHARITABLE ACTIVITY**

Activity	Direct Costs £	Support Costs £	<b>2011</b> Total £	Direct Costs £	Support Costs £	<b>2010</b> Total £
Publications	2,479,391	66,008	2,545,399	2,343,497	78,854	2,422,351
Scientific Meetings	38,917	36,663	75,580	40,987	36,074	77,061
Grants	139,784	38,038	177,822	162,483	38,016	200,499
Membership	-	48,649	48,649	-	59,893	59,893
Educational	4,430	29,396	33,826	7,008	26,603	33,611
Library	94,652	40,710	135,362	102,916	42,964	145,880
Public Policy	42,542	51,001	93,543	26,960	45,354	72,314
Burlington House	127,396	88,229	215,625	131,248	88,260	219,508
Sub-Total	<u>2,927,112</u>	<u>398,694</u>	<u>3,325,806</u>	<u>2,815,099</u>	<u>416,018</u>	<u>3,231,117</u>
Governance	62,322	87,975	150,297	64,783	85,386	150,169
Total	<u>2,989,434</u>	<u>486,669</u>	<u>3,476,103</u>	<u>2,879,882</u>	<u>501,404</u>	<u>3,381,286</u>

Cost allocation - Support Costs – disclosed by Function.

Function	<b>2011</b> Cost £	<b>2010</b> Cost £
Executive	87,033	83,070
Finance	35,725	32,711
Facilities	59,279	55,551
Membership	24,405	18,055
IT	40,484	87,567
Policy Development & Press	59,155	45,741
Non-Attributable	92,613	93,323
Sub-Total	<u>398,694</u>	<u>416,018</u>
Governance	87,975	85,386
Total	<u>486,669</u>	<u>501,404</u>

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.

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011 (Continued)

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

Function	2011 Cost £	2010 Cost £
Audit Fees – Current Year	17,000	15,396
Audit Fees – Prior Year	1,225	4,052
Pension scheme	2,960	3,000
Consultancy	4,000	-
Regulatory	600	-
Trustees' Expenses	13,149	16,807
Trustees' Remuneration	1,780	4,525
AGM Expenses	3,835	4,067
Committee Expenses	4,430	6,010
Staff Time Apportioned	64,412	59,178
Other Expenses	36,906	37,134
<b>Total</b>	<b>150,297</b>	<b>150,169</b>

Governance is 4.2% of Resources Expended (2010 : 4.4%).

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

Role	2011 % of Total	2010 % 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:

		2011 £	2010 £
Depreciation		130,490	132,354
Auditor's Remuneration:	Audit	14,075	15,598
	Consultancy	4,000	-
	Pension Scheme	4,150	3,850
Other Professional Services	Final Salary Pension Scheme:	1,800	9,473
	Stakeholder Pension Scheme	1,083	4,000
	Final Salary Pension Scheme: FRS 17 Val'n	2,960	3,000
	Investment Management Fees	401	255
Operating Lease Rentals	Plant & Machinery	6,429	6,429
Profit on disposal of tangible fixed assets		-	536

#### **9. NET INCOMING RESOURCES FOR THE YEAR (continued)**

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:

	2011 £	2010 £
Lease expiring within two to five years – Plant & Machinery	6,429	6,429

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011 (Continued)

#### 10. STAFF COSTS

Staff costs, including taxable benefits are:

	<b>2011</b>	<b>2010</b>
	£	£
Salaries and wages	474,756	458,945
Taxable benefits (LVs)	1,562	1,524
Employer's National Insurance	48,864	46,685
Pension, Employer's Contributions:		
- Stakeholder Pension Scheme	98,520	60,517
- Death in service contributions	6,134	6,830
- Final Salary Scheme: Other pension costs	38,599	35,319
Annual Premium to eliminate deficit	53,000	-
	721,435	609,820

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) (2010 was 14).

#### **Pension costs**

A qualified actuary carried out a triennial review of the scheme as at 1<sup>st</sup> 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 1<sup>st</sup> 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 1<sup>st</sup> 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 2014).
- Employees continue to contribute at the rate of 5% (5% for 2010).

