

**ROYAL ASTRONOMICAL SOCIETY**  
**TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2010**

**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 2010 were:

Professor A.C. Fabian (President until May)  
Professor R. L. Davies (President after May)  
Professor A.M. Cruise (Vice-President until May)  
Professor J.E. Drew (Vice-President)  
Professor M.A. Hapgood (Vice-President until May)  
Professor M. Kendall (Vice-President after May)  
Professor O. Lahav (Vice-President after May)  
Professor J.C. Zarnecki (Vice-President)  
Professor P.G. Murdin (Treasurer)  
Professor M.A. Barstow (Secretary)  
Dr I.A. Crawford (Secretary)  
Dr H.J. Walker (Secretary)  
Dr R.J. Barber (Councillor)  
Professor K. Blundell (Councillor)  
Dr P.K. Browning (Councillor)  
Dr E. Bunce (Councillor)  
Dr I.F. Corbett (Councillor)  
Professor M.G. Edmunds (Councillor until May)  
Professor B. Gibson (Councillor until May)  
Dr J. Greaves (Councillor until May)  
Professor A.W. Hood (Councillor)  
Professor D.W. Hughes (Councillor)  
Professor R. Ivison (Councillor)  
Dr A. Norton (Councillor)  
Professor D.J. Southwood (Councillor)  
Professor R.E. Spencer (Councillor)  
Mr M. Thompson (Councillor)  
Dr J. Wild (Councillor until May)

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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  
Editorial Assistants: Anna Evripidou; Valerie Dennis (½ post); Sylvia Hales; Bella Lock; Fern Storey (½ post); Claire Williams  
Membership Secretary: Ronald Wiltshire (until May); Fern Storey (½ post from May)  
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

**Auditors**

Baker Tilly UK Audit LLP  
1<sup>st</sup> Floor  
46 Clarendon Road  
Watford  
Herts  
WD17 1JJ

**Investment Advisors**

Newton Investment Management Ltd  
The Bank of New York Mellon Centre  
160 Queen Victoria Street  
London EC4V 4LA

**Principal and Registered Office**

Burlington House  
Piccadilly  
London W1J 0BQ

Registered Charity Number 226545

## **2. STRUCTURE, GOVERNANCE AND MANAGEMENT**

The Royal Astronomical Society was founded in 1820 and is incorporated by Royal Charter. The Charter is dated 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 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 nearly 3,700 Fellows and Honorary Fellows, of whom 1/3 are based in some 60 overseas countries; 18% are under the age of 34 and 27% are more than 65; approximately 14% 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 2010 except that it was agreed that, with effect from 2011, the election of Presidents would take place 12 months before the commencement of their period of office during which time they would be invited to meetings of Council as an observer.

### **Trustee induction and training**

Following the announcement of the election results, see above, information is sent to all new Trustees and they are invited to attend an induction programme before their first Council meeting. This covers information about trustee liabilities and responsibilities, financial control, management of conflict of interests, membership, committees, activities and risks. It is also an opportunity for new trustees to ask questions and familiarise themselves with the organisation 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, organising scientific meetings and formulating RAS policy for the consideration of Council. The President and Vice-Presidents are responsible for chairing meetings, and representing the RAS externally. The Treasurer is responsible for the

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

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

### **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, providing the media with expert commentary on newsworthy astronomy topics, contributing to the government's science policy and supporting the activities of affiliated bodies. 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 2010 were to promote the interests of the professional community of astronomers and geophysicists, whether or not Fellows, on whom the advancement and dissemination of new knowledge depends, by:

- Campaigning for an outcome from the Comprehensive Spending Review, scheduled to follow the General Election, which would sustain the global status of UK astronomy and geophysics research and teaching;
- Challenging a narrow interpretation of 'impact', a criterion of increasing importance in research funding decisions, since otherwise it could adversely impact on curiosity driven or 'blue-skies' research (whose outcomes, by definition, are unpredictable and long-term);
- Cooperating more closely with the geophysics community including the BGA and the *Natural Environment Research Council* (NERC) – which in addition to funding solid-earth geophysics, inherited responsibility for earth-orientated solar-terrestrial physics research from the *Science and Technology Facilities Council* (STFC);
- Supporting the National Astronomy Meeting in Glasgow;
- Sponsoring more scientific meetings outside London;
- Expanding the *Friends of the RAS*;
- Recognising outstanding figures in UK astronomy and geophysics by initiating a 'blue plaque' scheme;
- Facilitating career break scientists to return to work by offering to sponsor a *RAS Daphne Jackson Fellowship*;
- Considering whether to cut production and distribution costs by ceasing print publication of its research journals;
- Publishing at least 2 books in the RAS-Springer series;

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- Re-launching a re-designed web site with improved navigation and content;
- Installing a membership management data base;
- Redesignating the Policy and Press Officer as (full time) 'Deputy Executive Secretary', with additional responsibility for education.

**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 4<sup>th</sup> commencement order of the Charities Act 2006.

**4. ACHIEVEMENTS AND PERFORMANCE**

**Public Policy & the Professional Community**

Throughout 2010, the Society made the case for its sciences to receive an adequate settlement in the coalition government's first Comprehensive Spending Review. All MPs with a recorded interest in science were sent the Society's booklet *A New View of the Universe* which illustrated on the impact of astronomy on wider society. Community opinions were aired at three meetings of the *Astronomy Forum*, where representatives from STFC engaged with professional astronomers and space scientists.

The RAS directly, or indirectly via the *British Geophysical Association*, contributed evidence to the following House of Commons Science and Technology Select Committee inquiries:

- The impact of spending cuts on science and scientific research
- Scientific evidence and advice in emergencies (Space Weather)
- UK Space Agency
- Regulation of geo-engineering.

In addition, evidence was submitted to the Engineering and Physical Sciences Research Council's *International Review of Mathematical Sciences* and the British Geological Survey consultation on *Earth Sciences in the 21<sup>st</sup> Century*. Finally, the Society encouraged STFC to resolve the tension created funding international subscriptions, shared UK facilities and core grants from the same budget and to improve the efficiency of grants management.

Cooperation with the solid - earth geophysical community was further enhanced through meetings with NERC and by the election of the President of the BGA to the Council of the Society.

Copies of reports and submissions can be downloaded from the RAS web site at [www.ras.org.uk](http://www.ras.org.uk).

The Society issued a total of 67 press releases in 2010 and the Deputy Executive Secretary gave 30 radio and 35 television interviews. Social media accounts were set up on Twitter, Facebook and LinkedIn to promote and publicise its activities.

