



Federation of Astronomical Societies

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SOCIETY SUBSCRIPTIONS TO THE FAS should now be in. Would the following societies kindly forward their dues to the Treasurer asap. Apologies to any whose payment has been made during the production stage of this newsletter. Copies of the Handbook will not be sent until subscriptions have been paid. (£7.50 and reduced rate £4.00.)

Birmingham, Bolton, Daventry, Carmel College, Newbury, Kings School Gloucester, Morley College, Solent, Crayford Manor House, South Essex, South West Herts, South Somerset, Woking, Cleveland, Sidmouth, Stoke-on-Trent, Newchapel, Guernsey, Stevenage.

HERSTONCEUX 85 COMPETITION RESULTS

Magazines: Judged by Ian Ridpath. Prizes of 1 year's free subscription to FAS awarded to Braintree & District AS and to AS of Wales, who were considered equal winners.

Instruments: Judged by Alan Dowdell.

(i) **Slides** - 1st prize to Alex Vincent of Worthing AS for his series of slides showing maxima and minima of certain variables. The prize was a set of colour slides donated by Speedibrews. 2nd prize to Geoff Dobie of Maidenhead AS for his excellent black and white slide of the Dumb-bell Nebula. The prize of a tie was donated by the BAA.

(ii) **Black and White Prints** - Graham Boots of Worthing won a book donated by Ruth Bradford-Harris and a Halley Seeker donated by MWW.

(iii) **Colour Prints** - Steve Hathaway won a T-shirt from his colour prints taken with a Croydon AS 18-inch telescope.

Judged by David Hardy. The prize of a framed Malin print of Ophiuchus and Antares was donated by Earth and Sky and awarded to Peter Fisher of Brighton AS for his mural "Long Haired Star".

G. Rolland

OBSERVER'S GUIDE TO HALLEY'S COMET

by James Muirhead
Published by George Philip;
Price £2.95 (softback), 75pp

Reviewed by Brian Jones

Although quite a number of books have appeared recently covering the forthcoming apparition of Halley's Comet, the Observer's Guide to Halley's Comet is probably one of the best around, bearing in mind that the vast majority of those who see the comet will do so through nothing more elaborate than a small telescope. This moderately-priced book presents the reader with clear instructions on how to locate, observe and track the comet both with the unaided eye and through moderate optical aid. Coupled with this is a brief but adequate account of general and a brief but adequate account of famous historical comets, including Halley's, all combining to make this a very worthwhile purchase for both the casual and more experienced observer.

FAS HANDBOOK 1985/86

Each paid-up member society will be now have received a copy of the latest Handbook, with lists of societies, publications, speakers, visual aid sources, etc. Articles include astrophotography, meteor watching, the Scotch mount and Giotto. Extra copies can be obtained from Rosemary Naylor, price £2.00, plus 22p postage. Cheques payable to FAS.

ASTROCALENDARS 1986

This useful booklet published jointly by the Cardiff AS and FAS gives sky maps and notes for each month of 1986. It can be purchased in bulk from the Treasurer at 60p per copy to include postage. Cheques payable to FAS.

ANNUAL GENERAL MEETING AND CONVENTION

1986 May 3 - Saturday at the Herbert Lecture Theatre, Coventry.

FAS CONVENTION at the

ASTRONOMY CENTRE

1986 July 12 - Saturday

The main theme of this convention will be to present the contribution made to the development of astronomy in the north of England; past, present and future. A cursory look around the region yields men such as Goodricks and Espin, establishments such as Grubb Parsons and Jodrell Bank, and many many other topics. Will readers please get in touch with Rosemary Naylor, organiser, with their ideas of what should be included.

Other items on the programme will include balloon debates, fancy dress competitions, etc (it won't be dead serious!). Guest speaker Patrick Moore. Book the date now. Everybody welcome.

