



*Advancing
Astronomy and
Geophysics*

ROYAL ASTRONOMICAL SOCIETY

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MINUTES OF COUNCIL MEETING 8 FEBRUARY 2007 HELD IN THE ROYAL SOCIETY OF CHEMISTRY BURLINGTON HOUSE

1. PRESENT: Professor M. Rowan-Robinson (President), Professor D. Gubbins, and Professor E.R. Priest (Vice-Presidents), Professor P.G. Murdin (Treasurer), H.J. Walker (Secretary), Dr A.J. Ball, Professor M.E. Bailey, Professor A.M. Cruise, Professor M.G. Edmunds and Professor E.I. Robson.

APOLOGIES: Professor D.W. Hughes (Vice-President); Professor I.D. Howarth and Dr M.A. Hapgood (Secretaries) Professor M.A. Barstow, Professor R.L. Davies, Dr L Fletcher, Professor J.H. Hough, Dr J. Mitton, Mr I.W. Ridpath, Professor M.J. Rycroft and Professor I.P. Wright.

IN ATTENDANCE:

D Elliott (Executive Secretary)

R Massey (Policy Officer)

The President, having invited Council to exercise its rights under bye-law 21, welcomed Professor Edmunds to the Council as a replacement for Professor Hartquist, who resigned in December 2006.

2. MINUTES

The minutes of the meeting of 7 December 2006 were approved and signed.

3. MATTERS ARISING

3.1 HEFCE 'vulnerable subjects' and geophysics

A reply was tabled to the President's letter of 15 January, which requested the inclusion of Geophysics in the list of subjects eligible for support from the £75 million fund established by HEFCE to assist vulnerable science. Its Chief Executive, Professor David Eastwood, acknowledged that the case for Geophysics needed to be considered and that this would be investigated by the Analytical Services Group. In particular the costs of geophysics, as compared with the other 'vulnerable subjects' so far identified and the extent of its provision in each institution needed to be established.

The President observed that this was an encouraging reply and asked Vice-President Professor Gubbins to liaise with HEFCE during this investigation.

3.2 Human Space Exploration Consultation

The Executive Secretary reported on the results to date of the poll of the membership on the following proposed policy position:

‘The RAS strongly endorses the scientific benefits of space missions, which have transformed our knowledge of the Earth, the solar system and the universe over the past 50 years. The RAS holds to the view that the prime driver in selection of scientific space missions, within an inevitably limited budget, should be the quality of the science. The RAS recognizes that there may be some scientific goals that can only be achieved within a human spaceflight programme. However these goals are likely to be feasible only within a greatly expanded scientific space programme. The RAS also recognizes that the space programme is a powerful attractor of school children and students towards STEM subjects, and that the space industry is an important sector of the UK economy. Educational, economic and technological arguments might support a UK involvement in human spaceflight. However this would require separate funding, additional to the science budget.’

As of February 7, from the 424 votes cast, 404 were in agreement with the proposition and just 17 were opposed. 2558 fellows had been emailed (the email addresses of the remaining members being unknown); of these 2294 had reached their destination and at least 691 had been opened (the others being either ignored or diverted by ‘spam’ filters or firewalls). Even so a return rate of almost 20% from the fellows actually reached was very positive and encouraged Council to repeat electronic polling on other important policy issues. The Society’s influence with government, and other decision takers, would be stronger when it could claim that its policies were based on consultation with the fellowship at large.

It was agreed that a notice would be put on the web site to indicate that polling would be closed the following week, and that the results of the vote would be communicated to the Clerk of the Science and Technology Committee, currently investigating UK Space Policy, in advance of the President’s appearance before it on 21 February.

4. PRESIDENT’S BUSINESS

4.1 The President reported on his meeting with Sir Keith O’Nions, DG of the research Councils at the Office of Science and Innovation, DTI held on 8 January 2007.

4.1.1 In advance of the meeting he had indicated the points for discussion.

Concerning the Science and Technology Facilities Council (STFC) they were:

- the importance of its charter specifically including blue skies research among its aims
- the necessity that it should be advised by a Science Committee made up of senior researchers
- the need that increases in the costs of international subscriptions to ESO, ESA and Gemini caused by currency fluctuations and the growth of UK GDP should continue to be met by funds additional to the core funding for astronomy.