In contrast to triennial review, the latest FRS17 valuation, at 31<sup>st</sup> December 2011, shows an excess to be recognised of £89,000 (2010 £61,000), due mainly to the fact that the discount rate assumptions for the FRS17 and the triennial valuation are derived using different methodologies as required under the relevant legislation and standards for each type of valuation, also the recovery of investment values in 2010.

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011 (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 2011 amounted to £29,000.

	<b>2011</b>
	£
Expected return on scheme assets	42,000
Interest cost on scheme liabilities	(33,000)
Employer Contributions	40,000
Current service cost	(20,000)
	29,000

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 £91,599 (Including £53,000 towards eliminating the deficit) (2010 £35,319) in respect of the defined benefit pension scheme; £98,520 (2010 £60,517) in respect of the targeted defined contribution scheme and £6,134 (2010 £6,830) 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

	<b>2011</b>	<b>2010</b>
	£'000	£'000
Current service cost	20	36

The best estimate of the contributions expected to be paid to the Scheme by the Society for the year ended 31<sup>st</sup> December 2012 is £93,608 (Including £53,000 towards eliminating the deficit).

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

Expected return on pension scheme assets	42	38
<i>Interest on pension scheme liabilities</i>	(33)	(36)
	9	2

#### **Retirement Benefits Disclosure under FRS17**

The amounts recognized in the balance sheet are as follows:

	<b>2011</b>	<b>2010</b>
	£'000	£'000
Present value of funded obligations	672	605
Fair value of scheme assets	761	666
Excess in scheme at end of the year and available to the Society	89	61



## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011 (Continued)

#### 10. STAFF COSTS (continued)

##### Pension costs (continued)

The excess in the scheme (£89,000) 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 (£89,000).

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

	<b>2011</b>	<b>2010</b>
	£'000	£'000
Opening defined benefit obligation	605	685
Service cost (net of employee contributions)	20	36
Interest cost	33	36
Actuarial loss	9	14
Employee contributions	5	7
Benefits paid	0	(173)
Closing defined benefit obligation	672	605

Changes in fair value of scheme assets are as follows:

	<b>2011</b>	<b>2010</b>
	£'000	£'000
Opening scheme assets	666	733
Expected return	42	38
Actuarial (loss)/gain	(45)	19
Contributions by employer	93	42
Employee contributions	5	7
Benefits paid	-	(173)
Closing scheme assets	761	666

The amounts recognized in income and expenditure are as follows:

	<b>2011</b>	<b>2010</b>
	£'000	£'000
Current service cost (net of employee contributions)	(20)	(36)
Interest on obligation	(33)	(36)
Expected return on scheme assets	42	38
Total	(11)	(34)

The actual return on scheme assets was (£3k) (2010: £57k).

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

	Current year		Cumulative	
	<b>2011</b>	<b>2010</b>	<b>2011</b>	<b>2010</b>
	£'000	£'000	£'000	£'000
Actuarial gains/(losses)	(54)	5	(379)	(325)

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011 (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	
	2011	2010	2011	2010
	%	%	%	%
Equities	41	45	5.5	6.6
Bonds	47	40	3.2	3.9
Property	12	15	3.7	5.6
Cash	-	-	3.0	4.1
	100	100	4.2	5.4

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

	<b>2011</b>	<b>2010</b>
Discount rate at 31 December	4.8%	5.4%
Expected return on scheme assets at 31 December	4.2%	5.4%
Future salary increases	3.0%	3.7%
Future pension increases –pension earned before 6 <sup>th</sup> April 1997	0.0%	0.0%
Future pension increases –pension earned after 6 <sup>th</sup> April 1997	2.7%	3.4%
Proportion of employees opting for early retirement	0.0%	0.0%
Inflation (RPI)	2.9%	3.6%

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:

	<b>2011</b>	<b>2010</b>
Retiring now		
Male	22.1	22.0
Female	24.3	24.1
Retiring in 20 years		
Male	23.4	23.4
Female	25.9	25.7

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

Defined benefit pension scheme:

	2011	2010	2009	2008	2007
	£'000	£'000	£'000	£'000	£'000
Defined benefit obligations	672	605	685	441	795
Scheme Assets	761	666	733	581	722
Excess/(shortfall)	89	61	48	140	(73)
Experience adjustments on scheme liabilities – gain/(loss)	(45)	14	9	(61)	(2)
Experience adjustments on scheme assets – gain/(loss)	(34)	19	73	(79)	(18)

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011 (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 £13,149 (£16,807 for 2010). Remuneration, total £1,780, was paid to a Trustee during 2011 (£4,525 for 2010). Legal authority for this payment has been obtained from the Charity Commission.