HALLEY'S COMET INFORMATION PACK

Published by Inner London Education Authority, Learning Resources Branch, Production Division, Thackeray Road, London, SW8 3TB;
Price £5.50 (ILEA affiliated organisations £3.50)

Reviewed by Brian Jones

Although aimed at the schools market this information pack is an ideal aid for those who wish to instruct beginners' groups. The pack contains a poster and 2 friezes, one of which is devoted to comets in general and the other to Halley's Comet in particular. Together with these is a teacher's booklet which, as well as containing information to expand on that shown on the friezes, suggests practical ways of stimulating an interest in space. The whole thing is very well written and is ideal for any group or society who wish to educate a non-astronomical public. In the back of the booklet is a comprehensive list of further learning material, books, charts and so on. In all, the Halley's Comet Information Pack is a very good investment.

A COMET CALLED HALLEY

by Ian Ridpath and Terence Murtagh
Published by Cambridge University Press;
48pp; £2.95

Reviewed by Rosemary Naylor

Published later than most of the Halley Comet books, the authors must have found difficulty in choosing a title for this contribution. As a modest memento of the current Halleymania, this book can be recommended. It catches the mood of would-be observers with an insight into our changing understanding of these bodies and the way in which they travel through the Solar System.

There is an interesting selection of illustrations spanning the whole history from Babylonian clay tablets through medieval (and later) fears of plagues to future space intercepts. This is a readable account; just sufficient to remind us how much we have yet to learn about comets.

Reviewed by Martin Chick

There are two programs on the cassette tape, Computer Orrery and Computer Planetarium. The cassette tape is complete with a set of good instructions. Both programs are simple to use and the screen displays are very clear.

The Computer Planetarium shows the Sun, Moon, Planets and Halley's Comet, also a star display of some 246 stars of 3 magnitudes, the program runs in Solar and Sidereal Time. The sky updates every eight seconds or four seconds if the stars are omitted. There are also Sky effects, twilight, etc. One difficulty is the identification of constellations as there is no facility for this.

Computer Orrery is a four-dimensional model of the solar system showing the orbits of the planets and Halley's Comet around the Sun. This is an excellent program for education use, easy to use and a good screen display.

To conclude, both programs are reasonable value and can be used to demonstrate the movements of planets, etc., in our solar system.

Available from Anima Scientific Computing, 23 Crawley Avenue, Hebburn, Tyne and Wear, NE31 2LT.

HALLEY'S COMET IN HISTORY

Edited by F R Stephenson and C B F Walker

From British Museum Bookshop; price £5.50 64pp (softback)

Reviewed by Rosemary Naylor

This book has been published to accompany the exhibition of the same name currently showing at the British Museum in London. It is a scholarly production which draws upon the uniform text recorded on Babylonian tablets in the possession of the British Museum. These have been translated by the late Professor Abraham Sachs to reveal some 2,000 astronomical texts written between 450BC and 75AD. In addition, ancient Chinese records, dating back to 722BC, list the appearances of "broom stars" and "brush stars", as witnessed by astrologers.

Faintly, these various records have been sifted to find references to past returns of Halley's Comet from the first reliable record in 240BC onwards. European observers have left accounts of sightings of the comet. Taken together, this represents a remarkable piece of detective work, begun by Halley himself, and very much extended by this publication.

The British Museum exhibition runs until early May.

SPACE GARBAGE

by Jack Meadows

Published by George Philip; 160 pp, £7.95

Reviewed by Rosemary Naylor

Professor Jack Meadows states in the foreword that archaeologists have learnt a lot about early human beings by sifting through their rubbish dumps. He suggests we have much to learn about the early history of the Solar System by studying interplanetary debris. Hence the title "Space Garbage".

The author draws upon his own researches to describe in an entertaining way the relationships between Sun and Earth and all the little bits of matter which exist in and around Earth's orbit. This is a full account of meteors, asteroids and comets arranged in a thought-provoking way. I don't like the title, though admit it is appropriate. The author strongly recommends to beginners and experts alike. When they have grown tired of Comet Halley, this book will

A photograph taken of the sky with a standard camera can be disappointing, as so little of the sky appears on the picture as compared with the view seen with the naked eye.

But there are attachments for cameras that extend the field of view to allow the entire sky to be shown in a single photograph. Such cameras are the best way to show the Milky Way, aurora and the relationship between constellations, and in the daytime rainbows and cloud formations become a possibility.