Concerning the Comprehensive Spending review (CSR) they were:

- that, because of past low levels of funding, relative to the other Research Councils, PPARC had already had to make cuts to major astronomy projects and activities
- that astronomy and space science, however, were important attractors of prospective university students into physics (in the past 20 years, to attract and retain physics students, physics departments with significant astronomy activity had doubled)
- that 30% of physics departments depended on PPARC for over 40% of their total research income and
- therefore, that it was vital that the CSR allows for astronomy core funding to grow at least at the rate of inflation since otherwise many physics departments could be vulnerable.

4.1.2 The President reported that the meeting went reasonably well and that the DG had confirmed that the RAS was ‘asking the right questions’. Specifically,

- Sir Keith accepted that the charter of the STFC did not give research in astronomy and particle physics as a goal, although it does mention training postgraduate students in astronomy, particle physics, space science and nuclear physics*. However he added that the charter had now been agreed and promulgated. To obtain the reassurance that the RAS desired he suggested that the President should write to him, copied to Chief Executive-designate of the STFC, Professor Keith Mason, raising this issue, to which a reassuring reply would be sent.
- On the issue of a Science Committee the DG said that the proposals for an advisory structure he had seen recently looked ‘sensible’ but invited the President to discuss this in detail with Professor Mason.
- On currency and GDP fluctuations Sir Keith said that the Office of Science and Technology (OSI) would, as before, continue to smooth these out
- On the CRS and funding the DG did not give much away. He explained that, after the total allocation had been set, the Treasury had little involvement in how the science budget was spent (he added that this was best left to the OSI since, when Ministers were involved, initiatives could be announced without proper consideration of all the implications).
- Sir Keith denied that astronomy funding through PPARC had been squeezed unfairly. Much of the increase in science funding had gone in infrastructure and overheads and when this was factored in there had not been much change in research volume across the board. He added that nor did he expect this situation to change following the CSR.
- The President thought that Sir Keith had not fully appreciated the dependence of physics departments on astronomy funding. The DG expressed concern at the dependence of some departments on PPARC generally and offered the opinion that astronomy funding would have better protection within the new, larger, STFC.
- Finally, Sir Keith suggested that the RAS should analyze carefully STFC's delivery plan when it came out later in the year.

Note: the Objects of the STFC as stated in the Charter are:

(a) To promote and support high-quality scientific and engineering research by developing and providing, by any means, facilities and technical expertise in support of basic strategic and applied research programmes funded by persons established in Our United Kingdom and elsewhere.

(b) To promote and support, by any means, high-quality basic, strategic and applied research and related postgraduate training in astronomy, particle physics, space science and nuclear physics and research in any other field which makes use of scientific facilities where access is provided, arranged or otherwise made available by the Council, having regard to the objects of the other research councils.

(c) To promote and support the advancement of knowledge and technology (including the promotion and support of the exploitation of research outcomes) and to provide trained scientists and engineers, and thereby to contribute to the economic competitiveness of Our United Kingdom and the quality of life of its people, meeting the needs of users and beneficiaries.

(d) In relation to the activities as engaged in by the Council above and in such manner as the Council may see fit:

- (i) to generate public awareness;
- (ii) to communicate research outcomes;
- (iii) to encourage public engagement and dialogue;
- (iv) to disseminate knowledge; and
- (v) to provide advice.

4.1.3 As a footnote, the President added that he had subsequently met Professor Mason who had outlined the proposed advisory structure of the STFC *. The President thought that it appeared satisfactory though he remained concerned that the new Council would give priority to developing the Science Campuses at Daresbury and Harwell at the expense of those universities' instrumentation groups which were not within a 50 mile radius of them. He was also concerned that there could be a reduction in the use of peer review in reaching strategic decisions and proposed to write to the Director of Corporate Affairs-designate (Jim Sadlier) about this. Professor Mason had gone on to sketch PPARC's priorities for the CSR. These included space science; facilities (to be able to bid to site a major ESA facility in the UK); science campuses; multi-disciplinary initiatives and increased studentships and fellowships (possibly linked to the strategic 'road map'). It was important, the President added, that the community worked in partnership with PPARC over the next few weeks and months since, in the first instance, it was necessary to assist the OSI obtain the best outcome for science from the Treasury (thereafter the RAS would have an opportunity to influence the allocation of the science budget). With that in mind the President informed Council that he proposed to take up the offer of David Heathcoat-Amory, MP (and FRAS), Chair of the Parliamentary Astronomy Group, to arrange a meeting with the Minister of Science, Malcolm Wicks.