#### **12. ANALYSIS OF NET ASSETS BETWEEN FUNDS**

	General & Designated Funds £	Restricted £	Total <b>2011</b> £
Fund Balances at 31st December 2011 are represented by:			
Tangible fixed assets	1,506,991	684	1,507,675
Heritage assets	9,589,749	-	9,589,749
Investments	3,359,241	1,422,971	4,782,212
Current assets – cash at bank and in hand	1,045,936	261,931	1,307,867
- other	1,478,805	67,577	1,546,382
Current liabilities	(1,666,532)	(87,632)	(1,754,16)
Defined benefit pension scheme asset	89,000	-	89,000
<b>Total Net Assets</b>	15,403,190	1,665,531	17,068,721
<b>Unrealised gains included above</b>			
<b>On investment assets</b>			
Total Unrealised Gains at 31 <sup>st</sup> December 2011	(114,262)	(27,164)	(141,426)
<b>Reconciliation of Movements in Unrealised gains on Investment Assets</b>			
	£	£	£
Net losses arising on revaluations in year	-	-	-
Net movement in year	(150,860)	(86,961)	(237,821)
Unrealised gains at 1st January 2011	36,598	59,797	96,395
Unrealised Losses at 31 <sup>st</sup> December 2011	(114,262)	(27,164)	(141,426)
<b>Gains on the revaluation of Investment Assets:</b>			
	£	£	£
Realised losses during year	(8,058)	(1)	(8,059)
Movement in unrealised gains during year	(142,912)	(86,960)	(229,872)
Total per Statement of Financial Activities	(150,970)	(86,961)	(237,931)

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011 (Continued)

#### 13. RESTRICTED FUNDS

	Balance 01-Jan-11 £	Incoming resources £	Resources expended £	Transfers £	Unrealised gains, losses/ on sales £	Balance 31-Dec-11 £
<b>Research &amp; Grants Fund</b>	1,491,350	73,865	(122,090)	55,000	(75,797)	1,422,328
<b>Benevolent Fund</b>	61,356	2,221	(95)	-	(2,730)	60,752
<b>Library Fund</b>	32,375	1,172	(1,173)	-	(1,440)	30,934
<b>Education Fund</b>	51,855	3,210	(1,000)	-	(2,307)	51,758
<b>Lectures &amp; Awards Fund</b>	105,339	3,814	(4,710)	-	(4,687)	99,756
<b>Grand Totals</b>	<u>1,742,275</u>	<u>84,282</u>	<u>(129,068)</u>	<u>55,000</u>	<u>(86,961)</u>	<u>1,665,528</u>

£55,000 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](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)

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2011 (Continued)

#### 14. UNRESTRICTED FUNDS

	----- Designated Funds -----					
	Burlington House Fund £	Building Fund £	Open Access Fund £	Heritage Asset Fund £	Unrestricted General Fund £	Total £
<b>Balance 1st January 2011</b>	<b>1,562,204</b>	<b>306,277</b>	-	-	<b>3,990,741</b>	<b>5,859,222</b>
<b>Total Incoming Resources</b>	-	-	-	-	<b>3,696,306</b>	<b>3,696,306</b>
<b>Total Resources Expended</b>	-	<b>(4,024)</b>	-	-	<b>(3,478,090)</b>	<b>(3,482,114)</b>
<b>Other recognised gains &amp; losses</b>						
Loss on Pension Scheme	-	-	-	-	(54,000)	(54,000)
Losses on investment assets	-	-	-	-	(150,970)	(150,970)
Heritage Assets	-	-	-	9,589,749	-	9,589,749
<b>Gross transfers between funds</b>						
Transfer (to)/from general unrestricted fund	(91,683)	91,683	100,000	-	(155,000)	(55,000)
<b>Balance 31<sup>st</sup> December 2011</b>	<b>1,470,521</b>	<b>393,936</b>	<b>100,000</b>	<b>9,589,749</b>	<b>3,848,987</b>	<b>15,403,193</b>

#### 15. GRANTS COMMITTED

Grants to the value of £195,000 have been committed for future payment, subject to certain conditions, specified by the Society, having been met (2010: £192,000). 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 2011.

