

**ROYAL ASTRONOMICAL SOCIETY**  
**TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2006**

**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 2006 were:

Professor K Whaler (President until May 2006)  
Professor M. Rowan-Robinson (President from May 2006)  
Professor P Murdin (Treasurer) (re-elected from May 2006)  
Dr M.A. Hapgood (Secretary)  
Professor I.D. Howarth (Secretary)  
Dr H.J. Walker (Secretary) (re-elected from May 2006)  
Professor M.M Grady (Vice-President until May 2006)  
Dr R.C. Smith (Vice-President until May 2006)  
Professor D W Hughes (Vice-President)  
Professor E. Priest (Vice-President)  
Professor R.L. Davies (Vice-President from May 2006)  
Professor D. Gubbins (Vice President from May 2006)  
Professor M E Bailey (Councillor)  
Dr A.J. Ball (Councillor from May 2006)  
Professor M.A. Barstow (Councillor)  
Professor A.M. Cruise (Councillor from May 2006)  
Dr L. Fletcher (Councillor from May 2006)  
Dr S.F. Green (Councillor until May 2006)  
Professor T.W. Hartquist (Councillor May 2006 –December 2006)  
Professor J.H. Hough (Councillor from May 2006) Dr J. Mitton  
(Councillor)  
Dr A.M.S. Richards (Councillor until May 2006)  
Mr I.W. Ridpath (Councillor)  
Professor E.I. Robson (Councillor)  
Professor M.J. Rycroft (Councillor)  
Mr J.D. Shanklin (Councillor until May 2006)  
Dr I.P. Wright (Councillor)

**Senior Staff**

Executive Secretary David Elliott  
Membership Secretary Ronald Wiltshire  
Accountant John Struthers  
Librarian Peter Hingley  
Editorial Office Manager John Randall

## **TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2006 (Continued)**

### **Bankers**

National Westminster Bank plc  
208 Piccadilly  
London  
W1A 2DG

### **Solicitors**

Bristows  
3 Lincoln's Inn Fields  
London WC2A 3AA

### **Auditors**

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

### **Investment Advisors**

HSBC Investments  
78 St James's St  
London SW1A 1HL  
Principal and Registered Office Burlington House  
Piccadilly  
London W1J 0BQ  
Registered Charity Number 226545

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

The Royal Astronomical Society was founded in 1820 and is incorporated by Royal Charter. The Charter is dated 7th March 1831. There is also a Supplemental Charter dated 5th June 1915 and a second Supplemental Charter dated 15th July 2005. The Byelaws were last revised at the Annual General Meeting, 12th May 2006.

The Royal Astronomical Society (RAS) was established to promote the study of astronomy and geophysics (A&G) which in more recent times has grown to include solar and solar-terrestrial physics, planetary sciences and the 'new astronomies', such as astro-particle physics and astrobiology. It comprises over 3,200 Fellows and Associates (Honorary Fellows), of whom 1/3 are based in some 70 overseas countries; 11% are under the age of 40 and 35% are more than 60; approximately 11% of the total membership is female. It is entirely funded by contributions 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

## **TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2006 (Continued)**

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 2006.

### **Trustee induction and training**

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

### **Management**

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

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 Executive Secretary there were 12 other staff members including the Accountant, Membership Secretary, Librarian and Editorial Office Manager plus a part-time policy/press officer, a part-time communication officer and a part-time editor of *Astronomy and Geophysics(A&G)*. The Managing Editors and editors of the Society's research journals, *Monthly Notices of the Royal Astronomical Society(MNRAS)* and *Geophysical Journal International(GJI)*, who are appointed by the Council, provide their services, as does the Treasurer, for a honorarium.

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

The RAS 's Charters, Byelaws and Committee organization are detailed on the Society's web site [www.ras.org.uk](http://www.ras.org.uk)

### **Networks**

The Society has formal associations with a number of organizations having shared interests, or offering benefits to RAS members, and has less formal arrangements with several other bodies. It is the UK national member organization of the International Astronomical Union and the European Astronomical Society. It has 'affiliated' status, which involves an agreed Memorandum of Understanding (MoU), with the Deutsche Geophysikalische Gesellschaft, with which it co-publishes *Geophysical Journal International*, the Geological Society of London,

## **TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2006 (Continued)**

the British Sundial Society, the Society for the History of Astronomy and the Institute of Physics. In addition the RAS has agreements with a number of specialist interest groups which are brought together in the Scientific Groups Committee (see 'Governance').