* Under this structure the Council and Chief Executive will be assisted by 5 advisory bodies covering; Science Strategy, Business Strategy, Education & Training, Audit and International Science. Strategy will be developed by the Science Strategy Board which also will be responsible for advising the Council and Chief Executive on

options for its delivery. The Science Strategy Board will be supported by two science committees responsible for Particle Physics, Astronomy and Nuclear Physics (PPAN) and Physical & Life Sciences (PLSC) respectively. The PPAN Committee will be supported by Peer Review Grants Committees for Astronomy, Particle Physics and Nuclear Physics. Facility access review arrangements across the programme will remain as they are now. Once constituted it will be for the Science Strategy Board and its two committees to recommend how they wish to receive input and advice from the wider community

4.2 The President next turned to the House of Commons Science & Technology Committee Review of Space Policy. Following on the points he had just made about supporting PPARC, the President said the RAS should give a strong endorsement to the case for expanding Space Science. Thus in addition to rehearsing the key points in the Society's written submission, in his oral evidence to the Committee on 21 February, he wanted to stress the multiplier benefits for the UK of being involved in the early stage of proposed space missions. He also wanted to outline the importance of having a national space body capable of taking a stronger role than BNSC had been able to, to coordinate training and knowledge transfer and provide international leadership. It was not clear, at this stage, if this meant creating an autonomous Space Agency, or Space Council operating inside, or alongside, the STFC.

4.3 Council noted the letter the President had sent to the Campaign for Dark Skies expressing concern at the lasers which Southampton Council proposed to install

4.4 Finally, Council agreed that the paper analysing the role of astronomy in research funding of UK physics departments should be posted on the RAS web site.

5. BURLINGTON HOUSE

5.1 The Executive Secretary reported that all the necessary licences and permissions had been given, that most specifications had been agreed and that the works were progressing satisfactorily.

5.2 He then went on to describe the proposal for the decoration of the windows on the first half landing. A distinguished window engraver, Sally Scott, had been approached. She had created a beautiful design, at once abstract and yet 'astronomical', extending over both windows and incorporating RAS motto as well as the 5 Platonic Solids. Further she proposed that the windows should be back-and-side-lit by neons concealed in the aluminium frames which would hold the 2 pieces of glass and be fitted over the existing windows (which would be blacked out to provide the optimum visual effect). The design would be engraved by sandblasting and acid and then subjected to a colouring process.

The Executive Secretary explained that while the existing windows, as required by the listing consent, would be protected, it would not be possible to open them. However, this would not be necessary to gain access to clean the outside of the window, nor did the thermal model, on which the ventilation system for the building was being designed, require them to be open on hot days. It would, though, be necessary to have electric lights on, and possibly upgrade their intensity, in the inner hall since little or no light would penetrate through the engraved windows. However, the Executive Secretary added, it had always been necessary to have the lights on even on sunny days and replacing the existing windows with clear glass would not make a significant

difference since most natural light was cut off by the high wall of Burlington Arcade onto which the RAS apartments backed (and which would not provide an attractive backdrop were they to be visible).

The cost of the proposed windows would depend on how extensively colour was used but a total price of £25,000, including installation costs, would allow the Society to have a lasting and impressive art work in the only part of the building which was seen by every visitor to it. This was higher than the indicative budget of £14,000 estimated for plain engraving but the Executive Secretary believed that, without colour, the stairs and inner hall would look somewhat under-stated. He added that apart from the all-skies camera display proposed for the new Fellows Room, which would be self-funding, and the (free) loan of a painting from Anthony Whishaw, which would hang outside the new Council Room, the only other plan to enhance the apartments with art works was the photographic mural to be fixed to the wall of the lift shaft for a cost of the order of £5-7,000. On the other hand it had been agreed that the more than £30,000 needed to replace the Council table would not be needed; instead the existing table would be renovated. Finally, the Executive Secretary confirmed that the estimated overall spend on the refurbishment was still well within the ceiling agreed by Council in July 2006.