This article discusses some of the principles involved and ends with a simple, low-cost, all-sky camera built by the author.

When you fit all the sky on to a single picture, it ends up circular in shape. Straight lines are bent into curves, and objects nearer to the horizon appear compressed.

A lens required to produce this view is called a fish-eye lens, unfortunately the cost is high, many hundreds of pounds. A second option is to have an adaptor fitted over a standard lens. These are cheap but have two main disadvantages. Firstly the picture quality suffers, and secondly the maximum aperture is greatly reduced, requiring long exposures. The third option is to place a camera above a deeply curved spherical mirror, similar to those security mirrors seen in shops. However, the camera and its support will block off part of the sky. An SLR camera is almost a must as you focus on a virtual image that curves slightly and lies below the surface of the mirror. Condenser lenses as used in slide projectors and photographic enlargers are ideal, just have the surface aluminized as for telescope mirrors. The largest generally available are about 10cm in diameter, and just fit the frame of a 35mm camera at its closest focussing distance.

Next comes the mounting to hold the camera and mirror apart. Cut two triangles of plywood, the larger to hold the mirror, the smaller is just larger than a hole required to pass the camera's lens which is cut in it. These two triangles are separated by three strips of plywood, with notches cut at each end, which slot into similar notches cut into the corners of each triangle, keeping the notches in the strips at right angles to the long edge, not angled. As you assemble it, the tension required keeps it together without the use of screws. The mirror is held in by three nylon screws around the rim. This assembly is raised off the ground by three legs, as used on coffee tables, screwed into plates attached below. An additional refinement is a coil of thin wire under the mirror, which is heated by a pair of rechargeable batteries, to prevent dewing when necessary.

At the time of writing, December 1, very few societies have sent in news of how their NW activities went. I'm sorry but you will have to wait till the next Newsletter for coverage. However, from snippets gathered over the grape-vine, all seem to have had success in seeing Comet Halley and in enabling the public to have their "once in a lifetime" view of it.

AYLESBURY AS: July 14, and members visited Jodrell Bank along with High Wycombe AS.

On the observatory front, members have been busy (as always) bending "M" section for the construction of new shutters for the same. A large quantity of paint has been "acquired" which no doubt will be put to good use!

by Eric Hutton
North Herts AA

by John C C Larard
Southern Astronomical S

This year I timed my first occultation eleven years using the same 7.5cm refractor that I used as a schoolboy in 1954. The fabulous instrument, which is gradually falling to pieces, is still operational.

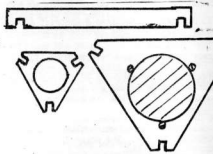
While sweeping across the area of the 4.0-moon with binoculars on April 24 1981 saw a bright star near the south limb. Was ZC 652 or 125 Tauri and not surprised at magnitude 5.0 it was easily visible; telescope against the earthlit crescent of the Moon.

The wind was breezing from the NW at For the temperature at 20h UT was +9.4°C and position was TQ 31817858.

No cloud occurred and the event progressed like clockwork. In the usual manner the star was occulted and a derived TMM time put the time of disappearance at 20h 49m 38.7s UT. The predicted time for the occultation was 20h 49.6m. I could not believe that my last occultation was that of Sat in 1973 using the 45.7cm Radcliffe refractor at the University of London Observatory, Mill Hill. Really, what had I been doing in the intervening years?

1985.

Construction plan for all-sky camera



In use, this all-sky camera operates at 1 same aperture as your camera lens. Exposures of 2 to 3 minutes can be made without showing any noticeable trailing of stars. Because of the small apparent focal length its limiting magnitude corresponds to eye stars, and thus produces a very true life picture.

Do remember that because it is a mirror, everything is reversed left to right, which can be corrected if you do your own print or use slides.

(For further reading, see Sky and Telescope June 1982 and July 1983.)

Society News Round-Up

STUART LONSDALE

A cheque for £250 has been received from the William Harding Trust and this is to go towards the 24-inch reflector and observatory.