The Society is represented on a number of organizations including the Science Council, the Parliamentary and Scientific Committee, Royal Observatory Greenwich Advisory Committee, UK UNESCO Science Committee and the Herschel House Museum.

### **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 and responsibility being taken to manage them.

### **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. In particular, the RAS organizes meetings, publishes journals ( its single biggest activity), awards grants, prizes and medals, maintains a library and supports the activities of affiliated bodies. The RAS does not itself fund (small travel and a post-doctoral scholarship apart) 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.

The main objectives for 2006, resulting from the strategy review of July 2005 and revised in the 'President's Action Plan' were to:

- Continue to improve the performance of the Society's journals by completing the move to an on-line submission and tracking system for *MNRAS* and *A & G* (already achieved for *GJI*). This would also allow those editorial assistants who prefer it to work from home.
- Monitor the threat to subscription income from 'open access' and 'open repository' developments.
- Explore the opportunities for co- publishing monographs and other books on astronomy.
- Promote the Society's image archive by linking it to an established photo library.
- Continue to organize a programme of scientific meetings including a National Astronomy Meeting in Leicester at which, for the first time, the President's Reception would be held, and encourage fellows to organize more out of London meetings (with the support of staff from Burlington House).
- Continue to provide grants while actively exploring the opportunities for investing the Society's reserves in large-scale projects, which would materially advance the study of astronomy and geophysics or its public outreach.

## TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2006 (Continued)

- Continue to recognize outstanding scientific achievement by awarding the Society's medals and awards at the National Astronomy Meetings and by proposing a new award for group achievement.
- Continue to promote the interests of the professional community of astronomers and geophysicists by generating and promoting policy proposals to the research councils and government and by taking an active role, as the UK National Member, at the triennial General Assembly of the International Astronomical Union in Prague.
- Review the Society's staffing complement to ensure it was appropriate to evolving needs, including the ability to support initiatives referred to in the preceding point. This would include the introduction of home (tele-working) for some staff.
- Continue to develop the services provided by the library by completing the transfer of manual records to the on-line catalogue.
- Continue to improve communications with the membership by developing the Society's web site including enabling electronic voting for elections to Council.
- Initiate refurbishment works in the Burlington House apartments, taking into account the accommodation needs of the British Astronomical Association which for the past half century has occupied part of the Society's apartments.
- Seek the agreement of Council to changes in the governance of the Society, including revised arrangements for more effective links with sister organizations, for implementation in 2007.
- Increase education and public outreach activities, acknowledging the power of astronomy to attract students into studying science at school and beyond.

### 4. ACHIEVEMENTS AND PERFORMANCE

#### Publications

The RAS publishes 2 research journals:

- Monthly Notices of the Royal Astronomical Society (MNRAS)*, one of the world's leading primary research journals in astronomy and astrophysics. It publishes, 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. Although based in the UK, it derives two thirds of its content from outside the UK.
- Geophysical Journal International (GJI)*, 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.

The Society also publishes a news and reviews journal, *Astronomy and Geophysics*. 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's publishing policy has been to focus on high quality papers through rigorous peer review and, as far as practicable, to provide authors with free publication on the principle that good scientists should be able to submit papers to the Society's journals irrespective of financial ability. This differentiates the Society journals from many competitors, where author payments are the norm. The Society recognizes that its present policy places nearly all the costs of publications on subscription charges. However the demand for RAS journals has held up because of the high quality of these journals. This is in line with independent studies, which

## TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2006 (Continued)

show that journal reputation, not cost, is the key driver of the market in scientific journals. This, though, may change as 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. The Society produces its journals in a partnership with Blackwell Publications, with which a new contract was negotiated with effect from January 2005. The Society owns the journals and the scientific review process, but it contracts out the processes for production, sale and distribution. This delegates the non-scientific aspects of publication to a commercial organization with appropriate expertise and access to the necessary capital resources. A Publications Management Committee, which comprises representatives of Blackwell, the editors, and the Society provide co-ordination. This partnership has led to the introduction of processes for the electronic submission of papers and execution of the scientific review process leading to early publication on web sites, as well as in paper editions. The Society benefits from the willingness of its editors and referees to perform their tasks as a natural part of their scientific work. Any significant fall in subscription income, such as may result from the availability of free repository copies, unless it was replaced by another income source, such as author payments, would reduce the resources available to the Society to put into the peer review process and indeed to many other of its activities.

During 2006 *MNRAS*, under its Editor-in-Chief Professor A. Fabian, expanded its web-based submission system to include Main Journal papers as well as Letters. The number of papers submitted for publication in *MNRAS* increased 6% while the average time taken from acceptance of a paper to its appearance as an electronic publication remained low at ~23 days for Letters and ~27 days for Main Journal. The impact factor achieved rose from 5.283 (2004) to 5.352 (2005) while there were 737,866 downloads, compared with 323,322 in 2005. The total circulation increased by 20%.

Professor C. Ebinger continued as Editor-in-Chief of *GJI*. There was an 11% increase in the number of submissions compared with 2005. The number of published articles increased by 14%, but a 42% increase in acceptances left a small backlog at Blackwell's to be cleared in 2007. The impact factor fell from 2.014 (2004) to 1.826 (2005) while there were 173,361 downloads, compared with 140,608 in 2005. As with *MNRAS*, through consortia sales, circulation increased by 20%.

*A&G* continued to be edited by Dr S Bowler. 32 papers were published, 7 derived from Society meetings, as well as news items, letters, obituaries and book reviews. Feed-back from both readers and authors was positive while design and production quality remained a much appreciated feature. The introduction of a web-based submission and tracking system was postponed until 2007.

### Pages printed for 1999-2006 and estimated numbers of pages to be published in 2007 and 2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<i>MNRAS</i> ( <i>Letters</i> )	11,200	12,250	10,500	11,000	12,500	13,508	14,071	16,464 (652)	17,360 (860)	18,430 (930)
<i>GJI</i>	3,950	4,050	3,900	3,426	3,852	4,620	4,448	4,900	6,750	6,860
<i>A&amp;G</i>	248	248	248	248	248	264	264	264	264	264

The use of web-based systems for both *MNRAS* and *GJI* yielded efficiencies which allowed both journals to be expanded without a concomitant expansion of support staff; it also made it possible to offer editorial assistants the opportunity to work from home, if they so wished (which, all but one, took).

## **TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2006 (Continued)**

The threat to the Society's income from moves to 'open access' and 'open repository' remains. Research papers funded by UK Research Councils will be required to be self-archived in freely available repositories, subject to review in 2008 following the completion of a study into the impact of open access on the publishing sector. There are similar moves with respect to EC funded research. The Society's policy is to encourage the widest possible dissemination of scientific research consistent with the maintenance of rigorous standards as provided for by peer review and the continued viability of the journals themselves. To this end in 2006 it offered an 'author pay' option for GJI authors to allow such papers to be immediately available in the public domain (so far little used) and worked with its publishers to constrain costs and offer purchasing options which maximized the readership of its journals. The Society actively participated in national and European fora at which the opportunities and risks of moving the costs of journals from subscribers to authors were debated.

### **Books**

The Society signed an agreement with Springer in November 2006 to produce a new series of books aimed at the academic market, primarily, but including history and popular titles for scientists and amateur astronomers. The books will exploit the Society's assets – its members, its archives, its meetings – to advance astronomy and geophysics. It is expected that the first 2 books will appear in 2007.

### **Image Archive**

The Society signed an agreement with the Science Photo Library (SPL) in March 2006 to promote its archived copyright images in the interest of making them better known and more widely used. By scanning and displaying images on its web site, one of the most used sources for science images in the world, SPL, acting as the agent of the RAS, will sell licences (including discounts for academic, educational works and preferred clients), to reproduce images for specified projects. The copyright and intellectual rights in the images, however, remain the property of the Society at all times. Moreover the Society retains the right to exploit or distribute images in any other way at its own discretion.