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**Education & Public Outreach**

The Society, through its Education Committee, developed a strategy to exploit the legacy of the *International Year of Astronomy 2009*, particularly by sustaining the *Telescopes for Schools* and *Meteorwatch* projects, and to increase its support for teachers of school level astronomy through engagement with the UK *European Space Education Resource Office* and *EdExcel*, the sole provider of GCSE astronomy examinations. In addition, existing programmes were continued into 2010 viz:

- A competition for school pupils (who were asked how they might describe or review the contents of the first message from an extra-terrestrial civilization). Prizes, in the form of telescopes and binoculars, were awarded to the winning entries.
- Free monthly public lunchtime lectures on topics including *Comets: Ghostly Wanderers in Space*; *Space Weather: A New Natural Hazard for the 21<sup>st</sup> Century*; *The Search for Gravity Waves* and *The Universe of Galaxies*. A complete list is available at <http://friends.ras.org.uk/>.
- *Burlington House Lectures* (public lectures arranged in cooperation with the other learned societies occupying Burlington House) on *The Eerie Silence – Amplified* and *Capital Cosmos: London's eye on the heavens*. Further details can be found at <http://www.burlingtonhouse.org/aboutus.asp>.
- Meetings for *Friends of the RAS* including *Sir Isaac (Newton) Remembers* and *How it Ends: from You to the Universe*. In addition, there were excursions to the Observatory Science Centre at Herstmonceux and to the Royal Observatory at Greenwich. The number of *Friends* in 2010, at 135, was 8 fewer than in 2009, when the scheme was launched. While doubtless their numbers could be boosted by restricting the popular lunchtime lectures to *Friends* only, rather than simply giving them advanced booking privileges, this would run counter to the Society's greater interest in extending public outreach. Further details are at <http://friends.ras.org.uk/>.
- Under the agreement with Cunard during 2010, 14 RAS Astronomy Lecturers made presentations (and weather permitting) organised deck observations on cruise liners as part of the on-board *Insights* programme.
- There was a special schools session at the Society's annual conference, held in Glasgow, in which school students presented papers on space weather, and three evening lectures including *Magic of the Sun and Stars*, by the Astronomer Royal for Scotland, *How to Use a Million Astronomers - The Galaxy Zoo and Beyond* and *Here is the Space Weather*.
- As in previous years 2 prizes of £1,000 each, sponsored by *Wiley-Blackwell*, were awarded respectively to the best astronomy and geophysics PhD thesis submitted to a UK university in 2010.
- The Society continued to maintain a list of professional astronomers available to give school talks.
- The Society's premises, when not required for its own meetings and those organised by members in pursuit of the Society's objectives, were made available on 41 occasions to other organisations including the *Society for Popular Astronomy*, *British Astronomical Association*, *Science and Technology Facilities Council*, *Society for the History of Astronomy*, *Wiley-Blackwell*, *British Sundial Society* and the *World Land Trust*.

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**Meetings**

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

- The 5-day *National Astronomy Meeting (NAM)* in 2010 was held at the University of Glasgow which was celebrating the 250<sup>th</sup> anniversary of the establishment of its Regius Professorship of Astronomy. Organised jointly with the *UK Solar Physics (UKSP)* and *Magnetospheric Ionospheric and Solar-Terrestrial Physics (MIST)* 551 delegates, in addition to 20 members of the press and 10 exhibitors, registered to attend the 14 plenary talks on topics ranging from *Life on Titan* to *Gravitational Wave Astronomy* and 35 parallel sessions covering a comprehensive range of topics (and featuring a high proportion of presentations by graduate students, who also figured prominently among the authors of the 160 poster presentations).
- 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. Meetings included talks by the Harold Jeffreys lecturer Professor Steve Miller (*Do Extrasolar Planets go Bang?*) and Piers Sellers, NASA Astronaut (*Getting to Orbit and Staying There*). 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 including *Explosive Transients - Detection and Follow-up* (Liverpool John Moores); *The Astrophysics of Transient Phenomena* (Dublin) and the annual *Eddington* (Cambridge) and *Grubb Parsons* (Durham) lectures.

A list of all meetings is available on the RAS web site at [www.ras.org.uk](http://www.ras.org.uk).

**Grants and Fellowships**

In 2010, the Society awarded grants from the Restricted Funds totalling £44,749. The reduction from £127,538 in 2009 reflected the early termination of the *Sir Norman Lockyer Fellowship*. 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 2010 grantees see the Appendix.

In addition, the 2010 RAS Fellowships programme was inaugurated to supplement the pool

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of post-doctoral research assistants and thereby compensate to some degree for the reduction of career opportunities caused by cuts imposed by the Research Councils. Subject to annual review of the budgetary situation it was decided to award three new Fellowships p.a. for 3 years starting in October 2010 on the same terms and conditions as the Society's *Sir Norman Lockyer Fellowship* except that, while applicants could be of any nationality, to achieve the aim of rescuing careers affected by the domestic funding crisis, it was stipulated that they needed to be 'ordinarily resident' in the UK and to have had their PhD awarded no more than 5 years before the commencement of the fellowship. The first fellow was appointed in time to take up his award during 2010 and a second tranche was advertised for 2011 resulting in the Society entering into commitments of over £750,000.

In the absence of a suitable candidate, the provision of funding for a *RAS Daphne Jackson Fellow* was not called upon in 2010 and has been carried over into the following year.

### **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 2011 awards, selected in 2010, included Professor Richard Ellis and Professor Eberhard Grün (Gold Medals); Professor Gilles Chabrier (Eddington Medal); Professor Roger Searle (Price Medal); Professor Matt Griffin (Jackson-Gwilt Medal); Dr Vasily Belokurov and Dr James Wookey (Fowler Awards); Dr Sugata Kaviraj and Dr Leigh Fletcher (Winton Capital Awards). In addition, Professor Michael Turner, Dr Lyndsay Fletcher and Professor Alex Vilenkin, respectively, were invited to give the 2011 Darwin, Harold Jeffreys and Gerald Whitrow Lectures

A complete list of previous prizewinners is available on the RAS website at [www.ras.org.uk](http://www.ras.org.uk).

### **Library**

From 2010 the library ceased to subscribe to the majority of the 300 periodicals in astronomy and geophysics it had previously taken, since, overwhelmingly, they were of interest to researchers who normally have the use of institutional research libraries so that the Society's copies were rarely, if ever, consulted. Instead, the library would develop its role as a repository of ceased titles (of which it has over 3,000), books (some 10,000 spanning popular astronomy to conference proceedings), historically important holdings (it has the largest collection of astronomical rare books in England, with over 5,000 items published before 1851) and images. With reference to the last point, under an arrangement with the *Science Photo Library*, by the end of 2010 some 1,100 images from the Society's collection were available for licensing resulting in 168 licenses being disseminated to a wide range of publications (generating £4,971 in revenue).

For further details see the RAS Photographic Archive On-Line at [www.ras.org.uk](http://www.ras.org.uk)

### **Publications**

#### **A. Journals**

The RAS publishes 2 research journals:

- *Monthly Notices of the Royal Astronomical Society* ('MNRAS'), is one of the world's

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leading primary research journals in astronomy and astrophysics. Its publisher, *Wiley-Blackwell*, prints, 3 times per month, the results of original research in any kind of astronomy, including 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. 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.

The Society owns the journals and the scientific review process, for which it relies on the cooperation of the community, but it contracts out the processes for production, sale and distribution. This delegates the non-scientific aspects of publication to a commercial organisation with appropriate expertise and access to the necessary capital resources. 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. However, the increasing support for the journals from authors demonstrates how welcome the policy is, and, even though the market judgment about the journals is placed entirely in the consumers' hands, the demand for RAS journals has held up because of their high quality - and as a result of their being 'bundled' and sold under licence to library and other consortia with other e-versions of scientific journals published by *Wiley-Blackwell*. In the event that funders of the research published in the Society's journals move to providing authors with grants to pay for publication in open-access journals or repositories, and require them to do so, 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. Any move, though, by research funding bodies or governments to mandate authors to deposit papers in open access repositories immediately, or after only a minimal embargo period, could have very serious consequences since many authors and subscribers might avail themselves of this non-paid option. Without either author or subscriber income the Society would lose the means not only to sustain the journals in their current form but to fund many other of its other activities. The Publications Management Committee, comprising representatives of *Wiley-Blackwell*, the editors, and the Society provide strategic co-ordination. The increased preference of readers for the e-version of papers published in its research journals makes the decision to discontinue print editions, and thereby reduce production and distribution costs, less a matter of 'if' than of 'when'. An in-depth review in 2010 concluded that, in the case of *MNRAS*, this was likely to happen in the next 2 years but somewhat later for *GJI*.