October 18 saw a quiz between Aylesbury A and Luton organised by Milton Keynes AS. Aylesbury unfortunately lost but with only two points in it.

Anyone fancy any Huygenian eyepieces about 100 years old? A Mr Franklin on Watford 21488 has some for sale. Four of them in fact, 1 1/2-inch RAS thread, brass mounted. Reasonable offers please.

BRAINTREE, HALSTEAD & DISTRICT AS: A meteor watch was held on August 11/12 along with some members of the North East London AS. An estimated 300 meteors were

11/0'Shaunnessy saw a -8 light range fireball travelling through Auriga and exploding to extinction leaving a very wide train for 3 seconds.

A display was arranged for a Colchester charity event in September.

A two-day display at a Hobbies & Pastimes Exhibition in Halstead was held in October.

With a new committee they are running at "full steam ahead" and look set for a busy line ahead.

BRIGHTON AS: Last year's disappointing attendance and membership figures were slightly better this year due to new-style monthly meetings and better publicity.

The society was represented at the Brighton arrival in July with some telescopes on show, which unfortunately were responsible for making the sun play hide-and-seek with the clouds every time they were pointed upward to show the public sunspots! A display of posters and handouts together with a mural depicting Halley's Comet spent most of the afternoon sheltering from the rain which came after the sun set in.

The evening, however, was a perfect one for observing with two members of the public staying until past midnight. It was agreed that some interest had been generated in the society so it was worthwhile.

Secretary, Philip Taylor, was in La Palma for the inauguration ceremony of the "Observatorio del Roque de los Muchachos", the British Isaac Newton reflector being one of the telescopes of course. Philip was working at the La Palma observatory during the week before the opening so he was on the spot.

The society's loan telescopes were not being well used by members.

BRITISH METEOR SOCIETY: The BMS Handbook Vol III and IV were published in July and Vol V was to be entirely devoted to radio meteor work.

A new style Radiant Catalogue will be published in 1986 October and advance orders at the special pre-publication price of £5 are now being accepted.

It says that various other special publications are planned for the future including a fireball catalogue presenting details of all world events known; a 3-volume observational database making available a valuable fund of data for research purposes, never published before and a brand new book covering meteor astronomy and allied fields.

Observed at Siding Spring Observatory in New South Wales was a magnitude -16 fireball! Of shallow descent and lasting some 6 seconds, the fireball split into many tens of fragments and loud sonic booms followed by rumblings were reported.

A large piece of the Allende meteorite, which fell in Mexico in 1969, has been found recently between San Juan and Las Camelias. The total mass being some 35kg with the largest piece being 11kg.

It is estimated that thousands of fragments were deposited over a wide area as the meteorite fell.

CRAWLEY AS: There are no meetings during summer months for Crawley and as I have not received the latest Newsletter, society news is limited. In fact there is no society news!

A special attempt at observing the Perseids was being arranged for the Astro Camp.

The rest of the Newsletter contains four pages on Astrology?

Items for the "Round-Up" should be sent to Stuart Lonsdale, 16 Joan Lane, Hooton, Levensall, Nr Rotherham, S Yorkshire. S66 6PH.

COTSWOLD AS: Writes Tony Ireland, "Members of the Cotswold AS were very much involved with the events of NAW. We got off to a flying start by taking part in the BBC Radio 4 programme "Cosmic Pursuits". Heather and Nigel were entertained in Cheltenham during the recording, which revealed how brilliantly one BBC man did with a tape recorder and endless patience can produce something intelligent out of total chaos! More than 650 people attended the 11 public meetings held in Gloucester and Cheltenham every night of NAW. Three clear evenings gave over 250 the chance to see Comet Halley through the society's telescopes. Some of them had seen it in 1910.

The society also arranged exhibitions in local libraries, building Society windows and book shops, featuring the publication that week of member Peter Cadogan and his latest book "From Quarks to Quasars". A painting competition for local schools attracted over 50 entries.

