



Federation of Astronomical Societies

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issue number 7

September 1985

Society News Round-Up

YLESBURY AS: Members are keeping their fingers crossed that the 24-inch will be ready for Halley. George Turner has prepared drawings of the dome and shutters from the sketches left by the late Bill George. George has also done some drawings for the corridor between the two huts. As usual, help from members was requested.

Eleven members attended the Convention in Coventry.

As part of his talk on Stonehenge, Gerard Hawkins tested the theory that the circle of 6 Aubrey Holes was an eclipse predicting mechanism. With the aid of the BAA Handbook and several members, two tests were done. He first succeeded in agreeing with the prediction in the Handbook, the second failing to agree. He may not have convinced everyone of the truth of the theory but it seems he provided members with an enjoyable practical demonstration and a thought-provoking talk.

BOSTON ASTRONOMERS: "Eyes on the Universe", the 10th anniversary conference on July 27, as attended by 115 people. Not bad you may think but there were 230 tickets on sale. Where were you all?

Chairman, Mark Dunn, was on Radio Lincoln talking about the Conference.

Thanks to members, the observatory and 23-inch reflector at Horncastle is now in good order after being allowed to become un-down.

About half-a-dozen members form regular work parties at the AAC and they are looking forward to the next Star Party.

A recent extra to publicity is mounting a display at country shows.

BRITISH METEOR SOCIETY: A very big welcome back to this famous organisation after its break from the FAS. Reading the material that Director, Bob Mackenzie, sends for the Round-Up is fascinating. Here's an example - In December 5 1984, a very brilliant fireball was seen by many observers in the clear skies of NW Italy and SE France. Fragmentation of the meteor occurred SW of Cuneo, just after it passed over the coast. A red, and later grey smoky train was observed. A strong explosion and a blinding flash were followed by a tremendous rumbling and sounds like thunder. A cloud of debris persisted. In the region around Cuneo, windows were broken and doors forced open. At the moment of explosion the daytime sky was lit with red flames as bright as the Sun. Seismic waves were recorded comparable to 2.5 on the Richter Scale, but no meteorites have been found despite a rigorous search.

Bob says that new members join at the rate of about two per month. Subscriptions are £5 per annum and the Journal "Meteoris" will be published again in August, November and 1986 February. The Journal contains a wealth of information on meteors and any-

CHELMSLEY AS: Writes Frank Hill, "Some damage was done to our dome which has recently been resealed with aluminium sheeting. The damage was done with air rifles and a half brick or two flung at the dome sides. Two dozen shots or more have made indentations, with several of them going right through the sheeting! Thank goodness the observatory was unoccupied at the time." It seems that the culprits were caught by a local gamekeeper and taken to the police.

An invitation by the West Bromwich Radio Society to give them a talk was gladly taken up. A quick trip round the solar system was followed by more slides and a talk on the Sun. It was so popular that they were invited back in July.

If your society has set up a Meteosat weather station, then Frank Hill wants to know about it. Contact him at: 12 Woodbine Walk, Chelmsley Wood, Birmingham, B37 6SB. He would be pleased to hear from you.

DUNDEE AS: A letter from Secretary Graham Young gives the latest on this Scottish society. He writes, "The Dundee AS was founded in 1956 in time for Comet Arend Roland and the Geophysical Year and the start of the Space Age. Astronomical work has concentrated on meteors, the aurora, noctilucent clouds, daily solar observations and general astro-photography."

They have been preparing for NAW and also this year the 50th anniversary of the Mills Observatory. Next year is their own 30th anniversary.

HUDDESFIELD AS: An "Astronomical Symposium" is to be held on Saturday September 21, and it is hoped local societies will attend, each one of them providing a speaker.

A window display was to be seen recently in a building society window.

The suggestion of the formation of a "Science Fiction Foundation", with a separate subscription and separate membership but everyone still members of the HAPS and all on a gentlemen's agreement, caused some conflict within the society. Not surprising! Some members saw the Foundation as a takeover bid with the possibility that their members may outnumber the astronomical membership. We await the outcome.

Financially it has been a successful year according to the Treasurer, with grants from the council of around £340.

After a break of two years, Philip Heppenstall is back again as President.

LUTON & DISTRICT AS: David White, Secretary, tells me that things are all good for NAW and a three-week exhibition planned for the central library. It is hoped to have public observing evenings with the 10-inch Dobsonian.

Sixteen members are hoping for good views of Halley with a trip to Tenerife in April.