Council agreed to the proposal with enthusiasm, though there was some reservation about the inclusion of the Platonic Solids. In view of this members were invited to suggest other motifs, which the Executive Secretary would pass to the artist for consideration.

6. ORGANISATION AND STRUCTURE

6.1 Council noted and approved the following names for inclusion on the ballot paper for elections to Council in May 2007:

Name	Proposer	Seconder
<i>Vice-President 'A'</i> Prof. Ian D. Howarth	'Council'	
<i>Vice-President 'G'</i> Prof. Mark Edward Bailey Prof. Richard A. Harrison	'Council' 'Council'	
<i>Secretary A/G</i> Dr Ian Andrew Crawford	'Council'	
<i>Councillor 'A'</i> Prof. M.G. Edmunds Prof. B. Gibson Dr J.S. Greaves Dr A. Gatt	Dr D. Ward-Thompson Dr. S.P.S. Eyres Dr H.J. Walker Mr M. Cripps	Prof. P.G. Murdin Dr B.J.D. Hassall Prof. E.R. Priest Mr S.G. Allen
<i>Councillor 'G'</i> Dr R.T. Holme	Prof. K.A. Whaler	Dr C.J. Ebinger

Prof. J.M. Kendall
Dr V.M. Nakariakov
Dr C. Thomas
Dr T.J. Ringrose
Dr J.A. Wild
Prof. J.H. Woodhouse

Dr G.A. Houseman
Dr C.E. Parnell
Dr M.J. Hill
Dr A.J. Ball
Dr F. Honary
Prof. D. Gubbins

Prof. D. Gubbins
Prof. E.R. Priest
Prof. J. Shaw
Prof. J.C. Zarnecki
Dr A.S. Kavanagh
Dr G.A. Houseman

6.2 RAS Web Site

In the absence of the Senior Secretary this item was deferred.

6.3 RAS-Springer Book Series and Science Photo Library (SPL) image sales

The Treasurer reported that the book series was taking off. 2 titles were under preparation, 4 had been reviewed and rejected and a further 4 were being explored. The Editor of 'A&G', Dr Bowler, had agreed to be Commissioning Editor for an increase in salary plus a commission per accepted book. In response to a question about its scope and rationale, the Treasurer explained that the book series aimed to facilitate contributions to the RAS's sciences, which would otherwise not be viable without the Society's participation. For a fuller explanation he referred members to the paper which had been presented, and accepted, at the October Council. It was agreed that the appointment of Dr Bowler should be posted on the RAS web site with a reminder to Fellows to contact her directly with book proposals.

Turning to the agreement with the SPL, the Treasurer informed Council that, to date, in excess of 100 images belonging to the RAS had been scanned and loaded onto the SPL web site; however he was still negotiating the basis on which Fellows could obtain access to them on a privileged (that is, heavily discounted) basis.

6.4 RAS NAM 2007

The Treasurer spoke to a tabled paper from the organiser of the NAM, Professor Bromage, which requested a grant towards its general costs of £16,000, rather than the £10,000 given by the RAS to the organisers of the previous last 2 NAMs. The Treasurer recommended acceding to this request on the following grounds:

- This NAM, for the first time, would include both the UKSP and MIST communities who, ordinarily, had sought, and received, separate support from the RAS
- It would be somewhat longer, being extended to run from Monday lunch to Friday lunch
- Due to the relatively short-notice decision to host the NAM2007 at UCLan, it had not been possible to secure student Halls accommodation for delegates necessitating the provision of coaches to and from a wide range of hotels.

While agreeing to the overall sum, Council was anxious that future NAM organisers should continue to regard £10,000 as the 'standard' RAS contribution. Accordingly, it was decided that £10,000 should be granted for NAM2007 general costs; £4,000 for the additional costs incurred by running the parallel MIST and UKSTP meetings, and the expenses associated with having to make accommodation arrangements late; and £2,000 as a contribution to the contingency fund, which would be called on only if necessary.

6.5 Staff cost of living increases

The Treasurer introduced the previously circulated paper, which outlined the increases in remuneration needed to maintain the purchasing power of staff salaries and other stipends and honoraria, given the 4.4% change in the Retail Price Index over the previous 12 months.

These were agreed.

7. COMMITTEES

7.1 Membership Committee

In the absence of its Chair, Dr. Mitton, Council noted the previously circulated paper and welcomed the stated intention of the Committee to review membership grades (again).