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Professor R.F. Carswell remained Editor-in-Chief of MNRAS. During 2010 the number of papers submitted for publication in MNRAS increased by 6%; the median period from receipt at W-B to a paper appearing as an electronic publication changed from 21 days in 2009 to 16 days in 2010 for MNRAS Letters, and from 39 days to 34 days for MNRAS Main Journal. The impact factor changed from 5.185 in 2009 to 5.103 in 2010. The number of article downloads for 2010 (for all usage platforms excluding ADS) was 562,293, an increase of 20% on 2009. ADS usage increased from 818,442 in 2009 to 981,619 in 2010, an increase of 19.9%. The total number of downloads in 2010 was 1,543,912, an increase of 24% compared to 2009. The 2010 institutional subscription rate was 101% of that in 2009, for the Main Journal, and 117% 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 2009. The number of published articles remained steady; there were 429 articles published in 2010 compared to 427 in 2009. The impact factor changed from 2.219 in 2009 to 2.435 in 2010. There were 266,839 full text downloads in 2010, an increase of 35% compared to 2009. 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 Wiley platform for 2010 was 27,040, an increase of 20% compared to 2009. There was a 93% renewal rate in institutional subscriptions.

In 2010, 3,899 libraries had access to MNRAS and 3,788 to MNRAS Letters through the Wiley-Blackwell licensed sales programme. 3,913 libraries had access to GJI and 3,752 to A&G.

**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. Given this constrained objective it is perhaps unsurprising that, while several new titles were under active consideration during 2010, none were published. The series editor, Dr S.Mitton, is currently editing the autobiographical memoirs of Thomas Gold FRS which is aimed for publication during 2011

**Other**

- The Librarian and the Astronomical Heritage Committee maintained oversight over the historic instruments and other artefacts on long term loan to museums and other public places including 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* and an 8" refracting telescope at the *Institute of Astronomy, Cambridge*. A design was agreed for the first 'blue plaque' to honour Isaac Roberts (died 1904), a gold medallist of the Society and pioneer of astrophotography. This is intended to be the first of a series to commemorate outstanding figures in UK astronomy and geophysics by affixing plaques on buildings associated with them.
- A new membership management data base was installed to facilitate accurate record keeping and reduce manual administration.

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- A newly designed website with improved site navigation and inter-activity was launched.
- The Society participated in the London *Open House* in September to allow the public to inspect the architectural and other features of the listed building housing the Society.
- Regular meetings were held with the other Learned Societies occupying the Burlington House courtyard, and with the Landlord and its managing agent, to ensure that the fabric of the building and courtyard were properly maintained and that the health and safety of staff and the public using them were adequately protected.
- The *RAS jobs list*, which is emailed to those requesting it, continued to provide a free advertising service to employers seeking staff in astronomy and geophysics.
- At the Annual General Meeting it was reported that the 2010 Council election had resulted in 812 valid ballot papers (830 in 2009) being cast for some 15 candidates (14 in 2009).

## **5. FINANCIAL REVIEW**

### **Reserves Policy**

Under the Society's Reserves Policy, apart from 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 – Notes to the Financial Statements, Accounting Policies f), the General Funds both 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 established, the largest risk was the loss of the premises: 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 risks to do with the maintenance of the building. Other principal risks considered in 2003 included the risks of under-performance of the final salary pension fund, under-performance of the publications (possibly even their sudden financial collapse due to changes of publication methods originating from external regulatory or technological developments), and the risk of having to wind up the Society. The reserve needed was estimated in 2003 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 is currently estimated to ramp down from a little over £1M p.a. over the 4 years, suggesting that a reserve of about £3M is prudent and conservative. At the end of 2009 the reserves stood somewhat above this level, although the reserves are held in liquid assets whose value is dependent on stock-market conditions, which at the moment are quite volatile, a risk of increased size and probability 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. The continuing stockmarket recovery of 2010, with its beneficial effect on the value of the reserves, and the financial health of the Society due to the increasing membership numbers and the commercial success of the publications programme encouraged the Council to consider further commitments, that can be progressively released from year to year, depending on developing financial circumstances, in particular to extend the fellowship

## **Royal Astronomical Society Trustees' Report for the year ended 31 December 2010 (continued)**

programme beyond the nine envisaged by the 2010 programme. The free reserves of the Society as at 31st December 2010, defined as being unrestricted, undesignated funds not represented by fixed assets, were £3,864,854 (£3,467,880 a year earlier).

### **Investment policy**

The Society holds cash on deposit, and investments (mostly in collective investment funds, including Common Investment Funds (CIFs) for charities which are backed by an identifiable asset, such as shares quoted on the stock exchange, bonds, property or cash). 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 to retain a balance between generating income to spend on immediate charitable objective and preserving capability in the future. The return of the main fund for 2010 was 12.8%. In a change from recent years, 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 0.5%. The fund manager has explained that the principal reason for the underperformance is that the fund is light in financial stocks (which were the main recovery stocks in 2009-10), the manager retaining a scepticism about the long term prospects of the banking sector.

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.

### **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 the *Donor Strategy* software, which will be oriented towards collection of payments electronically through various contractors supported by them and by HSBC.

## **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.

### **6.1 Research and Higher Education**

- 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 of 2010 resulted in a near 'flat cash' settlement for science research funded by STFC and NERC, though effectively, because of inflation, this could amount to a 15 % reduction over 3 years, and entail disengagement from important activities. In addition the steep reduction to capital expenditure could have serious implications. The impact of the change to the tuition fee regime on university teaching and student recruitment is unpredictable and may be profound. Finally, while the creation of the UKSA reflects government recognition of the Space industry's contribution to UK PCL, concern remains about the provision of funding for the exploitation of science resulting from missions.
- The Society, working with other bodies including the *Campaign for Science and Engineering* and sister scientific societies, will lead its communities in 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 and teaching without which the UK risks losing its world ranking (currently second after the USA).
- In particular, given the growing emphasis on 'economic impact' in evaluating responsive mode research grants and quality related higher education funding, the Society will continue to champion curiosity driven or 'blue-skies' research. While researchers who receive public funds need to communicate what they do and, where possible, demonstrate its contribution to meeting global challenges, stimulating public interest in science and developing the transferable skills of students, the Society will argue against linking the allocation of funds to hypothesised outcomes since, by definition, in the case of fundamental research, they cannot be predicted. Instead, the Society will campaign to retain scientific excellence as the determining criterion for funding research while stressing the way its sciences inspire particularly younger people to study STEM subjects.
- Following the transfer of responsibility for funding earth-orientated solar-terrestrial physics research from STFC to NERC, which already funds solid-earth geophysics, the Society will continue to seek closer working relations with NERC, both directly, possibly through a *Geophysics Forum*, and through continued support for the *British Geophysical Association*. The *Astronomy Forum* will remain a crucial instrument for harnessing the views and wielding the influence of the professional astrophysics community in dealings with the STFC –and, in the future, UKSA & HEFCE.

**Royal Astronomical Society**  
**Trustees' Report for the year ended 31 December 2010 (continued)**

- Finally, the Society will place more emphasis upon early career scientists by providing travel grants to encourage more of them to attend its regular specialist meetings, by arranging student meetings and by involving *2010 RAS Fellows* and *Sir Norman Lockyer Fellows* more closely in the activities of the Society.

## **6.2 School Education and Outreach**

- The health of UK astronomy and geophysics depends on young people opting for appropriate subjects at secondary school and taking relevant degrees at university. The Society will signal its commitment to supporting school level science by designating a member of Council as Vice-President (Education) and looking to them, in cooperation with the Education Officer and the Education Committee, to champion astronomy and geophysics in schools.
- In particular, for the first time, the Society will recognise outstanding teachers by awarding the *Patrick Moore Medal* while particular attention will be given to the growing number of schools offering GCSE Astronomy.
- Finally, as part of its review of grants, the Grants Committee will consider how it might better encourage and facilitate more professional scientists to give talks to local amateur astronomical societies, schools etc.