### **Meetings**

The Society continued to organize and sponsor a large number of meetings, at all levels, from those targeted at schoolchildren to Specialist Discussion programmes for the research community. 390 registered to attend the 5 day RAS National Astronomy Meeting (RAS NAM), the UK's premier annual astronomical event, which, under the leadership of Professor R. Warwick, met in Leicester 3-7 April 2006. 14 plenary talks and 24 parallel sessions (the latter involving 128 oral presentations) were given while 112 scientific papers encompassing a similarly diverse range of topics were also displayed as posters. A monthly programme of meetings, excluding the Summer break between June and September, was held in Burlington House, comprised of 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. Highlights of the meetings programme in the calendar year 2006 included the Whitrow Lecture (Professor Carlos Frenk); Harold Jeffreys Lecture (Professor Athena Coustenis); George Darwin Lecture (Professor M. Werner) and the Presidential Address (Professor Kathryn Whaler). While the Society continued to offer assistance to out-of-London meetings, a survey of members provided no

## **TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2006 (Continued)**

support for moving the regular meetings programme away from the capital (or indeed away from its 'traditional' Friday timetable).

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

### **Grants**

The Society increased its number of grants, which are open to non-Fellows, to support research or study in any areas 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. Applications were particularly encouraged for bursaries to enable undergraduates who are considering research as a career to work in a research environment for part of the summer before their 3rd or 4th year. 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 Councils (e.g., undergraduate research bursaries).

In addition, the Society awarded the Sir Norman Lockyer Fellowship, held throughout 2006 at Oxford University by Dr Roberto Trotta, to support an outstanding young scientist in a topical research programme.

A list of 2006 grantees; see Appendix.

### **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. In December 2006 the recipients of the 2007 awards were announced. They included Gold Medals, the Society's highest honour (Professors J.L. Culhane and N. Weiss); the Eddington Medal (Professor I. Novikov); the Price Medal (Professor A. Jackson); the Service to Geophysics Prize (Professor A. Khan); Fowler Prizes (Drs G. Smith and D. Mackay and the election to Associateship of the Society of 6 distinguished overseas scientists. A new Group Achievement Award was created to recognise outstanding achievement by large consortia in any branch of astronomy or geophysics where it was not appropriate to present, jointly, one of the other awards of the Society.

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

### **Policy**

In 2006 the RAS stepped up its level of engagement with the development and promotion of policy aimed at government and other decision taking bodies to help shape the future direction of publicly funded astronomy and geophysics by creating a new (part-time) position of 'Policy Officer' in November 2006. Several reports and submissions were made including those to the House of Commons Education and Skills Committee review of Higher Education; House of Lords Science & Technology Committee review of Science Teaching ; UKRC proposals to create a Science & Technology Facilities Council to replace PPARC and CCLRC; Funding Councils' proposals to replace RAE post -2008 ; the case for funding astronomy research (presented to HM Treasury and DTI); RCUK Consultation on Peer Review; European Policy on Open Access publication of scientific research. In addition the British Geophysical Association, which is jointly sponsored by the Society and the Geological Society of London, issued a major report on Geophysics Education.

## **TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2006 (Continued)**

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

The Society took a high-profile role at the General Assembly of the International Astronomical Union (IAU) which met in Prague in August 2006. The President acted as the UK 'National Member' while the Treasurer was elected to the Finance Committee of the IAU; an ex-President chaired the Resolutions Committee during the controversial debate on the definition of a planet and the status of Pluto.

### **Staffing**

As reported elsewhere, during 2006, 5 of the 6 editorial staff opted to work from home, following a comprehensive review of terms and conditions, and a new (2/5) Policy Officer position was created, initially for 3 years, to develop the Society's engagement with government and other major decision takers. All non-editorial positions were reviewed by an outside consultant as a result of which, it was decided to rationalize the staffing provision for the library. The Staff Handbook, which forms a part of the staff members' contract, was fully revised to take account of the changes introduced from October 2006 concerning Age Discrimination and to accommodate the circumstances of home workers.

