UNIVERSITY OF HERTFORDSHIRE OBERVATORY

Home Required For An Observatory Dome (OFFERED FREE!)

The University is replacing one of its domes and wishes to make the old dome available to a suitable astronomical society or other similar group.

The dome is offered free of charge, but would have to be dismantled once it has been removed from its present wall cylinder, and then transported away from the site on a short time scale by the society receiving it. The society would also have to agree to absolve the University from any claims or consequences arising from acquiring / re-building / using the dome. Unless it is to be mounted on a roof, a new wall cylinder will be required. The dome will probably be available around the end of August.

DESCRIPTION OF THE DOME

16 foot 6 inches diameter "Ash" dome, about 30 years old. The type is similar to their current REA model with two differently sized shutter sections which may be configured to allow viewing to the horizon or the zenith. Shutter width 42 inches. The shutter is driven by a single phase 110V motor (motor and 110V transformer included) with limit switches at the ends of its travel. Dome rotation is by a 240V single phase motor operating via a rack and pinion drive. The switch gear for both motors is included.

The dome is constructed from interlocking unpainted galvanised panels. Some of these have severe rusting along their bottom few inches, along with significant rusting of the running rail. There is also rusting of a lower ring which acts to prevent the dome lifting off its base. This damage is repairable.

The circular running rail rests on 28 wheels whose axle supports are fixed to a wooden base ring. The base ring needs to be supported on a level circular wall supplied by the dome. There are 22 fixing bolts in the present installation.

Further details are available from Mr R. Forrest (tel: 01707 285560, e-mail; r.w.forrest@herts.ac.uk).

The dome may be inspected by prior appointment with Mr Forrest at The University Observatory.
Bayfordbury
Near Hertford
Herts SG13 8LD

Any person representing an astronomical society or other group interested in acquiring the above dome should send the following details to Mr Forrest at the above address to arrive not later than 30th June 1999.

1 Name of the society and its registered address, telephone and fax numbers, e-mail address (if available)
2 Name of the person making the bid, address, daytime and evening telephone and fax numbers, e-mail address (if available)
3 The position of the person making the bid within the society, and his/her authority to make the request on behalf of that society.
4 Brief outline of the society (history, membership, activities)
5 The purpose for which the dome would be used if donated to the society
6 Evidence of the ability of the society to dismantle and remove the dome, to repair it and re-construct it.
7 Details of the site proposed for the dome - in particular is it available in perpetuity to the society?

In the event of more than one request being received, the dome will be offered to the society which in the University's opinion is most likely to make good use of the dome. The University also reserves the right not to offer the dome to any bidder.

Prof. C.R. Kitchin
Head of Physics and Astronomy
University of Hertfordshire Observatory
Bayfordbury
Near Hertford. Herts SG13 8LD
United Kingdom
Tel: 01707 285560 or 01707 284600
Fax: 01992 503498 or 01707 284644

Summer 1999
South Wales Astronomical Societies Convention

Saturday October 16th 1999

FREE!!

The 2nd South Wales Astronomical Societies (Swansea, Port Talbot, Bridgend, Cardiff and Usk) Convention will take place on Saturday October 16th at the Department of Physics and Astronomy, University of Wales College Cardiff, 5 The Parade, Cardiff.

The speakers and their lectures will include:

Professor Chandra Wickramasinghe
University of Wales College Cardiff
Extra Terrestrial Life, New Frontiers

Dr Victor Clube
Oxford University
The Mindless Millennium

Professor Mike Edmunds
University of Wales College Cardiff
The Chemical Evolution of the Universe

Trade stands will also be present, as well as the Technique inflatable planetarium. There will also be an opportunity to look around this world renowned physics and astronomy department.

For more information please contact Theresa Cooper on 01446-700722 or email theresa@theresac.demon.co.uk. Updated information will also be placed on the Web site http://www.swan.ac.uk/astra/astro/swaas/

Trade stands to date are SCS Astro, Venturescope, Earth and Sky, Springer Books, Nigel Wakefield, Technique, University of Glamorgan, The Webb Society, BAA, Astronomy Now, FAS

Hubble Telescope has 700 Impacts

Photographs of the surface of the Hubble Space Telescope taken during its second servicing mission in February 1997 reveal that over 700 impacts from micrometeorites or space debris have occurred. Around 80% of the impact zones measured less than 0.8cm, although the largest was 4.7cm in diameter

From Bridgend AS Newsletter No129

Crayford Manor House A/S

As part of the National Week of Science, Engineering and Technology, Crayford held an Astronomical exhibition at the Manor House.