## **6.3 Geographical 'Reach'**

- While the Society derives many benefits from having its HQ in central London, to properly serve its members based outside the SE of England and to engage with a wider community it will support activities in other parts of the UK- and overseas - by strengthening the roles of its university 'Points of Contact', by developing relations with the devolved administrations and by widening the scope of the National Astronomy Meeting to reach into Europe.

## **6.4 Publications**

Promoting and disseminating research through papers submitted for publication in its journals will continue to be the biggest single activity undertaken by the Society. During 2011:

- Given the growing preference of users for the electronic version, the Society's Publications Management Committee will continue to keep under review the need to produce printed versions of its 2 research journals.
- The Society will review its publishing arrangements and invite tenders, including from its present publishers, for the publication of all 3 of its journals when the present contract with *Wiley-Blackwell* expires in December 2012.
- The Editorial Board of *A&G* will re-visit the opportunities for cooperation with sister societies in the USA and Europe.
- The Commissioning Editor will aim to publish 2 books in the RAS-Springer series.

## **Royal Astronomical Society Trustees' Report for the year ended 31 December 2010 (continued)**

- The Society will monitor 'open access' developments in the UK, EU and USA and, in conjunction with other Learned Societies and its publisher, intervene where and when appropriate to ensure decisions are taken by research funding bodies in full knowledge of their possible consequences for both scientific publications and the associated activities made possible by the revenue they generate.

### **6.5 Other**

The Society will continue to provide a wide range of services to its members and to the general public by:

- arranging the 2011 National Astronomy Meeting in Llandudno, North Wales, the first to be held outside a university and the first to be directly organised by the Society;
- facilitating the involvement in the 2012 National Astronomy Meeting in Manchester of the *Astronomische Gesellschaft* (German Astronomical Society);
- offering a further tranche of 3-year fellowships to outstanding researchers and investigating if and how the *2010 RAS Fellowships* can be put onto a continuing basis;
- hosting monthly specialist and 'ordinary' meetings in Burlington House;
- awarding grants including, for the first time, travel bursaries for international fellows to attend the National Astronomy Meeting;
- recognising outstanding achievement by living scientists through the award of medals and prizes;
- installing the plaque of Isaac Roberts;
- facilitating career break scientists to return to work by continuing to make provision to sponsor a *RAS Daphne Jackson Fellowship* ;
- organising monthly public lectures;
- continuing a programme of activities for the *Friends of the RAS*;
- participating in the *Burlington House Lecture Series*;
- supporting overseas based scientists through the activities of the *International Astronomical Union's* South African based *Office for Astronomy Development*;
- and developing the RAS web site.

## **7. TRUSTEES' RESPONSIBILITIES IN THE PREPARATION OF FINANCIAL STATEMENTS**

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

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

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities SORP;

**Royal Astronomical Society**  
**Trustees' Report for the year ended 31 December 2010 (continued)**

- 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 1993, the Charity (Accounts and Reports) Regulations 2008 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 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  
13 May 2011

# 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 2010 on pages 19 to 41. 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 1993. 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 17 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 43 of the Charities Act 1993 and report in accordance with regulations made under section 44 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 2010 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 1993.

### 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 1993 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

1<sup>st</sup> Floor

46 Clarendon Road

Watford

WD17 1JJ

Date

## Royal Astronomical Society

### STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2010

	Notes	Unrestricted funds	Restricted funds	2010 Total funds	2009 Total funds
		£	£	£	£
<b>Incoming resources (IR)</b>					
IR from generated funds					
Voluntary income		46,227	1,000	47,227	5,523
Investment income	6	151,341	63,701	215,042	219,000
IR from charitable activities					
Publications	7	3,041,396	-	3,041,396	3,048,875
Scientific meetings		2,328	-	2,328	1,970
Membership		237,989	-	237,989	267,091
Educational		-	2,284	2,284	2,715
Library		4,601	-	4,601	7,609
Public Policy		5,022	-	5,022	-
Burlington house		25,834	-	25,834	24,125
Other incoming resources		8,757	-	8,757	47,166
<b>Total incoming resources</b>		<b>3,523,495</b>	<b>66,985</b>	<b>3,590,480</b>	<b>3,624,074</b>
<b>Resources expended</b>					
Costs of generating funds					
Investment management costs		239	16	255	571
Charitable activities					
Publications	}7	2,422,351	-	2,422,351	2,324,477
Scientific meetings	}	77,061	-	77,061	106,676
Grants	}	155,594	44,905	200,499	306,284
Membership	}	59,893	-	59,893	-
Educational	} 8	31,561	2,050	33,611	38,873
Library	}	144,642	1,238	145,880	186,587
Public policy	}	72,314	-	72,314	78,589
Burlington House	}	219,508	-	219,508	185,079
Governance costs	}	150,169	-	150,169	156,492
Other resources expended		5,986	336	6,322	5,884
<b>Total resources expended</b>		<b>3,339,318</b>	<b>48,545</b>	<b>3,387,863</b>	<b>3,389,512</b>
<i>Net incoming resources before transfers</i>		184,177	18,440	202,617	234,562
<b>Gross transfers between funds</b>	14	(55,000)	55,000	-	-
<i>Net incoming resources before other recognised gains &amp; losses</i>		129,177	73,440	202,617	234,562
<b>Other recognised gains &amp; losses</b>					
Gains on investment assets	12	252,304	109,112	361,416	539,536
Actuarial Gains/(losses) on defined Benefit pension scheme	10	5,000	-	5,000	(110,000)
<i>Net movement of funds</i>		386,481	182,552	569,033	664,098
<b>Reconciliation of funds</b>					
Total funds brought forward		5,472,741	1,559,723	7,032,464	6,368,366
<b>Total funds carried forward</b>		<b>5,859,222</b>	<b>1,742,275</b>	<b>7,601,497</b>	<b>7,032,464</b>

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

Activities are classed as continuing.

The notes on pages 22 to 41 form part of these financial statements.

## Royal Astronomical Society

### BALANCE SHEET AS AT 31<sup>ST</sup> DECEMBER 2010

	Notes	Total Funds	Total Funds
		<b>2010</b>	<b>2009</b>
		£	£
<b>Fixed Assets</b>			
Tangible Assets	2	1,627,091	1,738,951
Investments	3	5,020,309	4,659,923
<i>Total fixed assets</i>		6,647,400	6,398,874
<b>Current Assets</b>			
Debtors	4	1,389,347	1,526,561
Cash at bank and in hand		1,012,332	410,615
<i>Total current assets</i>		2,401,679	1,937,176
<b>Liabilities</b>			
Creditors:			
Amounts falling due within one year	5	1,508,582	1,351,586
<i>Net current assets</i>		893,097	585,590
<i>Net assets excluding pension asset</i>		7,540,497	6,984,464
Pension asset	1(s), 10	61,000	48,000
<i>Net Assets including pension asset</i>		7,601,497	7,032,464
<b>The funds of the Society</b>			
Unrestricted income funds			
Designated funds	14	1,868,481	1,871,797
General unrestricted income funds before pension excess		3,929,741	3,552,944
Pension excess		61,000	48,000
General unrestricted income funds after pension excess		3,990,741	3,600,944
Restricted income funds	13	1,742,275	1,559,723
<i>Total Funds</i>	12	7,601,497	7,032,464

The financial statements of pages 19 to 41 were approved by Council on 13<sup>th</sup> May 2011 and signed on its behalf by

Professor P.G. Murdin  
Treasurer  
13<sup>th</sup> May 2011

The notes on pages 22 to 41 form part of these financial statements.