Items for the next "Round-Up" should be sent to: 16 Joan Lane, Hooton Levitt, Nr Rotherham, South Yorkshire, S66 8PH.

MARSHALSWICK SCHOOL AS: A new member to the FAS (at least they will be in September) so a big welcome to you all.

Ken Phillips writes, "We were formed in November 1984 by a Dr C D Morley at the Marshalswick School, Ridgeway, St Albans, and have between 25 and 30 members. The school owns an 82-inch Newtonian and member have been converting an old animal house in the school grounds into an observatory. Following the opening of the observatory, planned for the end of September, I will have more news for you."

ORWELL AS: A field trip to observe the Perseids is planned and will be a camping weekend in the Cromer area.

An Open Week is to be held from November 13 to 16 inclusive.

June 15 saw a visit to Greenwich and the Maritime Museum. What surprised me about the article on the visit was that they said that a request for a guided tour of the 28-inch did not come to fruition? Why was this? Anyone in Greenwich know? Despite that setback, an enjoyable time was had by all and the Red Arrows kindly consented to fly over them during lunch.

SAGAS: Brighton AS - the social evening earlier in the year was a great success with over 40 people attending. The highlight of the evening was a Balloon Game in which historical characters had to justify their existence or be ejected from their balloon. William Herschel apparently remained aloft. About 50 people turned up to see the lunar eclipse through the telescopes set up on the beach. They were given extensive press coverage.

Crawley AS - successfully observed the grazing occultation during May. Three teams were placed around Crawley, two at members' homes and one in a field. Chairman, Kevin Birkett, and his son Andrew recorded a single 8-second occultation.

SALFORD AS: No doubt as a result of the "League table" in the last Newsletter which showed the "goal averages" of societies who had sent in material for the Round-Up, here is some news from them. The first for a long, long time!

The annual outing was to Edinburgh and a visit to the observatory. An interesting day was had by all.

For the Salford Show in August, an exhibition was planned to show the 18-inch with a Photomultiplier attached.

Due to the success of recent open nights, it has been decided to keep them as an on-going

Society News Round-Up

STUART LONSDALE

..... continued from previous page

HEFFIELD AS: Due to work commitments, I retired as President at the AGM and the new president, Kim Linsley took over. My last six years in the post had been extremely enjoyable, with a superb Committee and members who had supported me and helped to expand the membership and activities threefold. Imagine my surprise when our Secretary, Vera Betts, presented me with a framed certificate in appreciation of my untiring efforts for the benefit of the society. For me I was speechless!

The observatory is currently being repainted inside and out and another lock fitted after vandals removed TWO previous combination locks.

An "Open Evening" was held at the August meeting.

We are having difficulty in obtaining insurance for the telescopes which are loaned out to members. An 8½-inch reflector, 3½-inch refractor, 3-inch refractor and a 2-inch refractor together with the 12½-inch reflector in the observatory. Can any society provide me with a name and address of an insurance company that they use? Please reply to me at my address: 16 Joan Lane, Cotton Levitt, Nr Rotherham, South Yorkshire, S66 8PH; or phone me on Rotherham 14512. Thanks.

LONDON SOLAR COMMITTEE "SOLAR NEWS": Welcome to the FAS, and writes Bert Chapman. We have just joined the Federation so you may like to know about us. Essentially we are a magazine, the Solar News, specialising in Solar and Radio astronomy, we also cover Lunar and Meteor work. Although a magazine, we have a very strong Solar section and publish sunspot reports from our members covering every month. We have connections with Solar amateurs all over Europe and the USA - we are very interested in co-operating with societies to increase our cover of these subjects. We are the only magazine in the country covering radio telescope work, and we have a very strong team of experts to help and answer readers' questions. Among the team are F C Judd, Dr Arthur Gee and Ron Ham, all experts in radio work. The magazine is published quarterly, £3.50 per annum including pp, specimen copy £1. We think it is probably the best astronomy magazine being produced in this country and we are looking forward to developing it into something outstanding in the near future."

Well, if you want to find out if it is the best, then write to: Bert Chapman, "Brindleys", Mill Lane, Hooe, Nr Battle, East Sussex; tel: 0424 892715.

PLYMOUTH AS: Clive Purchase writes, "Our last season, which finished in May, was one in which we saw a declining membership. We now hope that this will change for the better in September."

On July 26th we held a public Star Party and although we were clouded out we managed to fill a school hall and entertain our guests with lectures, displays and equipment. From this event we raised £46 and gained some new members.