The exhibition was well attended and a great deal of interest was shown by the public, the main focus of attention was with the forthcoming eclipse.

More information and photographs of the exhibition can be found at our web site.

http://www.astromony.freeserve.co.uk.

Also on the web site are photographs of the Aurora taken by two society members, Rita Whiting and Val Stoneham, on a recent visit to Alaska.

Dick Chambers showing visitors sun spots.

Eclipse Accommodation Available

Near Launceston, Cornwall

3 Bedroom Bungalow

Enquiries – Ring 01594 833700
LIST OF OFFICERS 1998/99

President: Pam Spence,
See Front cover for details

Vice President: Malcolm Jones
Tabor House, Norwich Road, Mulbarton,
NORWICH, Norfolk, NR14 8JT
Tel: 01508 578392
E-mail 100257.1434@compuserve.com

Secretary: Clive Down,
See Front cover for details

Treasurer: Dave Sutton,
See Front cover for details

Membership Sec: Eric Hutton,
14, Folly Close, HITCHIN, Herts, SG4 9DG
Tel: 01462 626032. E-mail: bookman@rmlc.co.uk

Minutes Secretary: Dave Thomas
20 Maryport St; Usk, Gwent, NP5 1AE
Tel: 01291 673160.
E-mail: DJTASTRO@aol.com

Editor: Rob Barter
See Front cover for details

Handbook Editor: Dave Eagle,
24, Copithorne Close, OAKLEY, Bedfordshire
MK43 7QG  Tel: 01234 825256
E-mail: daveeagle@observer1.freeserve.co.uk

Education Secretary: Peter Corbally
45 Swinton Crescent, Unsworth, Bury, BL9 8PB
Tel: 0161 7663802 E-mail: pjpubs@btinternet.com

Meetings Organiser Dave Thomas
See Minutes Secretary for details

Publications Secretary: Malcolm Jones,
See Vice President above

Publicity Officer: John Parrat
73 Woolbarn Lawn, Whiddon Valley, Barnstaple,
North Devon, EX32 8PQ.  Tel: 01271 372331
E-mail: john@astro3.freeserve.co.uk

Slide Librarian: Alan Drummond
27 York Road, Crawley, West Sussex RH10 5JS
Tel: 01293 535027

Chilterns Group: Dave Eagle
25, Crocus Way, Manor Park, Rushden, Northants,
NN10 OUP.  Tel: 01234 825256
Observer@daveeagle.freeserve.co.uk

Devon Group: VACANT

East Anglia Group: VACANT

North West Group: Ron Kelley
1, Acazia Drive, SANDBACH, Cheshire, CW11 9ER
Tel: 01270 768048
E-mail: rkp@ronkelley.demon.co.uk

SAGAS Rep: Nick Quinn
15, Newham Lane, STEYNING, West Sussex, BN44
3LR Tel: 01903 814090 Nick@niquinn.demon.co.uk

West Midlands: Andy Salmon
Olympus Mons, 13, Jacmar Crescent, Smethwick,
WARLEY, West Midlands, B67 7LF
Tel: 0121 5654845 Andy_Salmon@compuserve.com

Yorkshire Group: Paul Harper
45, Lydgate, Lepton, HUDDERSFIELD, West Yorkshire,
HD8 OLT Tel: 01484 666832
Website Co-ordinator: Nick Quinn
See SAGAS Rep for details

BULLETIN BOARD

A Date for your Diary
1999 FAS Autumn Convention

The 1999 Autumn Convention will take place on Saturday 2nd October, in the Pippard Lecture Theatre of the Cavendish Laboratory, Cambridge.

Sponsored by Astronomy Now

Loughton Sky Camp
10-19th Sept 1999

As in previous years, Loughton will be organising a week long Sky Camp near Thetford in Norfolk, to which everyone is invited. It will be held from Friday 10th September to Sunday 19th September 1999, with lectures, barbecue (on Sat 11th) etc. Last year it was featured on BBC’s ‘CountryFile’ programme.