## Royal Astronomical Society

### CASH FLOW STATEMENT FOR THE YEAR ENDED 31<sup>st</sup> DECEMBER 2010

	2010		2009	
	£	£	£	£
<b>Net incoming resources before revaluations &amp; disposal of investment assets</b>		202,617		234,562
Adjusted for				
Depreciation Charge	132,354		125,220	
Profit on disposal of fixed assets	(536)		-	
Investment income	(215,042)		(219,000)	
Debtor/payments in adv. decrease/(increase)	137,214		(1,268,405)	
Current liabilities movement	156,996		1,082,351	
Net FRS17 pension movements, excluding actuarial surplus or deficit.	(8,000)		(47,000)	
		202,986		(326,834)
<b>Net Cash inflow/(outflow) from operating activities</b>		<b>405,603</b>		<b>(92,272)</b>
<b>Returns on investment and servicing of finance</b>				
Investment income received	215,042		219,000	
<b>Net cash inflow from returns on investment</b>		<b>215,042</b>		<b>219,000</b>
<b>Capital expenditure and financial investment</b>				
Payments to acquire investments	(6,208)		(252,843)	
Payments to acquire tangible fixed assets	(21,660)		(40,360)	
Receipts from sale of investments	6,508		210,000	
Receipts from sale of fixed assets	1,702			
Net movement in cash on deposit with broker	730		313,346	
		<b>(18,928)</b>		<b>230,143</b>
<b>Increase in cash in the year</b>		<b>601,717</b>		<b>356,871</b>
<b>Reconciliation of Net Funds</b>				
Increase in cash		601,717		356,871
Net funds at 1 January		410,615		53,744
Net funds at 31 December		1,012,332		410,615

The notes on pages 22 to 41 form part of these financial statements.

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2010

#### 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**

No value is included for the inalienable possessions of the Society (Library etc.) or Heritage Assets (Astronomical Clocks etc.); the Society does not hold up to date valuations owing to its intention to retain these assets, except those acquired 2006 onwards.

##### (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; Nil Depreciation on Presidential Portraits, which as works of art, are considered to at least hold their book value.

##### (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.

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2010 (continued)

#### 1. ACCOUNTING POLICIES (continued)

##### (f) **Unrestricted Funds (continued)**

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)

##### (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 the fund's income should support research in Cosmochemistry, by graduate and postdoctoral students. The accumulated expenditure less income, £3,473 (£2,159 for 2009), 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 and donation.

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2010 (continued)

#### 1. ACCOUNTING POLICIES (continued)

##### (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.

##### (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, 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.

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2010 (continued)

#### 1. ACCOUNTING POLICIES (continued)

##### (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 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 2010 (continued)

#### 2. FIXED ASSETS

	<b>2010</b>				
	Leasehold Improvements (Burlington House Fund) £	Telephone & Security System £	Computer** Equipment £	Portraits* £	Total £
Cost at 1 <sup>st</sup> Jan.	1,832,470	36,415	158,678	9,466	2,037,029
Additions	-	-	21,660	-	21,660
Eliminated on disposals	-	-	(3,959)	-	(3,959)
Cost at 31 <sup>st</sup> December	1,832,470	36,415	176,379	9,466	2,054,730
Depreciation at 1 <sup>st</sup> Jan.	178,583	27,208	92,287	-	298,078
Charge for period	91,683	6,667	34,004	-	132,354
Eliminated on disposals	-	-	(2,793)	-	(2,793)
Depreciation at 31 <sup>st</sup> Dec. 2010	270,266	33,875	123,498	-	427,639
Net Book Value at 31 <sup>st</sup> Dec. 2010	1,562,204	2,540	52,881	9,466	1,627,091
Net Book Value at 31 <sup>st</sup> Dec. 2009	1,653,887	9,207	66,391	9,466	1,738,951

\* Past Presidents' Portraits

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

#### 3. INVESTMENTS

	General Fund £	Restricted Funds £	Total <b>2010</b> £	Total <b>2009</b> £
<u>Quoted General Fund Investments</u>				
<u>(Common Investment Funds from 2002)</u>				
Newton Global Growth & Income Fund	3,465,677	1,509,233	4,974,910	4,615,240
Universal Liquidity Fund	2,281	719	3,000	3,300
Alternative Investment – Property	42,344	-	42,344	40,598
	3,510,302	1,509,952	5,020,254	4,659,138
Movement in Quoted investments				
Market Value 1st January	3,258,266	1,400,872	4,659,138	4,076,759
Additions at cost	4,721	1,487	6,208	252,843
Disposals at opening market value	(4,989)	(1,519)	(6,508)	(210,000)
Net unrealised investment gains/losses	252,304	109,112	361,416	539,536
<b>Market value 31st December</b>	<b>3,510,302</b>	<b>1,509,952</b>	<b>5,020,254</b>	<b>4,659,138</b>
Cash on Deposit with Broker	5	50	55	785
<b>Investments – Total</b>	<b>3,510,307</b>	<b>1,510,002</b>	<b>5,020,309</b>	<b>4,659,923</b>
Historic Cost as at 31st December	3,473,703	1,450,158	4,923,861	4,924,160

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2010 (continued)

#### 3. INVESTMENTS (continued)

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

Fund	2010		2009	
	£	%	£	%
Newton: Global Growth and Income Fund	4,974,909	99.1	4,615,240	99.1

#### 4. DEBTORS

	2010	2009
	£	£
Trade Debtors	1,159,312	1,119,925
Prepayments and Accrued Income	154,264	402,742
Other Debtors	75,771	3,894
	1,389,347	1,526,561

#### 5. CREDITORS: Amounts falling due within 1 year

	2010	2009
	£	£
Trade Creditors	36,296	46,456
Accruals	247,720	206,789
Other tax and Social Security	171,895	143,446
Deferred Income	976,805	952,124
Other Creditors	75,866	2,771
	1,508,582	1,351,586

#### Deferred Income

	£
Balance as at 1 <sup>st</sup> January 2010	952,124
Income received from Fellows in advance	12,719
Released to income	(952,124)
Publications income received in advance	964,086
Balance as at 31 <sup>st</sup> December 2010	976,805

#### 6. INVESTMENT INCOME

	General Fund	Trust Funds	2010 Total	2009 Total
	£	£	£	£
<u>Dividends received:</u>				
Unitized/Structured Investments (Other)	146,034	63,595	209,629	209,715
Alternative Investments - Property	2,819	-	2,819	3,479
Cash Fund	2	1	3	189
Sub-Total	148,855	63,596	212,451	213,383
Interest from Bank	2,467	102	2,569	2,450
Interest from Stockbroker	19	3	22	754
Interest from HM Revenue & Customs	-	-	-	0
Totals	151,341	63,701	215,042	219,000

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2010 (continued)

#### 7. PUBLICATIONS

	2010	2009
	£	£
<b>INCOMING RESOURCES</b>		
Monthly Notices of the Royal Astronomical Society	2,083,905	2,069,882
Monthly Notices of the Royal Astronomical Society : Letters	22,104	34,441
Geophysical Journal International	863,987	863,245
Astronomy & Geophysics	66,565	77,458
Other	4,835	3,849
<b>TOTAL</b>	<b>3,041,396</b>	<b>3,048,875</b>
<b>RESOURCES EXPENDED</b>		
Monthly Notices of the Royal Astronomical Society	1,658,591	1,560,617
Monthly Notices of the Royal Astronomical Society : Letters	17,229	26,313
Geophysical Journal International	654,661	645,145
Astronomy & Geophysics	86,320	87,409
Other	5,550	4,993
<b>TOTAL</b>	<b>2,422,351</b>	<b>2,324,477</b>