# Royal Astronomical Society

## APPENDIX

### 2011 GRANTEES - RESTRICTED FUNDS (Including expenditure committed, to be claimed)

Grants – Institutions			
Date	Institution	Detail	£
01/11	University of Sussex	Undergraduate Research Bursary	1,440
01/11	Forestry Commission Scotland	Dark Sky Park Events	2,000
02/11	Natural Environment Research C'l	Early Career Researchers' Workshop	1,665
02/11	Science & Technology Facilities C'l	Support E-ELT at the Royal Society Summer Exhibition	1,000
03/11	Queen's University Belfast	Attendance, IAUS 279 Conference, Japan	1,000
03/11	University of Warwick	Attendance, Workshop, Cluster 10 <sup>th</sup> Anniversary, Corfu	635
03/11	University of Southampton	Constraining Coronal Energy Content in X-ray	1,080
04/11	Cardiff University	A United Approach to Scalar Field Cosmologies	1,080
04/11	University of Glasgow	Summer School Bursary	1080
04/11	Armagh Observatory	Astronomy Exhibition at Royal Albert Hall	3,000
05/11	Open University	Attendance, Mars Conference	611
05/11	Open University	Isolation of Novel Extremophiles from Icelandic Volcanic Environment	500
05/11	University of Sussex	Attendance, LOFAR Plenary Meeting	458
05/11	University of Sussex	Attendance, Workshop, Galaxy & Large-scale Structure Formation	2,000
05/11	University of Sussex	Research Using Hermes	1,080
05/11	Exmoor National Park	Dark Sky Reserve Application	1,000
05/11	University College London	Auroral Explorer at the Royal Society Summer Exhibition	1,000
05/11	University of Glasgow	Attendance, AGU Meeting	800
05/11	University of Central Lancashire	Summer Student Bursary	1,080
06/11	University of Glasgow	2 Summer Student Bursaries	1,080
06/11	University of Glasgow	Summer Student Bursary	1,080
06/11	University of Southampton	Summer Student Bursary	1,080
06/11	Northumbria University	3 Travel Grants to Attend Workshops	1,020
06/11	University of Oxford	Contribution to "From Atoms to Stars" Conference	3,100
06/11	University of Exeter	Attendance, Resolving the Future of Astronomy with Long-Baseline Interferometry Workshop	300
06/11	Liverpool John Moores University	Attendance, Supernova Conference & Workshop, Sydney, Australia	500
07/11	University College London	Summer Studentship	1,080
07/11	University of Oxford	Summer Student Bursary	1,080
07/11	University of Sussex	Summer Student Bursary	1,080
07/11	University of Glasgow	Conference Support for the 13 <sup>th</sup> European Solar Physics Meeting	675
07/11	University of Manchester	Attendance, URSI GASS, Istanbul	1,000

## Royal Astronomical Society

07/11	Campaign for Science and Engineering	Subscription	500
08/11	University of London (MSSL)	Undergraduate Research Bursary	1,080
08/11	University of Manchester	Support, 2011 Young European Radio Astronomy Conference	2,000
08/11	University of London (MSSL)	Undergraduate Research Bursary	1,080
08/11	Keele University	Building Bridges: Cooperation of UK and Iranian Astronomers	3,200
08/11	University of Leeds	Summer Student Bursary	1,080
08/11	University of Glasgow	Summer Student Bursary	1,080
10/11	Liverpool John Moores University	Attendance, Milky Way 2011	425
10/11	Liverpool John Moores University	Attendance, IAU Symposium 285	332
10/11	University of Manchester	Summer Student Bursary	1,080
11/11	St. Catherine's College, Cambridge	An Observatory Dome for Oxford University Space & Astronomical Society	600
11/11	University of Oxford	Support Public Lecture, IAU Symposium 285	488
11/11	Techniquet	Planetarium Show for wales	2,500
12/11	Royal Astronomical Society Club	Visting Speakers	1,076
12/11	Federation of Astronomical Societies	Support during BBC Stargazing Live 2012	2,000
		Sub-Total	54,105
05/11	University of Oxford	Refund – Holes in the Cosmic wave Background	(360)
		Sub-Total	53,745

