



## The Astronomical Society of Edinburgh

### Annual Report for 2000

The Astronomical Society of Edinburgh was founded (as the Edinburgh Astronomical Association) in 1924 and is governed by a Constitution adopted in 1937 and since modified (most recently on 13th January 1995). A copy of this Constitution has been supplied to each member and may be referred to in the Society's Library at the City Observatory and on the Society's web site. Copies may be obtained from the Secretary.

Clause 1 of that Constitution is:

The name of the Society shall be "The Astronomical Society of Edinburgh" and its objects shall be to advance the education of the public about the science of Astronomy and to promote astronomical research chiefly in Edinburgh and its neighbourhood. In furtherance thereof:

- (a) to circulate information on astronomical matters by the publication of articles, books etc.;
- (b) to encourage astronomical study and observation; and
- (c) to increase popular interest in astronomy.

The Management of the Society is vested in a Council, elected from the Ordinary Membership of the Society. The following were elected at the AGM in March 2000 and served from 1st April:

<b>President</b>	Lorna McCalman 20 Hillside Crescent, Edinburgh, EH7 5EB Telephone: 0131 556 3790 Email: lmccalman@blueyonder.co.uk
<b>Secretary</b>	Graham Rule 105/19 Causewayside, Edinburgh EH9 1QG Telephone: 0131 667 0647 Email: Graham.Rule@ed.ac.uk
<b>Treasurer</b>	George Grant 42 Bonaly Road, Edinburgh, EH13 0EQ Telephone: 0131 441 6542 E-Mail: george@grantfire.com
<b>Vice-Presidents</b>	Charlie Gleed Duncan Hale-Sutton

**Councillors**

Johnnie Bradley  
Alan Ellis  
Raymond Fenoulhet  
Pete MacDonald  
Jim Nisbet  
Adrian Weatherhead

The following Council members elected at the AGM in 1999 held office during the early part of the year (from 1st January to March 31st): Johnnie S Bradley, Alan Ellis, Raymond Fenoulhet, Charlie Gleed, George Grant, Duncan Hale-Sutton, Peter MacDonald, Lorna McCalman, Jim Nisbet, Graham Rule, Adrian Weatherhead

The Society's principal address is:

The City Observatory  
Calton Hill  
Edinburgh EH7 5AA

Telephone 0131 556 4365

At the AGM Jim Nisbet stepped down as Treasurer after having served for 9 years in this post. Thanks to Jim for all his hard work during that time.

Alison Duncan has been appointed Press Officer to the society. Alison, a professional journalist, will be responsible for press releases as well as keeping astronomical journals up to date with our activities. All press releases and items for publication will first be approved by the Council of the Society.

**Membership**

We welcomed 28 new members into the Society in 2000: Keith Adam, Wilma Joyce Austin, Michael Boon, Llyod Bradley, Steven Bruce, Chris Cauld, Allan Brian Clark, Susan Gillies, Dr. F.O. George, Ayton Girling, Scott Hanley, Samuel James Laycock, Graeme Lee, Dr Nikki MacLeod, Ms Kirsty MacLeod, Finlay Macrae, Ronald Frederick Marsh, Robert Millar, Scott Reynolds, David Cairns Robertson, Angus Self, David Small, Kenneth Thomas, Eva Todd, Robert Tracey, Yvonne Warner, Simon Walker, Campbell Wild.

On the 31st December the membership of the Society was 160 of which 7 are Honorary members.

It was with great sadness that the Society noted the deaths of Mr J.I. Dodds who had been a Councillor of the Society in the 1970s and Vice President in 1981, Mr J.D.Weir, Mr D.J.Lewis and Professor Hermann Brück

**Honorary Members**

Honorary members are Dr M. Bruick, Dr H Ford, Dr D Gavine, Prof D. Heggie, Mrs E. Jenkinson. The Honorary Presidents are Prof Andy Lawrence. C.B.E. and Prof. John Brown.

## Publications

Two editions of the society's Journal were published in 2000 (issue number 41 April 2000, and issue 42 October 2000) under the editorship of Dr Dave Gavine.

The society continues to purchase the Astrocalendars from the Federation of Astronomical Societies. These are given to members on payment of their subscription to the society. Extra copies have been purchased to allow non-members to purchase them if they wish.