We anticipate with the return of "Halley" and National Astronomy Week to increase our membership even further.

Work on our 24-inch telescope sadly came to a halt in the early Spring due to the lack of

At the AGM, Chairman, Allan Swan, gave a talk on "Driving a Telescope by Computer and Stepping Motor", for which he had taken great pains to demonstrate the operation of his program on a BBC computer by driving a simulated telescope on a beautifully made model equatorial mount. An operational limitation was the lack of a disc drive. This meant that RA and Declination values could not easily be stored. The system has to be reset before a change in co-ordinates. So if anyone has a spare disc drive, Allan is waiting to hear from you.

WELLINGBOROUGH & DISTRICT AS: In July, the society was sadly let down by the non-appearance of John Hosty. According to Stephen Williams he never showed up nor did he contact us to apologise. Stephen stepped in and gave a talk on Giotto and NAW was discussed.

A jumble sale realised some £16.59 for funds.

Stephen Williams is working on a booklet on observing Halley's Comet which he says will be available to member societies of the FAS at the beginning of September. He is also to produce an exhibition program for a computer, the model of which unfortunately is unclear in his handwriting. It looks like TL 99/44? Anyway, phone him on Wellingborough (0933) 77972 if you are interested.

WEST MIDLAND AS: If you not know but the WMAA is a "postal" astronomical group, set up in April 1978 to provide the district with an astronomical centre with communication entirely by the magazine and occasional get-togethers. During August, one such happening is a series of public lectures and a star party to observe the Perseids. Extensive publicity was expected to bring in the public and make them aware of the Association.

They are going to need publicity. "In June," writes Allan Wells, "I decided to have an 'Open Day' where telescopes were displayed on the front lawn and notices placed inviting people to come and see sunspots during the day and the moon at night. The purpose of this was to see if local people would be willing to come to any events during NAW. The answer I got was very clear indeed.

Hours Open : 14
Attendance : 0 (zero)

These figures clearly show that our local media have got it right - we are far too much involved in trying to survive to care about anything in the sky."

WEST OF LONDON AS: A Perseid watch was to be held at the High Top observatory of South West Herts AS. You may remember that their previous observing site at Northwood Golf Course had to be abandoned some time ago.

The July meeting was to have seen the Finals of the observing competition.

For NAW the society is organising the usual format of a public meeting and observing sessions. With the financial strain on funds of NAW in printing handouts of society activities, they were on the lookout for sponsors from local firms. Let us know what response, if any, you get.

WEST YORKSHIRE AS: A successful weekend in June saw the interior of the dome refurbished and a good spring-clean all round.

The problems with aluminising the mirror I mentioned in the last Newsletter were thankfully overcome when they sent it to a good company - Galvotronics in Essex. We in

at the Royal Greenwich Observatory, near Hailsham, East Sussex, from 9.30am onwards.

Speakers this year include Eric Zucker, Michael Maunder and David Hardy, with more to be arranged, plus a variety of "happenings". Rumour has it that SAGAS have organised a TV-style quiz show (again!). Exhibitions and Trade Stands and visits to the RGO facilities complete your day. The complete programme will be available at the booking-in desk.

ADVANCE BOOKINGS please to Ken Marcus. Please make a block-booking for the society, making cheques payable to the FAS. And renew the subs to the FAS at the same time to qualify for membership rates.

ADMISSION: £2.50 per FAS member;

£3.50 others.

MID-DAY MEALS: Either take a picnic to eat in the spacious grounds, or book in advance with a payment of £2 for either a hot meal or a cold vegetarian dish.

EVENING BUFFET: for those staying to the late Star Lecture, £3.50 per ticket.

ACCOMMODATION: Limited accommodation is available this year in the Castle, and should be booked early through Mr Keith Newman at the RGO, Herstmonceux Castle, Hailsham, East Sussex. Charges are: **dbb**.

Double room with bath £14.25 per person
Twin room without bath £12.50 for 2 persons
Single room, no bath £10

COMPETITIONS were listed in FAS Newsletter, issue no 6, but please note George Bolland has moved house. His new address is listed elsewhere. Those who have already posted their entries need not be alarmed as George will call back at his previous address in case anything has been left there.

DISPLAY SPACE can be found for society exhibits. Please give Ken Marcus some warning of your requirements.

ENTRANCE to the Convention THIS YEAR WILL BE BY THE WEST GATE. Please note this change as the East Gate will not be manned and it is a fair way round, if you get it wrong.