7.2 Higher Education Committee

In the absence of its Chair, Professor Hough, Council noted the previously circulated paper. Professor Edmunds clarified that his appointment with the Higher Education Academy should not be the cause for delaying the distribution of the RAS questionnaire, which Professor Bromage has designed to obtain information about the state of undergraduate astronomy teaching.

7.3 Education Committee

The Secretary, Dr. Walker, spoke to the previously circulated paper and drew attention to the proposed appointment of a coordinator to manage the 'kite-marking' of education materials. With the proviso that the RAS needed to avoid duplication of effort through close liaison with PPARC and other bodies this was agreed.

8. POLICY & PUBLIC ENGAGEMENT

8.1 'Galileo'

In the absence of the Geophysical Secretary, this item was deferred.

8.2 'Astronet'

Professor Robson explained that ASTRONET, which consists of the main national research organizations in Europe as well as the European Southern Observatory and the European Space Agency, existed to create a European, long-term strategic planning process for astronomy. In the first instance this would be done by producing a 'Science Vision' for European astronomy and a concomitant 'Infrastructure Roadmap'. He added that Professor Bode at LJM U had been appointed project coordinator.

8.3 Parliamentary Questions (PQs)

The Policy Officer was asked to produce and distribute model letters, which fellows could adapt and send to MPs, explaining why they wanted the latter to ask a particular question. One member sounded the caution that the more time bodies like PPARC had to spend providing ministers with the answers to PQs, the less they had to deal with managing the UK astronomy.

9. PUBLICATIONS

9.1 MNRAS and GJI Managing Editor Reports

Council noted the previously circulated papers. The Treasurer reminded Council that it had been agreed the previous year that, unless their presence was specifically required, the Managing Editors would not attend in person since this would not be the best use of their time. He went on to draw Council's attention to the refreshing of both journals' editorial boards; to their continued growth in size; the growing proportion of papers from overseas authors; the increased number of readers and the improvement of acceptance and publication times.

While congratulating both Managing Editors on these singular achievements Council wondered if GJI could not take the lead in trying to change the geophysics 'community culture', which tolerated a more leisurely approach to reviewing than did the astronomers'.

10. OTHER

10.1 Candidates for Election: Council approved the following Candidates for Election to Fellowship listed in OR/01/07 & OR/02/07 and posted on the RAS web site.

Austin	Matthew
Booth	Mark
Brainin	Robert
Carley	Ruth Alexandra
Cole	Shaun
Collins	Christopher
Cruz	Maria
Dow	James
Doran	Emile
Downing	Paul
Duddy	Sam
Eales	Stephen
Faimali	Alessandro
Feldman	Charlotte
Foullon	Claire
Gallaway	Mark
Gu	Xibin
Haehnelt	Martin
James	Bethan
Jheeta	Sohan
Keane	Evan
Lombry	Thierry
Madigan	Thomas
Marshall	Jonathan
Mohan	Mahesh
O'Brien	Kenneth
Oliver	Sebastian James
Orjales	Jose Manuel Cao
Pappas	Matthew
Peel	Michael
Richardson	John E.

Rizzo	Davide
Romer	Kathy
Shalet	Danielle
Shaul	Diana
Skidmore	Michelle Sarah
Smith	Duncan
Starkman	Glenn
Vardanyan	Mihran

10.2 The minutes of the Monthly A&G (Open) Meetings for 8th December 2006 and 12th January 2007 were approved and signed

11. AOB

The President explained that the RAS had been asked by Professor Lynden Bell of the Institute of Astronomy, Cambridge, to participate in the establishment of a lecture series in Cambridge, to honour Eddington, one of the RAS's most distinguished former Presidents. The President went on to say that, following an exchange of correspondence, it had been agreed that in return for contributing for 10 years up to £1000 per year to the costs of an annual lecture, the RAS would secure the right to nominate a member of the selection panel, be recognised in all publicity on an equal footing as a sponsor with Cambridge and be able to request the lecturer to repeat his lecture at an RAS meeting, possibly in a shortened form. With the proviso that the proposed restriction of the RAS nominee to fellows based in Cambridge and its environs was unnecessary and should be removed, Council agreed to the proposal.

Council rose at 1555

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M. Rowan-Robinson
President

8th March 2007