John Fletcher, our local media star, achieved national fame by being only the third amateur to photograph Halley in the UK, and was rewarded by this being shown on "Sky At Night" in October. John guided his 8½-inch Newtonian for 30 minutes early in the morning of September 18 to record the image, some 200 million miles away and fainter than Pluto."

EDINBURGH AS: During the winter, the usual monthly programme of lectures will take place. Held at the City Observatory, Carlton Hill, Edinburgh, on the first Friday of the month, except the January meeting which is on the 10th.

Interesting to note that at the October meeting, the talk was by one Father Richard Royle of the Vatican Observatory, his talk entitled not surprisingly "The Vatican Observatory. Sounded most interesting and unusual.

The City Observatory was to be open during NAW and it houses a 6½-inch photovisual refractor and a 13-inch reflector, currently being refurbished. Visits to the observatory by organised groups are a feature of the society's activities - to make arrangements contact the Observatory Director, address as first paragraph, plus post code EH7 5AA or telephone 031 556 4365, after 6pm on Fridays.

HUDDESFIELD AS: The Symposium held in September, seems to have gone okay, even though members were a bit low. Eleven delegates from four societies: Salford, York, West Yorks and Leeds, plus eight Huddersfield members made up the day. Talks ranged from "About Ourselves", deep sky observing and photometers. Everyone said they enjoyed the day.

Extensive publicity was given for NAW so we sent news of how it all went. A short "Halley Encounter" magazine was produced and sold for funds.

The society magazine "Oregon" appears in its new form - much smaller in size.

The recently founded "Elster Society" of the Huddersfield Science Fiction Foundation continues to be well-supported with 11 members. A magazine "Fanzine" is to be produced.

Seven members attended the Sponsored Perseid Meteor Watch. The event raising about £60 for funds.

A publicity drive aimed at schools is to be tried out.

A deep sky filter is available at the observatory and initial results show that it indeed cuts down that unwanted sodium glow.

LEEDS AS: Leeds meet at the Polytechnic, Calverly Street, Leeds, from 7pm to 9pm, second Wednesday of the month.

Production problems have meant that the society magazine "Nebula" has not been seen as regularly as they would have liked.

There has been a slight increase in membership.

The YGAS Astronind Competition was staged by Leeds during October.

LUTON & DISTRICT AS: Writes David White, "Thanks to almost ideal weather conditions, NAW proved to be a great success. Well over 200 people came to the public observing evenings, despite having to endure temperatures which were well below zero, they were treated to some splendid views of Halley. While the society's 12-inch reflector made the comet an easy object to see, many people reported that they were unable to find it in binoculars.

Jupiter was also looked at along with Andromeda.

Due to the great amount of interest shown, it is proposed to hold further public observing evenings when the comet becomes much brighter."

MARSHALSWICK SCHOOL AS: The official opening of the school observatory took place in October and the honoured guest was Professor Stuart Mallin of the RGO. It marked the end of 2½ years' hard work.

The telescope is an 82-inch reflector of f6.6 on an equatorial mount, and was a project for "O" Level Astronomy. Despite some difficulties with the mounting, it has proved to be an excellent telescope. Good views of the Moon and Jupiter have been obtained with several other interesting objects.

The dome of the observatory, which, by the way, was converted from an old animal house, is the bottom half of a septic tank! This runs round on six nylon wheels on a track. The area beneath the observatory provides a display area and a members' room.

Anyone interested in seeing the school observatory can contact Ken Phillips or Kevin Mayfield, The Observatory, Marshalswick School, The Ridgeway, St Albans, Herts, AL4 9NX.

NEWCHAPEL OBSERVATORIES & PLANETARIUM: Outline planning permission has been given for the establishment of the "Natural Sciences Visitor Centre" on the land adjacent to Newchapel Observatories and Planetarium. The Centre, when completed, will provide a unique compilation of astronomical and natural scientific facilities.

It is hoped to include an exhibition building, having heat conservation features and occupying the central area of the 1½-acre land, displaying exhibits associated with the theme of the Centre. Latest advances in spaceflight and astronomy, alternative energy, environmental protection, education and community work, will all feature.