HELPERS are needed, so if you can arrive early to help with stewarding, gate duty, etc, please mention this when applying for tickets in order to obtain a refund on the entry fee

IMPROVED FACILITIES AT THE CASTLE THIS YEAR INCLUDE A BAR.

SOME IMPORTANT ADDRESSES:

Treasurer: Ken Marcus, 5 Cedars Gardens, Brighton, East Sussex, BN1 6YD.

Secretary: Dave Powell, 1 Tal-y-Bont Road, Ely, Cardiff, CF5 5EU.

President: Tony Balfour, 43a Ellesborough Road, Wendover, Bucks.

Assistant Editor: For Herstmonceux competitions, and for trade adverts to this newsletter: George Bolland, 5 Wannock Avenue, Willington, Eastbourne, East Sussex, BN20 9RP.

Editor: for contributions to issue no 8:

HORIZONTAL SUNDIAL

M Lowrie Esq

semble:

aste a photocopy of the whole of the
diagrams on to thin card and allow to dry.

ut out the parts carefully with sharp
issors.

ut and fold the two tabs A and B at the
ottom of the gnomon as indicated.

tick the gnomon on to the shaded areas
of the dial plate along the XII (noon)
line, tab A on area A and B on B.

Check that the gnomon is square to the
dial with a set-square or the corner of
a book.

ase:

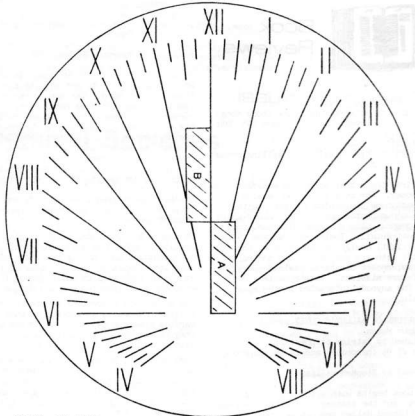
Set the dial on a table or other level
surface so that the top of the gnomon
and the XII line point to the North.

Correction for Latitude. The dial is
drawn for latitude 53° North (the latitude
of Stoke-on-Trent and Nottingham). For
other latitudes, raise the North (South)
point of the dial by 2 millimetres for
every degree North (South) of 53° North.
In Taunton, for example (51° N) the South
point of the dial should be raised 4mm.
The shadow of the gnomon cast by the Sun
will then show local apparent solar time.

Correction for Equation of Time. Apply
the correction indicated in the "Equation
of Time" graph for the appropriate date.
For example, at the beginning of October
the graph gives dial 10 minutes fast, so
subtract 10 minutes from the dial time.
This will give local mean solar time.

Correction for longitude. Add (subtract)
4 minutes to the local mean solar time
for every degree of longitude West (East)
of the Greenwich meridian (0°). For
example, in Swansea (4° W) add 16 minutes.
This will give Greenwich mean solar time
(GMT).

Add one hour if Summer Time is in force,
to obtain British Summer Time.

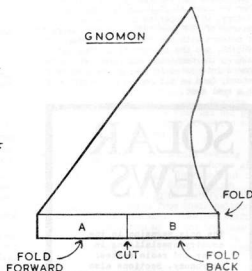


DIAL PLATE

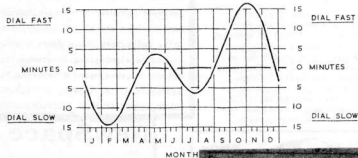


COMPLETED SUNDIAL

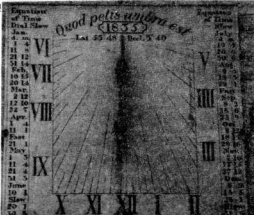
GNOMON



EQUATION OF TIME



vertical sundial dated 1835 on the
Abden Bridge Art Centre detailing the
corrections for the Equation of Time.
Photographs by Terence Tissington of
Abden Bridge AS.





Book Reviews

SPACE SHUTTLE by Christopher Chant
Published by McLaren Publishing (Hong Kong)
Ltd, 165 Old Brompton Road, London SW5 0BA;
price £4.95.

Reviewed by Stephen Williams, Wellingborough & District AS

The first thing that struck me was the value for money. For only £4.95 you receive a hardback book containing 127 pages with 57 full-colour photographs, 53 black-and-white photographs, plus numerous diagrams, some in great detail. Topics covered are 1970s spaceflight, design of the shuttle, the orbiter with its propulsion and control systems, rocket boosters, payload operations, and future missions. This book is a real must for anybody interested in the space shuttle.