### **Library**

The RAS library receives some 300 current periodicals in astronomy and geophysics and has holdings of over 3,000 ceased titles. It contains more than 10,000 books from popular level to conference proceedings and in addition has the second-largest specialist collection of astronomical rare books in Britain with over 5,000 items published before 1851. The membership of the Society includes not only professional astronomers and geophysicists who normally have the use of institutional research libraries, but also a substantial proportion of non-professional astronomers, historians and others who may not have access to such depositories. In addition the RAS library holds journals and books not available in many university libraries. The removal of the library's holdings respectively to a repository, the Society's Annexe in Burlington House and to temporary offices in Hallam St. in preparation for the refurbishment of the main apartments in Burlington House in November 2006 (see below) was a major preoccupation, as was progressing the computerization of records. As always, the willingness of volunteers to give their time was of great assistance.

### **Member Communications**

The newly designed web site, which was rolled out in 2005, comprised an area restricted to fellows through a password system and another area available to the public. Its primary purpose was to improve communications with the membership by, for example, allowing fellows to maintain their own personal details, link to electronic versions of the Society's journals, contribute to discussion in the 'Forum' and access the on-line library catalogue. Provision was made in 2006 to enable members to cast an electronic vote for elections to Council from 2007 and to participate in membership polls to assist determine the Society's policies.

Once again a Fellows' pocket diary was produced containing useful information about the Society and its sciences.

## **TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2006 (Continued)**

### **Burlington House**

Following the conclusion, in 2005, of the long dispute with the government over the basis on which the Society, and 4 other Learned Societies, should continue to occupy the courtyard apartments of Burlington House the Society agreed to finance, from its general reserves, a major refurbishment of its premises. This was scheduled to start after the completion, in mid-2006, of the cleaning and refurbishment of the exterior of the building and courtyard by the landlord (the government). A firm of conservation architects, 'Peregrine Byrant', was commissioned to lead a team of consultants to oversee the restoration of the public rooms to a standard appropriate to their historical importance as a grade 2\* listed building, up-grade the mechanical and electrical services (including the installation of a lift to cater for disabled visitors, and air-conditioning), improve the conditions under which the Society's rare books are stored and above all, make the building 'fit for purpose' as the home of a professional scientific organization. This would be effected by reinstating a lecture room, but with advanced features, and provide a suite of attractive meeting rooms and working spaces for the use of fellows and the science community. Following a competitive tender the construction contract was awarded to 'Crispin & Borst' and work, scheduled to take 10 months, commenced in November 2006. During this time the staff of the Society normally based in Burlington House, including the British Astronomical Association, moved to temporary accommodation in Hallam St. from where, with the exception of the library (where reader services had to be curtailed), the full range of Society activities continued to be supported. Rare books and other valuable items including furniture was removed to a repository (where the opportunity would be taken to effect necessary repairs and restoration).

The 5 Learned Societies, together with the Royal Academy of Arts, who share the Courtyard, announced their intention to offer a programme of joint 'Burlington House Lectures' directed at the general public.

### **Governance**

The Society entered in Memoranda of Understanding (MoU) with the following groups in order to regularize and improve liaison with and between these important associations for promoting specialized aspects of astronomy and geophysics viz. Astrophysical Chemistry, Magnetosphere, Ionosphere and Solar –Terrestrial (MIST) Physics, Planetary Forum, Astrobiology Society of Britain, Solar System Science, UK Astroparticle Physics, UK Solar Physics Group and the British Geophysical Association. The MoU provided for the groups to seek financial support from the Society for specific activities; the use of the Society's rooms for meetings; to submit proposals for the Society's discussion meetings programme and to submit reports for publication in *A & G*.

### **Education**

Following a review of how the Society could contribute to the encouragement of school pupils to study science, an Education Strategy was adopted in December 2006. Its principal features were the creation of a 'kite-marked' list of educational resources to support teachers of the astronomical and geophysical content in all the major relevant qualifications at KS2, 3, 4 and 5 in secondary schools; establishing a searchable data base of experts willing to give talks to schools (and a bursary scheme to assist schools to attend lectures at neighbouring universities); the expansion of existing competitions for school pupils and the commissioning of a longitudinal research study to evaluate the extent to which the study of astronomy and geophysics motivates students to study scientific subjects.

## TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2006 (Continued)

### 5. FINANCIAL REVIEW

#### Reserves policy

The Society's investments are divided between unrestricted funds and restricted funds. Restricted Funds serve specified purposes, often as the results of implementing the conditions of a gift or a bequest. In 2006, the Society set up the Ian Ridpath Fund for Conservation as a result of such a gift. All unrestricted funds are available as reserves and can be used for purposes such as the following: to manage cash flow; solve single problems; generate income for charitable purposes; manage risks; underwrite the final salary pension fund for its employees; sustain financial under-performance of the publications; comply with tax or regulatory requirements and, the ultimate risk, manage the wind-up of the Society. Since it felt that the system of designation of some of the unrestricted funds was no longer serving present requirements, the Council decided in December 2006 to un-designate all its unrestricted funds except for a Buildings and Maintenance Fund intended to manage maintenance and end-of-lease requirements associated with the Society's occupancy of Burlington House. The free reserves of the Society as at 31st December 2006, defined as being unrestricted, undesignated funds not represented by fixed assets, were, £5,305,972. During the year Council cancelled the designation of the £4,016,000 publications reserve.

Other business risks such as employer's liability are covered by insurance. Since the Society's main income streams bulk into two large sums received at the beginning of the year, the Society holds interest-bearing cash accounts to satisfy normal turnover in the rest of the year. Towards the end of 2006 the Society held larger than usual cash sums as it prepared to make payments for the refurbishment project of its premises at Burlington House. In addition the Society holds unrestricted and restricted funds, comprising mainly Common Investment Fund holdings as well as pension funds (which are subject to regulatory review). Finally there are other assets, including archives, rare books, scientific instruments (most of which are on long-term loan to museums) and the titles of its publications.

#### 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 a stable asset, such as shares quoted on the stock exchange, bonds, property or cash). The mixture of investments is determined by the Investment Manager on the basis of the guidelines set by the Society's Finance Committee (in the case of restricted funds, to preserve purchasing power but invest for income; for the General Fund, there is no immediate requirement for income). Investment performance is measured against the WM Benchmarks, Constrained by Income and Unconstrained, respectively. A medium level of risk applies to both.

	Performance 2006 – Total Return %	
	Benchmark	Actual
General Fund	12.0	12.8
Restricted Funds	13.0	12.6

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.

## TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2006 (Continued)

### 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, at its March meeting, sets the overall financial framework of the Society, based on the first draft of the annual accounts. It decides the Annual Contribution 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.

In general, the costs (including salaries and, for the first time, rental and external building maintenance costs) of the Society continue to rise faster than RPI. At the same time the Society's range of activities continues to grow. The net result is that, in recent years, the Society's finances have shown a progressive reliance on surpluses generated by income from the journals. However, in order to limit future price increases to the journals, and to meet Council's requirement that, where possible, recurrent expenditure is contained within income, since 2003 there has been a steady rise in the level of members' contributions, which have been deliberately increased above RPI. The continued health of the stock market has made it possible to implement the Burlington House refurbishment project out of reserves and to finance the proposals outlined in section 6, while retaining the capacity to fund a further large-scale science project.

### 6. PLANS FOR THE FUTURE

While continuing to cater for its general membership, the over-riding aim is to position the Society such that it provides leadership and representation of its members who are career scientists. Currently it is estimated that some 70 % of astronomers and geophysicists employed in UK universities and research institutions are fellows; ideally this figure should be closer to 100%. This requires that the Society's organisational systems are as professional and efficient as possible and that more effort is made to attract younger scientists into joining. Equally, the Society needs to achieve greater visibility in the eyes of politicians, the research councils and the media as a campaigning organisation.