In addition, the Society continues its presence on the World Wide Web and results in a number of enquiries about the Society and membership from Britain and world-wide. The "URL" for the Society is <http://www.roe.ac.uk/asewww/> and the Society thanks the Royal Observatory, Edinburgh for hosting our pages on their server. In addition to notices of meetings and other events the Society's Annual Reports and Journals can now be found there.

## Meetings

The Society has held the following meetings during 2000

January 7th

Graham Rule - ASE

*Thomas David Anderson - Watcher of the Skies*

February 4th

Omar Almaini - ROE

*The Universe Through X-ray Eyes*

March 3rd

Annual General meeting

Followed by Alan Ellis BSc FRAS - President, ASE

*Jupiter - the Liquid Giant* (Presidential Address)

April 7th

Neil Grubb - ASE

*CCD Imaging*

May 5th

Brian Kelly - Former Dundee City Astronomer

*The story of the little bear, the rose and the sunspots*

June 2nd

Gerry Taylor - ASE

*Families of Satellites*

July 7th

Social evening and barbecue

August 4th

Members night

Short presentations were given by:

Jim Nisbet *Here is the astronomical news*

George Grant *Re-energising the ASE*

Nikki McLeod *Using a webcam on a laptop for astronomical imaging*

Ron Livesey *Aurorae & radio propagation*

Bill Ward *Observations of Ceres at opposition*

September 1st

Dave Gavine - ASE

*Lunar Occultations*

October 6th

Dr Marek Kukula - ROE

*Black Holes and Quasars*

November 3rd

Dr David Clarke - Director of University of Glasgow Observatory

*The Pleiades*

December 1st

Rodger Stapleton - St Andrews University

*What time is it?*

Attendance at Meetings (where recorded) has been: 47 in February, 39 in June, 25 in August, 64 in October, 75 in November, and 75 in December.

## Council Meetings

The council met on 7th January, 24th January, 28th January, 25th February, 31st March, 28th April, 26th May, 3rd July, 28th July, 25th August, 29th September, 27th October, and 24th November.

## Equipment

The 6 inch Cook telescope is in regular use by members and several Friday evening meetings have been held to demonstrate the use of the Cook. The eyepieces (25mm, 18mm), which were bought last year, have made a big difference to the use of this instrument, with some beautiful views of the planets being most striking.

The 8  $\frac{3}{4}$  inch Dobsonian telescope has been taken to Earliburn to realise its full potential. The ease of use makes it ideal for everyone to use.

A 4 inch Newtonian telescope has been purchased for the society. It is very light and easily portable which makes it ideal to take with us when giving talks to outside groups.

Refurbishment of the 13 inch Cox telescope is continuing. It is hoped that it will be installed in the Crawford Dome, as this is in a much better condition than the Cox Dome. A further advantage being that the Crawford dome is on the same level as the car park and when the refurbishment is complete, will allow easier access for disabled visitors.

We have purchased a 12 inch Newtonian reflector for £200, from the widow of one of our members, Mr D.J. Lewis. The mirror and the flat are going to be re-aluminised and the telescope is to be mounted on a Dobsonian mount. This will make it more portable and it will then be taken to Earliburn for use by our members.

## Observing

The observatory is open to members of the society and the public on Friday evenings between 8pm and 10pm, to allow use of the telescopes and library. The middle two Fridays of the month have been used to show members how to use the 6 Cook refracting telescope. This has been very popular and around 20 members are now able to use the telescope.

Visitors are also shown around the Observatory and told about the history of the site. On clear nights, they are able to look through the telescope at the Moon and the planets.

Our dark observing site at Earlyburn is now ready for use. Much hard work has gone into refurbishing the garage and installing electricity. This provides a warm shelter and storage space. We also have the use of a small dome, in which a pillar has been built to mount a 12 inch SCT belonging to Jim Douglas. Several members regularly visit Earlyburn for observing and imaging sessions.

Two new observing groups have been started this year, the CCD/ Imaging group, which is run by Dr Neil Grubb, and the Messier group run by Dave King. These groups are well attended, providing a focus for members observing interests.