See page 8 for main information sheet

Further information from the Loughton Chairman:-
Mike Cook 2 Sunset Drive, Broxhill Road, Havering-Atte-Bower, Essex. RM4 1QL (01708) 375146 or (0961) 832827 (mobile).

Publications Available

Astrocalender
Observational Astronomy £2.00 + A5 SAE + 31p stamp
Step by Step Astrophotography £1.30 + A5 SAE + 31p stamp
Using a Telescope £1.80 + A5 SAE + 31p stamp
Choosing a Telescope or Binoculars £0.60 + A5 SAE + 26p stamp
Hazards & Safety Guidelines
FAS Handbook

Contact Publication Secretary For Details & Bulk Orders
Payment – Cheques payable to F.A.S
MALCOLM JONES, Tabor House, Mulbarton Road
Norwich, Norfolk. NR14 8JT
E-mail: 100257.1434@compuserve.com

Advertise for Space
Small adverts for members and their societies are free. For adverts of a more commercial nature we can provide up to A5 size in area for a small fee. The newsletter has a circulation over 4000 to a specialised readership.
Contact the Editor for details.

MEMBERSHIP CHANGES
Remember to send society contact changes to the Membership Secretary,
Eric Hutton, 14 Folly Close, Hitchin,
Herts, SG4 9DG. Tel: 01462 626032
E-mail: bookman@rmlc.co.uk

Deadline for submission for next newsletter, 30th Aug 99.
Please remember to send ALL articles to the Editor, Rob Barter.
A dream come true
By Pam Spence

In the UK, a truly dark sky is a rarity. Most of the amateur astronomers belonging to the numerous astronomical societies of the FAS struggle to observe – not just because of light pollution, but because of cloud too. So perhaps a dream of the UK amateur is to observe under a clear, transparent and dark sky.

Another dream is the size of telescope. They say size doesn’t matter, but of course with telescopes, it does.

So how would you like to observe with a one metre, Richi-Cretien-Coelot telescope under a beautiful clear, dark sky?

I recently had the opportunity to do just this, and it is something that may be within your reach too.

Despite full moonlight, I managed to easily discern the central star of the Ring Nebula. The planetary nebula, NGC6543, was beautiful, the polar caps of Mars were easily visible, as was Syrtis Major. I didn’t even have to squint through any turbulence. I’ve never seen Mars like that through a telescope before, only in photographs.

Obviously a one metre telescope is not really for just looking through – and after they had taken off their photometer, I was able to attach my camera and photograph both Venus and Mars (though not, obviously, at the same time!). I await my slides with bated breath. I do hope my Martian photos come out.

So, was I at the eyepiece of the JKT on La Palma? No, nothing could be further from the truth. I was actually 2,800 metres up a mountain at the Tien-Shan Observatory, Kazakhstan.

If your geography is as bad as mine, you probably are no wiser as to where I was observing. Even the local travel agent said “where?” when I went in to ask for local currency for my trip.

Kazakhstan is a country, a beautiful and vast country, that used to be part of the Soviet Union. The Tien-Shan Observatory lies in the Tien Shan mountain range which forms the boundary between Kazakhstan and China. Afghanistan lies just to the south.

So why did I travel so far for an observing session?

When the Soviet Union fragmented into its constituent states, the funding fragmented too. The observatory I visited, equipped with the very best technology, had been a Russian-financed observatory. Indeed, while I was there, I met a Russian astronomer who continues to use one of the 0.5 metre telescopes for his project of cataloguing the magnitudes and positions of stars. But the majority of the instruments lie idle.

I was shown round the site (isn’t pristine snow beautiful until you try and walk on it?), and visited the other (now mothballed) one metre, and the other (unused) 0.5 metre telescopes. I saw sunspots projected by the 15cm refractor which has an H-a filter and visited the nearby sleeping 50cm solar telescope and its spectrophotoscope.

It was so sad to see the instruments unused, particularly when UK professionals scramble for telescope time.

But now, a handful of entrepreneurs are trying to open up these instruments to both the professional and the amateur in the UK. Austrian Airlines, Martin’s World Tours and the Ajutor Tourist Company are trying to put a package together which will allow access to this site.