As Mike Pace says, "The creation of the Visitor Centre will be a challenge, more so than the dream that became a reality twenty one years later, when Newchapel Observatories & Planetarium came of age. The extent of the facilities and the interest created will be limited only by the imagination of those involved."

We all wish you the very best of luck in this adventurous project.

NORTH EAST LONDON AS: Member Stephen Merry managed to obtain permission to use the 28-inch refractor at Greenwich. Stephen, let us know how you went on.

... continued from previous page

Despite only having very few members, NELAS manage to provide excellent talks by guest speakers and informal discussions between themselves. I note such things as observing and photographing Noctilucent Clouds, mirrors and mirror grinding and astrophotography.

Anyone interested in joining this keen group are advised to contact Bernard Beeton on 01-363 5696.

ORWELL AS: During early August an attempt was made to photograph Comet Halley with the 10-inch refractor but unfortunately it was not until the night of October 4/5 that they were successful. Using M55 and a 4-minute exposure, the comet was seen on a 4x8 print (rated at 3200 ASA). The following weekend also provided an image of the comet. Members were wondering if these were the first of Comet Halley through the 10-inch or were some taken 76 years ago?

Member Eric Sims must have a very understanding wife. He took her and their two children on a field trip to observe the Perseids - perched on top of a cliff very exposed to the wind and rain. After counting 20 meteors and abandoning setting up his telescope due to the gale force wind, Eric gave in and retired to bed!

A visit to the observatory by a group of Gifted Children who not only wanted to view the telescope, but make a film of the whole thing as well, sounded like fun, with over forty children, four film crew, eight group organisers and five society members - ALL in the observatory at once!

PLYMOUTH AS: Writes Clive Purchase, "At last, it gives us great pleasure to announce the completion of our 24-inch telescope. Although primitive at the moment (July), optically it is excellent. Views of M42, M55, etc were quite breathtaking ... we now plan to modify and improve the telescope to bring it to full operational use.

Our season has got off to an excellent start with an increased membership. We now feel that at last we are getting our society on its feet again.

Finally, we are delighted that we believe we are the first to recover Comet Halley photographically in the South West. Our team effort photograph was taken on the morning of October 13, after many weeks of bad weather."

SAGAS: Craydon AS - Tony Roberts has taken over from Norman Fisher as the Chairman. Norman held the post for six years.

Farnham AS - have withdrawn membership from SMUKS. Reasons, according to Arthur Good, President of Farnham AS, were that they thought that the meetings, held at Chichester, did not provide enough useful information either about SAGAS or astronomy and that the journey length was too long to make it worthwhile to stay for the more social activities that followed meetings.

South Downs AS - the two Open Days at the Trundle Observatory were a great success. Some 180 visitors came to see what was going on. 363 meteors were seen on August 11/12 for the Perseid watch.

Vectis AS - as a result of drastic action to counter falling membership over the last few years, Vectis now report a dramatic increase from 16 to 40 members in ten months. Well done!

SHEFFIELD AS: Phenomenal! The only way to describe NAW. With only 43 clear evenings during the week, some 500 visitors saw Comet Halley, either with the 12-inch or through the numerous other telescopes and binoculars. The two public lectures brought in 200 people! Membership as you can imagine has increased. The phones are still ringing with enquiries and the fact sheets we produced, some 1500, have all gone. Local Radio publicity was excellent.

From profits made out of the week, a donation will be sent to the charity SENSE for deaf-blind children. They will never see Halley or hear the excitement it caused.

Myself and President, Kim Lindley, were guests at the naming ceremony of the BR engine "Comet Halley" on Thursday, November 14 by Heather Couper at Manchester Piccadilly. Included was an evening visit, on the train, to Jodrell Bank for a planetarium show and drinks. About 100 people were there. Very enjoyable.

We seem to have obtained insurance for our portable telescopes and the optics of the 12-inch, from CIS Insurance, under their "All Risks" policy. Anyone wanting details, contact me.

Darren Skindells gave a very creditable performance in the recent YGAS Astronomical Competition held in Leeds, he came fifth out of eight.