### 2010 GRANTEES – RESTRICTED FUNDS (Including expenditure committed, to be claimed)

Expenditure Committed – To be Claimed			
02/10	University of Oxford	Student Bursary	1,440
02/10	University of Southampton	Student Bursary	1,440
02/10	University of Southampton	X-ray Variability	1,080
08/10	University of Durham	Raising Astronomical Aspirations in Durham Schools	1,000
08/10	University College London	Organisation Support for JENAM 2010	1,000
08/10	University of Manchester	Public Lecture Associaied with Asymmetric Planetary Nebulae	413
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
02/11	University of Oxford	Where do Galaxies Merge?	1,080
08/11	University of Portsmouth	Attendance, IAU Symposium 295	1,500
08/11	University of Glasgow	Support for PhD Student Research Trip, National Solar Observatory, Arizona	890

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08/11	University of Birmingham	Attendance, LIGO/Virgo Collaboration Meeting	538
08/11	University of Nottingham	Attendance, IAU Symposium 280	300
08/11	University of Leeds	Symposium, Studies of the Earth's Deep Interior	3,000
08/11	Queen's University, Belfast	Support, 17 <sup>th</sup> International Conference on Atomic Processes in Plasmas	1,250
08/11	Dark Sky Wales	Teacher Training for GCSE Astronomy	4,200
12/11	University of Nottingham	Research Fellowship	44,000
		Sub-Total	66,711
01/09	Expenditure Committed, to be claimed	B/F	-15,993
		<b>Sub-Total – Institutions</b>	<b>104,463</b>
<b>Grants and Awards – Restricted Funds – Individuals</b>			
01/11	Research & Grants	Support for the 2010 KITP programme	900
01/11	Research & Grants	Attendance, AGU Meeting	900
01/11	Research & Grants	Attendance, AAS Meeting	564
02/11	Research & Grants	Attendance NAM 2011	950
03/11	Research & Grants	Assembling the Puzzle of the Milky Way	218
03/11	Research & Grants	Attendance, Lunar & Planetary Science Conference	500
04/11	Research & Grants	International Dark Skies Association Conference	425
04/11	Research & Grants	Attendance, Astronomical Sciences Conference	500
05/11	Research & Grants	Attendance MAPS Workshop	545
05/11	Research & Grants	Fees, International Space University	400
05/11	Research & Grants	Research Bursary, General Relativity	1,080
06/11	Research & Grants	Undergraduate Research Bursary	1,080
06/11	Research & Grants	Attendance, IAU Symposium 282	230
06/11	Research & Grants	Attendance, IAU Symposium 280	232
06/11	Research & Grants	Travel Grant for Visiting the USA	1,345
06/11	Research & Grants	Attendance Cosmological Frontiers in Fundamental Physics Conference, Paris	410
06/11	Research & Grants	Attendance at Summer School, Princeton, USA	500
07/11	Research & Grants	Attendance, International Pulsar Timing Array, Summer Workshop, USA	500
07/11	Research & Grants	Dark Sky Podcast Support	1,993
07/11	Research & Grants	Astronomical Heritage Portal Development	3,000
07/11	Research & Grants	Student Oral Presentation & Poster Prizes	100
07/11	Research & Grants	Bursary to Visit Origin 2011, Montpellier	532
07/11	Research & Grants	Attendance, Magnetospheres of the Outer Planets, Meeting, Boston, USA	800
07/11	Research & Grants	Travel Grant, Attendance International Conference	333
08/11	Research & Grants	Attendance, International Conference, USA	385