Thus, in 2007, the interests of the professional community of astronomers and geophysicists will be promoted by

- generating research papers and promoting policy proposals to the research councils and government, *inter alia*, on space policy and astronomy teaching in universities
- seeking an outcome to the Comprehensive Spending Review which protects and promotes UK astronomy and geophysics by reversing cuts previously made to the budget of PPARC
- influencing the *modus operandi* of the new Science & Technology Facilities Council ( STFC) to ensure that science research, including curiosity driven research, validated by the research community, remains its principal driver
- strengthening the claim of the Society to be the 'voice of UK astronomy' by increasing its professional membership
- generating publicity for the activities and achievements of the Society

At the same time, to ensure the continued flow of young scientists into the professional community the Society will increase its education and public outreach activities acknowledging the power of astronomy to attract students into studying science at school and beyond. This will include

## **TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2006 (Continued)**

- assisting secondary schools to locate and use relevant and accurate astronomy teaching resources.
- co-ordinating activities being organized in connection with the 'International Year of Astronomy 2009', a programme of events to raise the profile of astronomy with the, especially younger, general public.

In addition, during 2007, the Society will develop the objectives listed in section 3 viz

- Continue to improve the performance of the Society's journals by completing the move to an on-line submission and tracking system for *A & G*
- Monitor 'open access' and 'open repository' developments and extend an 'author pay' option to *MNRAS* (already in place for *GJI*).
- Launch the first books to be published under the agreement with Springer.
- Complete the up-loading of the Society's collection of photographic images into the SPL archive.
- Continue to organize a programme of scientific meetings in Burlington House, of which several will be web cast for the benefit of scientists unable to attend in person
- Continue to sponsor the National Astronomy Meetings - in Preston (2007), at which, for the first time, astronomers will be joined by the solar physics and MIST communities, Belfast (2008) and Hatfield (2009), the last a joint meeting with the European Astronomy Society.
- Continue to provide grants, including the appointment of a new Lockyer Fellow, while actively exploring the opportunities for investing the Society's reserves in large-scale projects, which will materially advance the study of astronomy and geophysics or its public outreach.
- Continue to recognize outstanding scientific achievement by awarding the Society's medals and prizes.
- Continue to develop the services provided by the library by completing the computerization of records.
- Continue to improve communications with the membership by developing the Society's web site including on-line polls and, for the first time, enabling electronic voting for elections to Council in May 2007
- Re-occupy and re-launch the refurbished Burlington House apartments by developing a programme of meetings in the new lecture theatre including those suitable for inclusion in the Burlington House Lecture series
- Continue to liaise with international organizations including the IAU and UNESCO (the latter in connection with its Astronomy and World Heritage initiative).
- Review the management of the Society's investment portfolio to optimize returns within the agreed risk parameters.

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

The Trustees are responsible for preparing the Annual Report and the Financial Statements in accordance with applicable law and regulations.

Charity law requires the Council, as trustees, to be responsible for the preparation of financial statements for each financial year. Under that law, the Trustees have elected to prepare the Financial Statements in accordance with United Kingdom generally accepted accounting practice (United Kingdom Accounting Standards and Applicable Law). The Financial Statements are required by law to give a true and fair view of the state of affairs of the Society and of the surplus or deficit of the Society for that year.

**TRUSTEES' REPORT FOR THE YEAR ENDED 31 DECEMBER 2006**  
**(Continued)**

In preparing those financial statements, the trustees are required to:

- select suitable accounting policies and apply them consistently
- make judgments and estimates that are reasonable and prudent
- state whether applicable UK accounting standards and statements of recommended practice 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 RAS will continue to operate.

The trustees are responsible for ensuring proper accounting records are kept which disclose with reasonable accuracy at any time the financial position of the RAS. They are also responsible for safeguarding the assets of the RAS 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**

The Trustees, having been notified of the cessation of the partnership known as Baker Tilly, resolved that Baker Tilly UK Audit LLP be appointed as successor auditor with effect from 1 April 2007, in accordance with the provisions of the Companies Act 1989, s26(5). Baker Tilly UK Audit LLP has indicated its willingness to continue in office.

Approved by the Council and signed on its behalf by:

Professor M. Rowan-Robinson  
President  
11th May 2007