President, Kim Lindley, had his photograph of the total lunar eclipse of January 1982 used in an article by Patrick Moore in the magazine "Space Voyager".

SOUTH SOMERSET AS: Writes Simon Hughes, "At last I have some news for the Round-Up ... during the summer months, the members (of which there are about 12) decided to stage an exhibition in Taunton and also some observation evenings for the public to coincide with NAW ... and I have just obtained an 8-inch mirror and flat with which I will build a reflector to accompany our 3-inch refractor. New members are always welcome. For further details, please contact Mr G McNelly, 11 Laxton Close, Taunton."

SOUTH WEST HERTS: At the High Top observatory, a massive concrete plinth to support the 6-inch refractor has been built by a working group. It was hoped that this instrument would be more frequently used. The telescope is a Troughton & Simms.

During NAW, more than 80 visitors saw the comet and other "celestial wonders". The weather was kind with only two evenings clouded out, Thursday and Saturday. Several photographs were taken as the comet approached the Pleiades.

The exhibitions at libraries and community centres were well received, leading to a large number of enquiries about the society.

More on that 6-inch refractor - Horace Dall had re-figured and re-cemented the two elements of the lens before he pronounced it "fit for use".

STEVENAGE & DISTRICT AS: It was reported that membership was increasing "almost daily" as a result of the publicity for NAW. (I don't have any latest NAW information.)

As with most other societies, a cheque for £50 was received from the NAW Committee toward expenses.

It was proposed to visit the National Museum of Photography in Bradford in January next year and combine this with a trip to the AAC.

UNIVERSITY OF BATH AS: Writes Richard Zanetti, "A society such as ours differs from most, as the membership changes each year, with most of the new members joining with previous knowledge. The aim of the society is to introduce new members to astronomy and to develop and increase their understanding as the year goes by. We have a semi-formal meeting once a week, when a talk is given or a film shown. Next term we will have talks on galaxies, stellar evolution, the Big Bang, etc. As well as the meetings, we have regular star watches and informal discussion meetings.

We have recently purchased a 10½-inch reflector and observatory from Ewell AS. At present, we are trying to rebuild the observatory and we hope to have it finished for NAW."

WEST MIDLAND AS: As a result of the publicity drive and the series of public lectures during August, membership has increased somewhat. The lectures proved to be very popular with people filling the room and spilling out into adjoining corridors.

The meteor watch, also open to the public, was clouded out as was the star party. However, the video and telescope demonstrations went down well.

Work has been carried out on the 12-inch reflector to overcome some errors in the declination drive.

Chairman Alan Wells says that the local radio stations did not seem very interested in the return of Halley. Let us know if they did give any publicity.

WEST OF LONDON AS: Arrangements had been made to use the 28-inch at Greenwich on the evening of November 4.

The society received 50 free tickets for the Halley Gala at the Wembley Conference Centre held on October 29. What was it like?

A donation was to be given to the charity SENSE, from profits made during the "Evening with Halley" on November 11.

The December meeting was to be a sort of "Brains Trust" with a panel of members answering questions on astronomy. In particular, those that you always wanted to ask but were afraid to.

WEST YORKSHIRE AS: According to Derek Hurton, NAW was "simply unbelievable". During eight days, an estimated 600 to 1000 turned up for a view of Halley. A number of new members resulted together with a nice addition to society funds. Badges, stickers, and copies of a special edition of their magazine called "Halley Photos" were sold. More open nights are planned for December 12, 13 and 14.

Derek had a spot on television and was also on Radio Leeds. A camera crew from Yorkshire TV spent some time at the observatory.

A "birthday party" was held to celebrate Halley's 329th birthday!

For the telescope, an illuminated reticle eyepiece is to be purchased to help out when guiding on long exposure photographs.

A Jumble Sale in October raised £60 for funds.

Several members attended Huddersfield's Symposium on September 21.

The WYAS contestant in the YGAS Astronomical Competition, Gordon Ward, came second.

Three telescope mounts are being constructed to be sited outside the observatory. One will house a 3-inch refractor, one a 6-inch reflector and the other a camera drive. A solar filter has been acquired for the 3-inch.