The CCD/imaging group is producing some excellent images, some of which are on exhibition in the City dome and the Playfair Building. Neil Grubb has had some of his images printed in Astronomy Now magazine

The Messier group is to encourage observing, particularly beginners. A certificate will be awarded to members who complete the observing list of Messier objects.

A hyper-sensitising service for photographic film is available to members. Charlie Gleed has been working on this project.

The main talking point this year was the Aurora of April 6/7th. This huge magnetic storm was witnessed and recorded by many members of the society.

Although there have been several auroral displays there have been few visual observations because of poor weather or moonlight.

Most of the meteor showers have been affected by bright moonlight and have been unfavourable. The Leonids were very disappointing this year, the moon and bad weather conspiring against observers.

The total eclipse of the Moon on January 20/21st occurred in good observing conditions was well observed and imaged by several members of the society.

The success of the two new observing groups has meant an increase in the number of members of the society who regularly observe and contribute their observations to the societys Journal and our monthly meetings.

## **Library**

We are continuing to add new and interesting titles to our library, which is still housed in the City Dome whilst the Library in the main building is out of use due to the dry rot. Members are encouraged to make use of the books, which are available for loan. Graham Rule continues to do an excellent job as Librarian.

## **E-Mail**

Thanks to Horst Myerdierks and the ROE, the society now has an e-mail list to which members of the society can subscribe. (free of charge) This list will be used to contact members about announcements, observing sessions and forthcoming events. To join the list, please contact the Secretary of the Society.

## **Visitors to the Observatory**

Forty people attended the Scottish Astronomers Group meeting on Saturday 20th May. The meeting, hosted by the ASE, took place in the City Observatory. Talks were given by two members of the society. Graham Rule spoke about the history of the observatory and Neil Grubb spoke about CCD astronomy.

Shetland AS collected the 12 inch and 18 inch Dall-Kirkham telescopes from Calton Hill and took them back to Fetlar in Shetland where they will be refurbished and rehoused in a custom made dome.

Dr Ian Bartky, author of "Selling the True Time - nineteenth-century timekeeping in America" visited the observatory to see some of the history of timekeeping in Edinburgh.

## **Other Events**

The time ball on the Nelson Monument was dropped at Midnight on 1st January 2000, by Graham Rule. It was dropped again at 12 minutes past midnight in recognition of Edinburgh's (local time) New Year.

An exhibition at Edinburgh Castle about the One O'Clock Gun was opened on 21st February to commemorate the centenary of the death of Charles Piazzi Smyth, the second Astronomer Royal for Scotland. He had been instrumental in setting up the time-ball on the Nelson

monument and the time-gun at the castle.

The Jewel and Esk Valley College planetarium visit was attended by 23 members of the society on 10th March. Harry Sutherland presented the planetarium show and everyone enjoyed the evening.

Our Honorary member Harry Ford was awarded the honorary degree of Doctor of Science, by the University of Abertay, Dundee. This was in recognition to a lifetime devoted to the furtherance of public awareness and education in astronomy. The ASE was represented at the ceremony by Dr Dave Gavine.

The Scottish Astronomy Weekend, hosted by the Glasgow Astronomical Society, took place on the 15th September. Unfortunately, the national fuel crisis meant a very low attendance. The delegates who attended the event were treated to a very interesting range of lectures. Dr Allan Chapman and Dr Francisco Diego, were the main speakers. An observing session at the University of Glasgows observatory was greatly enjoyed by participants who also saw an aurora. Dr Dave Gavine and Ron Livesey represented the ASE.

Lorna McCalman, Graham Rule and George Grant gave a public talk to around 20 people at Vogrie Country Park on Wednesday 8th November. Despite the disappointment that no observing was possible because of the weather, the audience enjoyed the talks and we have been invited to return to Vogrie next year.

Wigtown Astronomical Society organised a Scottish Astrofest on 24th-25th November. The Astronomer Royal for Scotland, Prof. John Brown opened the event with a talk on Black holes and White Rabbits The ASE was represented by Dr Neil Grubb who also gave a talk on CCD imaging, to the delegates.

Lorna McCalman was filmed by the BBC for an Open University programme, entitled "Ever wondered?" The programme is to be screened in the spring of 2001.