Kazakhstan is a wonderful country. The people are friendly and welcoming. It is an experience! The food at the observatory is nutritious and filling (you need a good breakfast to keep warm at that altitude), the scenery is breathtaking, the skies are unbelievable. Okay, the plumbing is basic (very) and you can only flush the toilet when the pipes aren’t frozen, but this is being worked on. After all, if you had limited money, would you use your one metre telescope or flush the loo?

It is early days yet, but the venture is being developed. In the months to come perhaps you will see adverts inviting you to travel to Kazakhstan to stay at the Tien-Shan Observatory. If you can, I urge you to go. You won’t forget that observing night in a hurry.
FAS President
AGM Report
Alan Dowdell

The last AGM was held at Newbury by the Newbury Astronomical Society. The FAS likes to move its spring/AGM meeting around the country and we are grateful to The Norman Lockyer Astronomical Society for inviting us this year to Sidmouth.

The FAS has had three council meeting in the course of the past year held in London. This is the only time the we formally meet, the rest of the time we communicate via E mail. Thus all members keep in touch making the societies business quick and easy to deal with. The main ongoing item of business, which we would have liked to have dealt with fully this year was the revision of the constitution. However it is now completed, thanks to the work of Doc' Sutton, our hard working treasurer. Doc has of course kept a very active control on our finances throughout the year as well for us.

Our main means of communicating with you and your members is via the Newsletter, I hope all will agree that the changes that have been made by our Editor Rob has made it more acceptable to the membership.

The Handbook has been revised and re-edited by Dave Eagle and this continues to be of great use to society secretaries. We have expanded our other publications, so that more are available to you for selling on to your membership.

Malcolm Jones who deals with these and the highly popular Astro Calendar would like further suggestions on what we can produce.

Ian Hutton has been busy keeping our ever expanding membership list expanding and dealing with our insurance schemes. The membership now stands at over 146 societies.

Clive Down our secretary has dealt with regular day to day business of the Society as well as supplying information to possible new Societies.

This meeting and the successful Cambridge meeting were organised by our hard working Pam Spence who took on the job of not only the Vice President but Meetings Organiser and Publicity Officer. All three jobs with great success.

We co-opted onto the Council an old friend of the FAS Alan Drummond to look after the slide library.

We had again a very successful stand at Astrofest. Having a stand at this major event allows us to promote society membership, we directed at least 100 to their local societies. The use of our Web page, run by Nick Quinn is a useful way in which all societies can keep in touch, advertising events etc, please us it. I will be standing down at his AGM so I would like to thank all members of the FAS committee and the regional reps. for all their hard work for making the FAS successful.

Alan Dowdell

Secretary's Report
Clive Down

Clive said that the FAS owed a great deal to Pam as she has taken every opportunity to promote the FAS through the pages of Astronomy Now. This has resulted in considerable interest in readers enquiring about local societies.

The FAS has received nearly 300 letters during the past year alone. Also, we have helped with the formation of a number of new societies.

Membership Secretary's Report
Eric Hutton

Eric said that 90% of UK astronomical societies were now affiliated to the FAS. Each year one in five of these makes changes to the information provided to the FAS and it is essential that addresses and telephone numbers are regularly updated for inclusion in the Handbook, Newsletter and Website.

In future, all societies that subscribe to the Public Liability Insurance Scheme will be given written proof annually.

Information to All Society Secretaries

During the past two years I have received enquiries from Societies who own Fixed Telescopes within a secure building, some on their own ground and others who rent their sites. The question of Insurance has been raised by these Societies.

As members will know the FAS has a block booking for Public Liability Insurance, for member societies who wish to have insurance at ten pounds per year.

I have discussed with our insurers the possibility of an Insurance Scheme for Buildings & Telescope Equipment either on societies own or rented sites.

Our Insurers have made proposals, similar to the Public Liability Insurance Scheme, for the FAS to try and start a Block Booking Insurance Scheme for societies at a realistic cost.

We have no costings to date. In the first instance I would like to know if there are any Societies who would be interested to know more about a Possible Insurance Scheme. If any Society Secretaries would like to write to the FAS/ Treasurer for details. All enquires will be answered by letter.