#### 8. RESOURCES EXPENDED

##### BREAKDOWN OF COSTS OF CHARITABLE ACTIVITY

Activity	Direct Costs	Support Costs	2010 Total	Direct Costs	Support Costs	2009 Total
	£	£	£	£	£	£
Publications	2,343,497	78,854	2,422,351	2,264,688	59,789	2,324,477
Scientific Meetings	40,987	36,074	77,061	51,643	55,033	106,676
Grants	162,483	38,016	200,499	269,262	37,022	306,284
Membership	-	59,893	59,893	-	-	-
Educational	7,008	26,603	33,611	6,233	32,640	38,873
Library	102,916	42,964	145,880	123,519	63,068	186,587
Public Policy	26,960	45,354	72,314	31,553	47,036	78,589
Burlington House	131,248	88,260	219,508	122,172	62,907	185,079
Sub-Total	2,815,099	416,018	3,231,117	2,869,070	357,495	3,226,565
Governance	64,783	85,386	150,169	62,706	93,786	156,492
Total	2,879,882	501,404	3,381,286	2,931,776	451,281	3,383,057

Cost allocation - Support Costs – disclosed by Function.

Function	2010 Cost £	2009 Cost £
Executive	83,070	76,605
Finance	32,711	32,591
Facilities	55,551	46,208
Membership	18,055	23,252
IT	87,567	50,966
Policy Development & Press	45,741	38,836
Non-Attributable	93,323	89,037
Sub-Total	416,018	357,495
Governance	85,386	93,786
Total	501,404	451,281

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2010 (continued)

#### **8. RESOURCES EXPENDED (continued)**

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. The 2009 comparative figures have been amended to reflect this change.

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

Function	<b>2010</b>	<b>2009</b>
	Cost	Cost
	£	£
Audit Fees – Current Year	15,396	15,232
Audit Fees – Prior Year	4,052	-
Pension scheme	3,000	3,192
Consultancy	-	1,200
Regulatory	-	1,067
Trustees' Expenses	16,807	17,097
Trustees' Remuneration	4,525	4,415
AGM Expenses	4,067	3,770
Committee Expenses	6,010	5,754
Staff Time Apportioned	59,178	73,463
Other Expenses	37,134	31,302
<b>Total</b>	<b>150,169</b>	<b>156,492</b>

Governance is 4.4% of Resources Expended (2009 : 4.6%).

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

Role	<b>2010</b>	<b>2009</b>
	% of Total	% of Total
Executive Secretary	30	30
Deputy Executive Secretary	20	-
Events & Awards	10	40
Accountant	40	40
Facilities Manager	-	10
Membership Secretary	-	10

#### **9. NET INCOMING RESOURCES FOR THE YEAR**

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

		<b>2010</b>	<b>2009</b>
		£	£
Depreciation		132,354	125,220
Auditor's Remuneration:	Audit	15,598	11,552
	Consultancy	-	1,200
	Pension Scheme	3,850	3,680
Other Professional Services	Final Salary Pension Scheme:	9,473	1,386
	Stakeholder Pension Scheme	4,000	1,843
	Final Salary Pension Scheme: FRS 17 Val'n	3,000	3,192
	Investment Management Fees	255	571
Operating Lease Rentals	Plant & Machinery	6,429	6,429
Profit on disposal of tangible fixed assets		536	-

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2010 (continued)

#### **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:

	2010	2009
	£	£
Lease expiring within two to five years	6,429	4,089
Lease expiring over five years	-	2,340

#### **10. STAFF COSTS**

Staff costs, including taxable benefits are:

	2010	2009
	£	£
Salaries and wages (including Press Officers & Astronomy & Geophysics Editor)	458,945	456,174
Taxable benefits (LVs)	1,524	1,570
Employer's National Insurance	46,685	45,848
Pension, Employer's Contributions:		
- Stakeholder Pension Scheme	60,517	45,992
- Death in service contributions	6,830	4,977
- Final Salary Scheme: Other pension costs	35,319	34,491
	609,820	589,052

During the year no individual employee of the Society earned more than £60,000. The average number of employees was 14 (Administration 3, Editorial 7, Library 1, House 2, Press & Policy 1) (2009 was 14).

#### **Pension costs**

A qualified actuary has carried out a triennial review of the scheme as at 1<sup>st</sup> January 2010; the preliminary 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 recommends 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, has 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. Council has requested that the Treasurer reviews 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, with the aim of reducing the rate of increase in the employer's cost burden. Employees contribute at the rate of 5% (5% for 2009).

In contrast to triennial review, the latest FRS17 valuation, at 31<sup>st</sup> December 2010, shows an excess to be recognised of £61,000 (2009 £48,000), 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 2010 (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 2010 amounted to £8,000.

	<b>2010</b>
	£
Expected return on scheme assets	38,000
Interest cost on scheme liabilities	(36,000)
Employer Contributions	42,000
Current service cost	(36,000)
	8,000

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 £35,319 (2009 £34,491) in respect of the defined benefit pension scheme; £60,517 (2009 £45,992) in respect of the targeted defined contribution scheme and £6,830 (2009 £4,977) 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>2010</b>	<b>2009</b>
	£'000	£'000
Current service cost	36	25

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 is £36,000.

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

Expected return on pension scheme assets	38	34
<i>Interest on pension scheme liabilities</i>	(36)	(30)
	2	4

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

The amounts recognized in the balance sheet are as follows:

	<b>2010</b>	<b>2009</b>
	£'000	£'000
Present value of funded obligations	605	685
Fair value of scheme assets	666	733
Excess/ <i>shortfall</i> in scheme at end of the year	61	48
<i>Excess impaired</i>	-	-
Excess available to the Society	61	48

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2010 (continued)

#### 10. STAFF COSTS (continued)

##### Pension costs (continued)

The excess in the scheme (£61,000) 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 (£61,000).

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

	<b>2010</b>	<b>2009</b>
	£'000	£'000
Opening defined benefit obligation	685	441
Service cost (net of employee contributions)	36	25
Interest cost	36	30
Actuarial losses	14	183
Employee contributions	7	6
Benefits paid	(173)	-
Closing defined benefit obligation	605	685

Changes in fair value of scheme assets are as follows:

	<b>2010</b>	<b>2009</b>
	£'000	£'000
Opening scheme assets	733	581
Expected return	38	34
Actuarial losses	19	73
Contributions by employer	42	39
Employee contributions	7	6
Benefits paid	(173)	-
Closing scheme assets	666	733

The amounts recognised in income and expenditure are as follows:

	<b>2010</b>	<b>2009</b>
	£'000	£'000
Current service cost (net of employee contributions)	(36)	(25)
Interest on obligation	(36)	(30)
Expected return on scheme assets	38	34
Total	(34)	(21)

The actual return on scheme assets was £57k (2009: (£107k)).