Dynamic Earth visit took place on Saturday 25th November.

## **Non-Astronomical Events**

On 5th August, the observatory was used to launch the Travelling Picture Gallery. Some of the visitors were shown the Moon through the Cook telescope.

Youth FM and Fresh Air FM have both been given use of the Tweedie Dome for radio broadcasts.

Other non-astronomical events taking place included the annual Hogmanay fireworks and the Edinburgh festival fireworks displays. The observatory was open for members and their guests to watch these events from the vantage point of the Observatory grounds.

The organisers of the Beltane Festival were allowed to store some equipment within the grounds of the Observatory

The Christmas raffle was held on Friday 1st December, the first prize being a 4 inch Newtonian telescope. Other prizes included Nortons Sky Atlas, a 3D sky map, a red LED torch, and a T-shirt with the ASE logo.

## **City of Edinburgh Council Business**

The council of the society have been extremely concerned by the escalating costs associated with our tenancy of the City Observatory. As a charity, we receive 80% relief on our rates bill, but that still leaves us to pay £1105, p.a. In addition, the water bill, which does not afford us any relief, is £2,000 p.a. and is the most cause for concern. In addition, the alarm system has been unreliable, resulting in many call outs for the key holders at all hours of the day and night.

The Observatory management committee (President, Secretary and Treasurer) had a meeting with Dorothy Marsh of the Recreation Department of the City Council on 27th July 2000, to discuss our problems. Although the City officials were sympathetic, there was little action and the bills kept coming.

By the beginning of November, the council of the society came to the unanimous view that to remain at the Calton Hill was in conflict with the aims of the society. Our aims are to promote public interest and education in astronomy. Too much time, effort and money was going into the running of an historic building.

At the November meeting, we informed members of the society that unless a satisfactory solution to our problems could be found, we would have to find an alternative venue for our monthly meetings. The financial burden of the City observatory was too great a drain on society funds.

When this information became public, we had tremendous support and offers of help from many individuals and organisations including Professor John Brown, Astronomer Royal for Scotland, Prof Andy Lawrence, Councillors Sue Tritton and Dougie Kerr.

Dougie Kerr raised a motion at the full council meeting of the City of Edinburgh, in support of the ASE. At this meeting, the Lord Provost announced that the ASE had the unanimous support of all the councillors.

Contact was also made with East of Scotland Water who assured us that our problems would be dealt with as a matter of urgency. A water meter will be installed as soon as possible and he would personally revise all the paperwork relating to the society.

The Recreation Department of the City Council are working on ways to alleviate our financial burden by looking at whether they could take on the water charges and deal with the alarm call outs. The question of our rates may be appealed and is being looked at. In return, our lease will have to be renegotiated. The council of the society feel more optimistic about the future of the Astronomical Society at the Calton Hill.

The support we received from so many people was very encouraging and greatly appreciated.

## **Restructuring of the Society**

No further action has been taken partly due to problems with tenancy of the site.

## **The Astronomical Society of Edinburgh Trustees**

A former Vice-President of the Society, Mr John Henry Lorimer RSA left a substantial bequest to the Society when he died in 1936. This bequest has been assigned to "The Astronomical Society of Edinburgh Trustees" and is managed by them under conditions set forth in a Deed of Trust granted in favour of Rev Dr James Patrick DD BSc and others, dated 10th December 1937.

The following are the trustees in terms of that deed:

Mr Raymond Fenoulhet (Secretary and Treasurer)

Dr John Rostron

Dr David Gavine FRAS

Dr John Hunter

All of the above trustees are members of the Society.

At a meeting on 3rd October 2000 the Trustees agreed in principle that the assets of the trust should be passed to the Society and managed by the Council in accordance with the Constitution and relevant Charities legislation.

## Financial Report

The Society has again seen an overall decrease in funds over the last year. Despite increased levels of income relative to the year ending 31 December 1999, the Society's outgoings still exceed its income by some £300. A significant contribution to the Society's income this year has been the bequest from the estate of the late John D. Weir, for which the Society is very grateful. The largest single item of expenditure this year was for the electricity supply to the Observatory, followed by that for water and the non-domestic rates. Although the water charges were subsequently refunded, the high cost of our occupancy of the City Observatory continues to concern the Society's Council. It is to be hoped that the financial burden on the Society will be alleviated still further in 2001, following the various discussions with the City of Edinburgh Council described in the Annual Report.