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08/11	Research & Grants	Attendance, XXX General Assembly URSI, Istanbul	706
09/11	Research & Grants	Attendance, Conference, Palermo	700
09/11	Research & Grants	Attendance, Conference, Palermo	1,000
10/11	Research & Grants	Attendance, Workshop, Jaipur, India	450
11/11	Research & Grants	Attendance, onference, Villars, Switzerland	650
		Sub Total	21,928
	Expenditure Committed – To be Claimed		
02/10	Research & Grants	Attendance at Conference, KITP, University of California	200
02/10	Research & Grants	Attendance at APN5 Conference	285
02/10	Research & Grants	Attendance at IAU Symposium 271	480
08/10	Research & Grants	Visit to MSSL	400
08/10	Research & Grants	Attendance at Conference “A Universe of Dwarf Galaxies”	500
08/10	Research & Grants	International Space University Fees	1,500
08/10	Research & Grants	Attendance, “Asteroids, Comets and Meteors”, Japan	800
08/10	Research & Grants	Attendance, Asymmetric Planetary Nebulae V Conference	250
08/10	Research & Grants	Attendance, 5 <sup>th</sup> Alfven Conference	1,018
08/10	Research & Grants	Meteor Camera for Meteorwatch	284
02/11	Research & Grants	Attendance, 42 <sup>nd</sup> Lunar and Planetary Science Conference	400
08/11	Research & Grants	Attendance, Signposts of Planets Conference	750
08/11	Research & Grants	Non-Gaussian Signatures in the Cosmic Microwave Background	850
08/11	Research & Grants	Attendance, AAS Meeting	833
08/11	Research & Grants	King Charles II and the ‘Noon-Day’ Birth Star	1,100
08/11	Research & Grants	Attendance, EPSC-DPS Joint Meeting	500
		Sub Total	10,150
01/11	Expenditure Committed, to be claimed	B/F	-15,081
		<b>Sub-Total – Individuals</b>	<b>16,997</b>
	Benevolent Fund		95
	Lecturers and Awards Fund		4,709
		<b>Sub-Total – Individuals</b>	<b>21,801</b>
		<b>GRAND TOTAL</b>	<b>126,264</b>

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### 2010 GRANTEES – GENERAL FUND - IYA 2009 and Research Fellowships

<b>Grants – Institutions</b>			
03/11	Highfield Science Specialist School	Highfield IYA 2009 Celebration	500
03/11	Woolsthorpe Manor	Telescopes – The Bigger Picture	1,000
03/11	Norman Lockyer Observatory	A Sunny Day at the Norman Lockyer Observatory	388
04/11	National Maritime Museum	Service Harrison Regulator Clock	10,000
05/11	Herschel House Trust	Annual Grant	750
12/11	Institute of Astronomy, Edinburgh	Research Fellowship	32,570
12/11	University of Cambridge	Research Fellowship	48,650
12/11	Durham University	Research Fellowship	11,508
		Sub-Total	105,366
<b>Expenditure Committed – To be Claimed</b>			
12/11	University of Cambridge	Research Fellowship (Balance 2 <sup>nd</sup> Year + 3 <sup>rd</sup> Year)	77,000
12/11	Imperial College London	Research Fellowship (2013)	44,000
12/11	Durham University	Research Fellowship (Balance 1 <sup>st</sup> Year)	36,000
12/11	University of St. Andrews	Research Fellowship (1 <sup>st</sup> Year)	44,000
		Sub-Total	201,000
01/11	Expenditure Committed, to be claimed	B/F	-171,620
	<b>Charitable Activities – Grants (General Fund)</b>	<b>TOTAL</b>	<b>134,746</b>
	<b>Charitable Activities – Grants</b>	<b>TOTAL</b>	<b>261,010</b>
12/10	Royal Astronomical Society Library	Support for Library	1,173
	<b>Charitable Activities - Library</b>	<b>TOTAL</b>	<b>1,173</b>
	<b>GENERAL &amp; RESTRICTED FUNDS</b>	<b>GRAND TOTAL</b>	<b>262,183</b>