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

	Current year		Cumulative	
	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>
	£'000	£'000	£'000	£'000
Actuarial gains/(losses)	5	(110)	(325)	(330)

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2010 (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	
	2010	2009	2010	2009
	%	%	%	%
Equities	45	47	6.6	6.9
Bonds	40	41	3.9	4.5
Property	15	11	5.6	5.9
Cash	-	1	4.1	3.4
	100	100	5.4	5.7

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

	2010	2009
Discount rate at 31 December	5.4%	5.8%
Expected return on scheme assets at 31 December	5.4%	5.7%
Future salary increases	3.7%	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	3.4%	3.4%
Proportion of employees opting for early retirement	0.0%	0.0%
Inflation (RPI)	3.6%	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:

	2010	2009
Retiring now		
Male	22.0	22.3
Female	24.1	24.9
Retiring in 20 years		
Male	23.4	23.6
Female	25.7	26.0

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

Defined benefit pension scheme:

	2010	2009	2008	2007	2006
	£'000	£'000	£'000	£'000	£'000
Defined benefit obligations	605	685	441	795	846
Scheme Assets	666	733	581	722	764
Excess/(shortfall)	61	48	140	(73)	(82)
Experience adjustments on scheme liabilities – gain/(loss)	14	9	(61)	(2)	(9)
Experience adjustments on scheme assets – gain/(loss)	19	73	(79)	(18)	1

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2010 (continued)

#### **11. TRANSACTIONS WITH TRUSTEES**

The Trustees receive reimbursement for travel expenses actually incurred in attending meetings, the amounts reimbursed during the year for 21 Trustees was £16,807 (£13,792 for 2009). Remuneration, total £4,525, was paid to a Trustee during 2010 (£4,415 for 2009). Legal authority for this payment has been obtained from the Charity Commission.

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

	General & Designated Funds £	Restricted £	Total 2010 £
Fund Balances at 31st December 2010 are represented by:			
Tangible fixed assets	1,626,976	115	1,627,091
Investments	3,510,354	1,509,955	5,020,309
Current assets – cash at bank and in hand	811,607	200,725	1,012,332
- other	1,318,018	71,329	1,389,347
Current liabilities	(1,468,733)	(39,849)	(1,508,582)
Defined benefit pension scheme asset	61,000	-	61,000
<b>Total Net Assets</b>	<b>5,859,222</b>	<b>1,742,275</b>	<b>7,601,497</b>
<b>Unrealised gains included above</b>			
<b>On investment assets</b>			
Total Unrealised Gains at 31 <sup>st</sup> December 2010	<b>36,598</b>	<b>59,797</b>	<b>96,395</b>
<b>Reconciliation of Movements in Unrealised gains on Investment Assets</b>			
	£	£	£
Net losses arising on revaluations in year	-	-	-
Net movement in year	252,304	109,112	361,416
Unrealised gains at 1st January 2010	(215,706)	(49,315)	(265,021)
<b>Unrealised Gains at 31<sup>st</sup> December 2010</b>	<b>36,598</b>	<b>59,797</b>	<b>96,395</b>
<b>Gains on the revaluation of Investment Assets:</b>			
	£	£	£
Realised gains during year	-	-	-
Movement in unrealised gains during year	252,304	109,112	361,416
Total per Statement of Financial Activities	252,304	109,112	361,416

## Royal Astronomical Society

### NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2010 (continued)

#### 13. RESTRICTED FUNDS

	Balance 01-Jan-10 £	Incoming resources £	Resources expended £	Transfers £	Unrealised gains, losses/ on sales £	Balance 31-Dec-10 £
<b>Research &amp; Grants Fund</b>	1,328,632	55,312	(42,230)	55,000	94,637	1,491,351
<b>Benevolent Fund</b>	55,785	2,266	(189)	-	3,494	61,356
<b>Library Fund</b>	30,467	1,238	(1,238)	-	1,908	32,375
<b>Education Fund</b>	46,788	4,185	(2,050)	-	2,931	51,854
<b>Lectures &amp; Awards Fund</b>	98,051	3,984	(2,838)	-	6,142	105,339
<b>Grand Totals</b>	1,559,723	66,985	(48,545)	55,000	109,112	1,742,275

£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)  
 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 2010 (continued)

#### 14. UNRESTRICTED FUNDS

	Burlington House Fund	Building Fund	Unrestricted General Fund	Total
	£	£		£
<b>Balance 1st January 2010</b>	<b>1,653,887</b>	<b>217,910</b>	<b>3,600,944</b>	<b>5,472,741</b>
<b>Total Incoming Resources</b>	-	-	<b>3,523,495</b>	<b>3,523,495</b>
<b>Total Resources Expended</b>	-	<b>3,316</b>	<b>3,336,002</b>	<b>3,339,318</b>
<b>Other recognised gains &amp; losses</b>				
Gain on Pension Scheme	-	-	5,000	5,000
Gains on investment assets	-	-	252,304	252,304
<b>Gross transfers between funds</b>				
Transfer (to)/from general unrestricted fund	(91,683)	91,683	(55,000)	(55,000)
<b>Balance 31<sup>st</sup> December 2010</b>	<b>1,562,204</b>	<b>306,277</b>	<b>3,990,741</b>	<b>5,859,222</b>

#### 15. GRANTS COMMITTED

Grants to the value of £192,000 have been committed for future payment, subject to certain conditions, specified by the Society, having been met (2009: £Nil). 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 2010.

## Royal Astronomical Society

### APPENDIX

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

<b>Grants – Institutions</b>			
<b>Date</b>	<b>Institution</b>	<b>Detail</b>	<b>£</b>
03/10	University of Central Lancashire	2009 UCLan Undergraduate Research School	1,000
04/10	Durham University	The Gas Content of Local Galaxies	1,440
04/10	University of Glasgow	Position and Sizes of X-ray Solar Flare Sources	720
04/10	University of Exeter	Origins of Solar System Conference	415
04/10	University of Hertfordshire	Variable Stars in the Large Magellanic Cloud	1,600
04/10	Durham University	Research Fellowship	11,607
05/10	University College London	Remote Observations of Exoplanet Transits	1,520
05/10	University of Hertfordshire	11 <sup>th</sup> Electromagnetic and Light Scattering Conference 2008	3,500
05/10	University of Sussex	Multi-Wavebank Galaxy Luminosity Function	1,080
05/10	University College London	Astrobiology Science Conference 2010	500
05/10	Royal Astronomical Society Club	Visiting Speakers	1,565
06/10	Durham University	Royal Society – Summer Science 2010	1,000
06/10	University of Glasgow	Characterising Plasma Parameters in Solar Prominences	1,080
06/10	Aberystwyth University	Detection of Active Regions on Distant Stars	1,800
06/10	Aberystwyth University	Variation of Magnetic Fields Observed in the Umbra and Penumbra	1,800
06/10	University College London	Orbital Parameters of Extra-Solar Planets	1,520
06/10	University of Exeter	From Stars to Galaxies Conference	730
06/10	University of Leeds	High Resolution Imaging of Massive Young Stars	1,440
06/10	University of Oxford	Holes in the Cosmic Microwave Background	1,800
06/10	University of Oxford	Undergraduate Research Bursary	1,640
07/10	Durham University	Research Fellowship	11,497
08/10	University of Leeds	Chemical Evolution of Massive Young Stellar Objects	1,400
08/10	University of Central Lancashire	Identifying Gravitational Micro-Lensing Events with STEREO/HI	1,800
08/10	University of Bristol	Royal Society Exhibit on East African Rift	1,000
08/10	Campaign for Science and Engineering	Subscription	500
09/10	Firebrand Productions	Bright Star Project	2,500
10/10	University College London	Unsolved Problems in Astrophysics and Cosmology	2,000
10/10	Imperial College London	2011 Grant Funding	3,000

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10/10	University of Central Lancashire	Asteroseismic Winter School	392
10/10	University of Cambridge	Solar Plasma Spectroscopy Conference	1,000
10/10	University of Oxford	Cosmic Rays at Snowdon Summit	2,000
10/10	Durham University	Research Fellowship	11,700
11/10	University College London	Your Universe, the UCL Festival of Astronomy	1,850
11/10	Liverpool John Moores University	Great Barriers in High Mass Star Formation Conference	600
11/10	Afghanistan Astronomy Association	Astronomy Primary School Textbooks	4,800
12/10	Federation of Astronomical Societies	Support for Amateur Astronomy Societies during BBC Stargazing Live	2,000
12/10	Armagh Observatory	International Meteor Conference	500
		Sub-Total	86,296