Subscription income has increased by over 40% compared with last year, mainly due to an influx of new members as the annual Subscription Rate has remained unchanged at £10 (£5 concessions). A proposal to increase the subscription rate was discussed by the ASE Council this year, however it was decided to defer any increase until the Society's financial obligations regarding the Observatory were clarified with the City of Edinburgh Council. The Society continues to issue FAS Astrocalendars to members when subscriptions are renewed. The inaugural Christmas raffle made a surplus of £2.03; although commendable, this is unlikely to influence any future decision on subscription rates!

Income from users of the Observatory rose by almost 18% compared with 1999, although some of this related to activities taking place in the later part of the previous year. The Society's Council will continue to seek donations from users of the site to meet the rates and other charges related to the Observatory, although it is possible that our commitments in these areas will be lessened in the coming months. As noted elsewhere, the Society's 'interim payment' of £900 to East of Scotland water was refunded in full in December 2000, following protracted correspondence with East of Scotland Water over a period of 18 months. Currently, the City of Edinburgh Council's Department of Arts & Recreation is in negotiations with ESW regarding the installation of a water meter for the Observatory.

Following the unfortunate death of David Todd, Secretary and Treasurer of the Astronomical Society of Edinburgh Trustees, no payments from that source were made during 1999 and none have been requested during the current year. However, the Society can continue to claim

funds from the Trust's income whenever deemed necessary.

Expenditure on the Earlyburn observing site has continued, with the installation of an electric meter by Kenny Laidlaw. The Society has also purchased a 12" f/4 Newtonian reflector for £200 (see the Annual Report) and continues to incur some expenditure related to the renovation of both this telescope and the Cox 13" reflector. Once again, the generosity of members in giving up their time to undertake work has meant that we have not had to meet labour charges as well.

We acknowledge with thanks the continuing support from the City of Edinburgh Council, although the Society no longer receives a grant towards the running costs of the Observatory.

Details of the Society's finances can be found in the Statement of Balances and the Receipts and Payments Account included in this Report.

## **Note to the Statement of Balances and the Receipts and Payments Account for the Year to 31 December 2000**

### **General Notes**

The form of presentation conforms to the requirements of the Charities Accounts (Scotland) Regulations 1992.

The following statements are required to be made:

(i) Nature and Purpose of each of the Major Funds

Current Account :

Bank of Scotland  
Treasurer's Account

Society Investment Account :

Bank of Scotland  
Business Investment Account

(ii) Remuneration and Expenses of Trustees  
(in the Society's case this refers to members of the Council)

Aggregate re-imburement of expenses to Council Members

£1156.13

These expenses cover costs incurred by Council Members on Society business which are later re-imbursed.

It should be noted that the split of expenditure under the headings of Society and Observatory is an historical decision which was made a number of years ago to attempt to show an estimate of the costs falling on the Society through its occupation of the City Observatory. The proportions of items which are split between the categories are identified in the specific notes below.

### **Specific Notes**

(Numbers refer to items on the Receipts and Payments Account)

1. Comments relating to the Trustees can be found in the preceeding Financial Report.
2. The Society paid £900 in water charges to East of Scotland Water in March 2000. This charge was refunded in full in December 2000, following protracted correspondence between the ASE and ESW. ESW is now dealing directly with the City of Edinburgh Council regarding the installation of a water meter at the Observatory.
3. This item includes the cost of tea and biscuits following meetings.
4. This is one half of the Library expenditure (including the cost of journals and the purchase of FAS Astrocalendars) with the other being shown against Observatory expenditure.
5. This is one third of the Insurance costs with the other two thirds shown against Observatory expenditure.
6. This is one half of the Treasurer's Expenses with the other half shown against Observatory expenditure.
7. The Society's Council agreed to redirect Society mail from the Observatory address because of the difficulty of getting mail delivered safely to the Observatory.
8. This covers the fee for examining the Society's report and accounts both in 1998 and 1999, as no payment was made in 1999.
9. This item includes the cost of subscriptions to the British Astronomical Association, the Federation of Astronomical Societies, the Society for Popular Astronomy and the Scottish Astronomers Group.
10. This is one half of the Library expenditure (including the cost of journals and the purchase of FAS Astrocalendars) with the other being shown against Society expenditure.
11. This is two thirds of the Insurance costs with the other one third shown against Society expenditure.
12. This is one half of the Treasurer's Expenses with the other half shown against Society expenditure.