THE RETURN OF HALLEY'S COMET by Patrick Moore and John Mason
Published by Patrick Stephens Ltd;
price £7.95 (hardback) and £4.99 (paperback)

Reviewed by Stephen Williams

This book begins with a look at comets in general and the anatomy of comets. We read about Edmond Halley and how he discovered that comets can be "one and the same". Then we learn about Halley's Comet in history, with separate chapters on the returns of 1835 and 1910, and the association of meteors with the comet. The return of 1985/86, and the spacecraft to "Halley" take up the remaining chapters. For astronomers interested in the most of this return, (and we all should be), this book is a real must.

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NATIONAL ASTRONOMY WEEK :
1985 NOVEMBER 9-16

Societies should be now be in receipt of an information package from the NAW committee. If your society has heard nothing, and you plan to be active in celebration of Halley's Comet, then supply the address of your NAW contact to:

"National Astronomy Week", c/o Enid Lake,

THE OFFICIAL HALLEY'S COMET BOOK
by Brian Harpur
Published by Hodder & Stoughton;
price £8.95 (hardback)

Reviewed by Rosemary Naylor, FAS

Brian Harpur's book of THE COMET is written at a popular level to get us into the "comet fever" mood. The author has evidently spent considerable time researching a wide variety of ephemeral publications reflecting the common man's views when confronted with the appearance of this cosmic spectacle. It will be interesting to see whether journalists this time around are able to wrinkle out the glibbie and even suicidal members of the public to interest readers in the 21st century, or for that matter whether advertising campaigns use the event to sell everything from fountain pens to custard powder.

On a more serious note, there is a good section on Edmond Halley's contribution to scientific thought. For readers who have been unable to locate a copy of the excellent biography by Colin Roman, these chapters will substitute quite adequately.

The scientific aspects of comets is treated briefly. There is an account of what the various space probes hope to achieve when they rendezvous with Halley and with Giacobini-Zinner.

Back on Earth, we are told how, when and where to search for the comet, with the admission that for observers in Britain, the views will be limited. Perhaps that is why there is only one paragraph on photographing the comet.

Encouraged by the fact that King Edward VII died in 1910, Mr Harpur lists the historically important events which took place at each of the apparitions since 240BC. To give the reader chance to assess whether or not these years had particular significance, he gives the notable events in the years immediately before and after. This long chapter seems to prove nothing in particular. Take as an example, Genghis Khan slaughtered thousands of people in 1222. From my hazy recollection of history, I can only comment that he did not confine his blood-thirsty tendencies to this one year only. Even if this is a serious attempt to compare "Halley years" with "non-Halley years", the exercise is pointless since it ignores all the other comets over the last thousand years which surely have an equal claim to be responsible for the ills of the world.

Notwithstanding this reviewer's reaction to one chapter, I can recommend the book as generally easy to read, and full of material for anyone wanting to prepare a talk on Halley's Comet. There is a good index and I hope the book will sell well. After all, Brian Harpur founded the Halley's Comet Society way back in 1975 and has put a lot of work into preparing his material. (It can be bought at Earth and Sky, as can the book by Moore and Mason, also reviewed.)

Rosemary Naylor



21a West End, HEBDEN BRIDGE, West Yorkshire HX7 8JG
Tel: Hebdon Bridge (0422) 846443

FOR YOUR DIARY: 1986 July 12.

This is the date of the Saturday Convention which the FAS will hold at the Amateur Astronomy Centre, courtesy the AAC project managers. The AAC is located on the Yorkshire/ Lancashire border between Manchester

NATIONAL ASTRONOMY WEEK :
NOVEMBER 9th-16th

If you wish to make this a truly memorable week, why not join fellow astronomers at Chyraise Lodge Hotel in Cornwall.

The hotel has all the facilities required by astronomers, two telescopes (a 21-inch Dobsonian, and a 9-inch With-Browning) both sited in south-facing light-pollution-free grounds, an extensive book and slide library and a full selection of star charts.

We have rooms that will sleep up to three persons, some en-suite, and all are spacious and fully-fitted. We provide good home cooking and there is a fully-licensed bar on the premises.

Lectures and discussions will be instigated by in-house speakers.

For general interest, the hotel is centrally situated for easy access to beautiful Cornish coves and fishing villages and of course the tin mines and Goonhilly Earth Station.

For further details please contact

Steve Anderson
Chyraise Lodge Hotel
Millpool
Goldsithney
Nr Penzance
TR20 9JD

tel: Penzance (0254) 763485.

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