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

Expenditure Committed – To be Claimed			
02/09	University College London	Student Bursary	1,440
08/09	University College London	Workshop on Solar System Magnetotail and Current Sheets	1,000
02/10	University of Southampton	Student Bursary	1,440
02/10	University of Southampton	X-ray variability	1,080
08/10	Royal Observatory, Greenwich	Astronomy Exhibition at Royal Albert Hall	3,420
08/10	University of Durham	Raising Astronomical Aspirations in County Durham Schools	1,000
08/10	University College London	Organisation Support for JENAM 2010	1,000
08/10	STFC	E-ELT at Royal Society Summer Exhibition	1,000
08/10	University of Manchester	Public Lecture associated with Asymmetric Planetary Nebulae	413
08/10	Keele University	Cooperation of UK and Iranian Astronomers	3,200
12/10	University of Central Lancashire	Undergraduate Research School 3 year Plan	1,000
		Sub-Total	15,993
01/09	Expenditure Committed, to be claimed	B/F	-89,109
		<b>Sub-Total – Institutions</b>	<b>13,180</b>
Grants and Awards – Restricted Funds – Individuals			
01/10	Research & Grants	UCF Winter Workshop 2010	350
01/10	Research & Grants	Conservation of Angular Motion in the Disc Galaxy Formation	300
02/10	Research & Grants	AGU Fall Meeting 2009	495
02/10	Research & Grants	AGU Fall Meeting 2009	542
03/10	Research & Grants	Chemical Evolution and Origin of Life	650
03/10	Research & Grants	Infrared Emission, ISM and Star Formation Workshop	160

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04/10	Research & Grants	Magnetospheric and Plasma Science Workshop	230
05/10	Research & Grants	European Geosciences Union, General Assembly 2010	624
05/10	Research & Grants	Astrobiology Science Conference 2010	821
06/10	Research & Grants	International Astronomical Youth Camp	325
06/10	Research & Grants	International Space Studies Programme	1,500
06/10	Research & Grants	Asymmetric Nebulae V Conference	228
06/10	Research & Grants	IAU Symposium 271	395
06/10	Research & Grants	A Universe of Dwarf Galaxies Conference	500
07/10	Research & Grants	The Effect of the Environment on the Tull-Fisher Relation	600
07/10	Research & Grants	General Relativity and Gravitation Conference	785
07/10	Research & Grants	Physics and Chemistry of Ice Conference	1,000
07/10	Research & Grants	Astro Particle Physics Group Meeting	1,000
07/10	Research & Grants	Meteor Camera for Meteorwatch	284
08/10	Research & Grants	Guidance, Navigation and Control Conference	500
08/10	Research & Grants	Stellar Monoliths	1,000
08/10	Research & Grants	2010 Sagan Summer Workshop	800
09/10	Research & Grants	Committee on Space Research, Assembly	250
09/10	Research & Grants	Touch the Sky	3,000
09/10	Research & Grants	2010 European Planetary Science Conference	393
10/10	Research & Grants	2010 European Planetary Science Conference	500
10/10	Research & Grants	Oral and Poster Sessions at NAM 2010	100
11/10	Research & Grants	American Astronomical Society Conference	483
		Sub Total	17,815
	Expenditure Committed – To be Claimed		
02/09	Research & Grants	Jenam and RAS/NAM Meeting, Hatfield	235
02/09	Research & Grants	IAGA 11 <sup>th</sup> Scientific Assembly, Hungary	934
08/09	Research & Grants	Conference on Natural Dynamos	248
08/09	Research & Grants	Observing Trip to Greenbank	500
08/09	Research & Grants	Attendance Lunar Reconnaissance Mt'g	400
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	Attendance at "Cluster 10 <sup>th</sup> Anniversary Workshop	635
08/10	Research & Grants	Early Career Researchers' Workshop	1,665
08/10	Research & Grants	Developing Dark Skies in Galloway Forest Park	2,000
08/10	Research & Grants	Visit to MSSL	400

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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 & Meteors”, Japan	800
08/10	Research & Grants	Attendance Asymmetric Planetary Nebulae V Conference	250
08/10	Research & Grants	Attendance 5 <sup>th</sup> Alfvén Conference	1,018
08/10	Research & Grants	Attendance Fall AGU	900
08/10	Research & Grants	Meteor Camera for Meteorwatch	284
02/11	Research & Grants	Funding for AAS Meeting	564
02/11	Research & Grants	Attendance at AGU Fall Meeting	800
02/11	Research & Grants	Attendance at AAS Conference, Seattle	483
		Sub Total	15,081
01/10	Expenditure Committed, to be claimed	B/F	-4354
		<b>Sub-Total – Individuals</b>	<b>28,542</b>
	Benevolent Fund		189
	Lecturers and Awards Fund		2,838
		<b>Sub-Total – Individuals</b>	<b>31,569</b>
		<b>GRAND TOTAL</b>	<b>44,749</b>

### 2010 GRANTEES – GENERAL FUND (Including expenditure committed, to be claimed) IYA 2009 and Research Fellowships

04/10	Rickmansworth School	Rickmansworth Schools Moon Watch	671
	Expenditure Committed – To be Claimed		
05/08	Armagh Planetarium	Space & Festivals	2,100
05/08	Armagh Observatory	Astro Art Fun	2,500
11/08	At-Bristol	Bristol Star Party	1,500
11/08	Caithness Astronomy Group	IYA 2009 - Events	1,000
11/08	Prof. Colin Pillinger	One Small Step – the Moon is close up	3,000
11/08	Dr. Christopher Riley	Apollo 40 <sup>th</sup> Anniversary Festival	1,000
11/08	Norman Lockyer Observatory	A Sunny Day at the Norman Lockyer Observatory	600
11/08	Dr. Margaret Aderin	She’s an Astronomer	5,750
02/09	Highfields Science Specialist School	Highfields IYA 2009 Celebration	500
02/09	Woolsthorpe Manor	Telescopes – The Bigger Picture	1,000
02/09	The Grey Coat Hospital	Space near and far	730
08/09	University College London	Work-life Balance in Astronomy 2009 Workshop	2,250
08/09	Mr. Paul Haley	From the Earth to the Universe - Share	2,000
08/09	TechFest-SetPoint	IYA 2009 Events	1,700
08/09	The Aluna Foundation	Construction and Launch of a Public Moon and Tide Clock	1,990

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12/10	University of Cambridge	Research Fellowship (1 <sup>st</sup> Year 2010-11)	48,000
12/10	Institute of Astronomy, Edinburgh	Research Fellowship (1 <sup>st</sup> Year 2011)	48,000
12/10	University College London	Research Fellowship (2013)	48,000
		Sub-Total	171,620
01/10	Expenditure Committed, to be claimed	B/F	-29,045
	<b>Charitable Activities – Grants (General Fund)</b>	<b>TOTAL</b>	<b>143,246</b>
	<b>Charitable Activities – Grants</b>	<b>TOTAL</b>	<b>187,995</b>
09/10	Royal Astronomical Society – Education	Thesis Prizes	2,050
	<b>Charitable Activities - Educational</b>	<b>TOTAL</b>	<b>2,050</b>
12/10	Royal Astronomical Society Library	Support for Library	1,238
	<b>Charitable Activities - Library</b>	<b>TOTAL</b>	<b>1,238</b>
	<b>GENERAL &amp; RESTRICTED FUNDS</b>	<b>GRAND TOTAL</b>	<b>191,283</b>