Treasurer Dave Doc Sutton
Science, Engineering & Technology Week
17th - 26th March 2000

Do you want more members? Would you like a new audience? Have you thought of being part of set2000, the 7th National Science, Engineering and Technology Week which runs from Friday 17 to Sunday 26 March 2000? Astronomy societies who participated in set99 (which ran in March this year) were pleased that the events they staged had not only reached a wider audience, but as a bonus, had gained them new members.

What is the National Science, Engineering and Technology Week (or setweek)? It is a national celebration involving all aspects of SET from blue sky science, to amateur societies and clubs. It has a strong education element, as well as covering topics of general interest, including topical issues like BSE (Mad Cow Disease), GMOs (Genetically Modified Organisation's), etc. The British Association for the Advancement of Science co-ordinates setweek on behalf of the DTI's Office of Science & Technology. The Week boasts over 7,000 events attracting over 1.25m visitors and massive media coverage and set2000 promises to be even bigger.

How can your society be part of it? If you run a lecture programme, why not schedule a talk to run during set2000, perhaps you could run this in a different venue and attract a different audience? Do you have transportable exhibits and could you bring these to a local supermarket, library or school? You could team up with a local setweek organiser (contact details from Maria Roy: 0171 973 3074).

Leicester Astronomical Society

The annual skittles match with Hinckley and district AS will be held in June.

Trips over the summer are planned to Bradford (National Museum of Film, Photography and Television) in June and Herstmonceux in August.

After a break in July, meetings start up again on Tuesday August 3rd for a pre-eclipse special will be followed by the Members Evening on 24th August at which we all will hopefully show off our eclipse pictures! About a dozen of us will be going to Cornwall to view the eclipse.

One of our autumn meetings will be an ‘Any Questions’ type session with experts from Leicester University and will be broadcast on local radio.

Meets at Braunstone Civic Centre, Leicester.
Contact: Ann Bonell, 53 Wardens Walk, Leicester Forest East, Leics. LE3 3GG. Tel. 0116 2394481
email: johnbonell@53le33gg.freeserve.co.uk

Vice-President's report
1998/1999
Pam Spence

The FAS continues to do its job well of helping the local astronomical societies in the UK and being their voice in national affairs. The increase in the number of societies belonging to the FAS, and the increased contact with other national bodies is evidence of this.

As Vice-President, my role has been to support the President and other members of Council whenever necessary. The last year has been a very difficult year for Council due to the increased work load and various Council members' personal difficulties. As various posts were not filled at the last AGM, in addition to continuing to oversee the general running of the FAS, I have been both meetings organiser and publicity officer. Consequently, in all the years I have been involved with the FAS Council, I feel the last year has been the most difficult for me.

Hopefully people will come forward to fill all vacant posts in the next year so the burden of work does not fall too heavily on existing Council members. If posts are not filled, then I feel the efficiency of the FAS is seriously threatened. I therefore very strongly represent to all members of affiliated societies that if they feel they can help in any way whatever, whether as a Council member or as an assistant to a current Council member, then please stand forward and offer your help.

With the current President standing down, I have offered to stand again as President to keep some continuity in the Council. However, I personally don't feel it is good for any organisation to have the same people doing the same job for great lengths of time and I look forward to being able to pass the Presidency over to someone else in the near future.

As meetings organiser, I feel the Cambridge Convention held last October was very successful with a good attendance. The last few AGMs, however, were not well attended, and I have proposed that in the future we have only one convention a year. In addition, if the post of meetings organiser is not filled at this AGM, then the FAS will not be able to offer conventions to its members.

As Publicity Officer, I have publicised the conventions and dealt with some press enquiries. The FAS is beginning to be a body to whom various people will turn when considering the amateur astronomer in the UK.