## Statement of Balances for the Year Ended 31 December 2000

<b>Bank Balance</b>	<b>(£)</b>
At 31 December 1999	
Current Account	1,283.81
Business Investment Account	<u>18,080.40</u>
	19,364.21
Less Liabilities for 1999	59.48
Plus Receipts for 2000	5,928.39
Less Payments for 2000	<u>6,205.89</u>
	19,027.23
At 31 December 2000	
Current Account	1,764.69
Business Investment Account	<u>17,325.04</u>
	19,089.73

## Current Liabilities

Unpresented Cheques	Cheque No 011497	12.50
	Cheque No 011594	<u>50.00</u>
Total Liabilities		62.50

Notes : These cheques were written prior to the end of the financial year and had not been presented for payment by 31 December 2000.

## Receipts and Payments Account for the Year Ended 31 December 2000

Receipts		(£)
Membership Subscriptions		1395.00
Grants (see note 1)		
City of Edinburgh Council	0.00	
Astronomical Society of Edinburgh Trustees	<u>0.00</u>	0.00
Investment Income		
Interest on Current Account	23.37	
Interest on Business Investment Account	<u>444.64</u>	468.01
Donations		249.78
Bequest from the estate of Mr. John D. Weir		1000.00
Refund of water charges (see note 2)		900.00
Organisations using City Observatory		1,670.00
Sale of Astrocalendar(s)		1.60
ASE Badge sales		6.00
Xmas raffle ticket sales		238.00
<b>Total Receipts</b>		<b><u>5,928.39</u></b>

Payments	Specific Notes	(£)
<u>For the Society</u>		
Lectures and Meetings		
Expenses	3	304.66
Hospitality		<u>223.73</u>
Printing and Duplicating		134.20
Telephone		269.56
Library	4	249.42
Insurance	5	117.90
Expenses		91.90
Secretary		
Treasurer	6	46.58
Redirection of mail	7	60.00
Independent Examiner's Fee	8	50.00

Equipment (not Office)		57.28
Display boards & badges for ASE Council		5.40
Projector purchases and repairs		105.99
Items for Earlyburn observing site		75.00
Society Subscriptions	9	91.40
Xmas raffle prizes		235.97
Telescope refurbishment		276.16
Telescope purchases		200.00
<u>Total for the Society.</u>		<u>2,595.15</u>

For the Observatory.

Gas		23.69
Electricity		1,227.17
Rates		773.92
Water	2	900.00
Library	10	249.43
Insurance	11	235.81
Expenses	12	46.58
Replacement locks & spare keys etc.		87.26
Return of deposit for keys (to Show FM Ltd.)		50.00
Cleaning/painting		16.88
<u>Total for the Observatory.</u>		<u>3,610.74</u>

**TOTAL PAYMENTS****6,205.89**

This report was approved at a meeting of the Council of the Astronomical Society of Edinburgh held at the City Observatory on 2nd February 2001

Lorna McCalman  
President

For and on behalf of the Council of the Astronomical Society of Edinburgh

The Astronomical Society of Edinburgh

REPORT OF THE INDEPENDENT EXAMINER  
to the members of the ASTRONOMICAL SOCIETY OF EDINBURGH

I have examined the accounts of the Astronomical Society of Edinburgh, and according to the best of my knowledge and belief in accordance with the information and explanations given to me, confirm that they have been properly prepared from the records of the Astronomical Society of Edinburgh and are in agreement therewith and comply with The Charities Accounts (Scotland) Regulations 1992.

David Thomson 20 Feb 2001

**The Astronomical Society of Edinburgh**  
**City Observatory**  
**Calton Hill**  
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**Telephone: 0131 556 4365**

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