Finally I would like to thank all members of the Council who have helped me through the past year. I think members of the FAS should be proud of the people on Council who continue to work so hard on their behalf.
SOCIETY NEWS ROUND UP

ABINGDON A.S
Contact: Bob Dryden 01491 201620
Or Sebastian Linfoot 01865 725094
Flat 10, Pembroke Court, Rectory Road, Oxford OX4 1BY

ASTRA: Association in Scotland to Research Astronautics
Contact Mr George McCue, 96, Bloomfield Road, Airdrie, Lanarkshire, ML6 9LX Tel: 01236 750903.
Meets Friday evenings at Airdrie Observ. & monthly in Glasgow.
http://easyweb.easy.net.co.uk/~portwin/Pages/ASTRA/General/ASTRA.html
E-mail: astra@easy.net.co.uk

AYLESBURY
Contact: Alan Smith. 182 Marley Fields, Leighton Buzzard, Beds. LU7 8WJ. Tel: 01525 374258

BEDFORD
Secretary: Lisa Harrington, 24 Swallowfield, Wyboston, Beds, MK44 3AE Tel. 01480 406350
http://www.btinternet.com/~cosmodave/bashome.html
E-Mail:(Dave Eagle): Observer@daveeagle.freeserve.co.uk
http://www.powernet.co.uk/bas/bashome.html

BIRMINGHAM
Dane Cartly 0121 353 6577

BOSTON AS Details of the 1999 lecture programme are available from Mrs Lorraine Money, 18 College Park, Horncastle, Lincolnshire. LN9 6RE. 01507 524037 (ansaphone), or e-mail Lorraine@astspace.demon.co.uk or Paul@astspace.demon.co.uk.

BRADFORD A.S
Contact: David Cooper, 36 Pollard Lane, Undercliffe, Bradford. BD2 4RN.
Bradford has now got it's own website: http://www.andybat.demon.co.uk/bas/index.htm
E-mail: has@andybat.demon.co.uk

BRIGHTON ASTRONOMICAL & SCIENTIFIC SOCIETY
Meetings are held at St. John's Day Centre, Palmeira Square, Hove on the first Tuesday of each month, commencing at 7:30pm.
6th July - "Solar Eclipses" by Pam Spence
Contact: Terri Fearn (01273) 581553.
E-mail: Terri@starplace.demon.co.uk
Website: www.fomax.demon.co.uk/BASS.html

Bristol
We meet at Bristol University Physics Building and we alternate Fridays there with Fridays at Westbury Park methodist church rooms for club nights.
Details can be obtained from me on 01454 632692 or at this email address. E-Mail: John.Pickard@bristol.ac.uk

CAMBRIDGE AA and YOUNG ASTRONOMERS
Stanley Trafford (01223) 880624
http://www astronomical.org.uk/~/ken.day/caa/caahome.html

CARDIFF
Sept 2nd Formation of stars and planets
Dr. D. Ward Thomson - Uni. College Cardiff
Sept 16th Johannes Kepler and music of the spheres
Dr. Alan Chapman - University of Oxford
Sept 30th Asteroids
Dr. David Hughes - University of Sheffield

Oct 14th The universe in 3D†
Dr. Chris Baddiley - Malvern, Worcs.
Oct 28th Observing Variable stars with binoculars
Tony Markham - Leck, Staffs

CASTLE POINT
Andy Turner 01702 258640
The Castle Point Astronomy Club now has a website. http://www.djmurphy.demon.co.uk/cpac

CHESTERFIELD
D Denton, Lilac Cottage, Market Place, Castleton, Sheffield, S30 2WQ. Tel 01433 620692

CORNWALL A.S.
Contact: Jill McGroarty 31, Godolphin Rd. Helston, Cornwall, TR13 8PX
Tel: (01326) 564996 E-mail: thomas.mcgroarty@virgin.net

CRAWLEY AS Ron Garner. 1 Pevensye Close, Pond Hill, Crawley, West Sussex. RH10 7BL. Tel: 01293 531096.

CRAYFORD MANOR HOUSE ASTRONOMICAL SOCIETY
We have a first class programme of lectures at Crayford anyone who would like more information can contact the secretary Roger Pickard on 01732 850663
Web Site: http://www.astronomy.freeserve.co.uk

DONCASTER A.S
Contact: Colin Maskill, 58 Thorne Road, Doncaster

EASTBOURNE Peter Gill, on 01323 646853

LA SOCIETE GUERNESIAISE
Geoff Falla the Hon. Secretary on Guernsey 724101
http://dspace.palace.pipex.com/town/estate/vs76/astrosec.htm

GWYNEED ASTRONOMICAL ASSOCIATION
Contact: Davyth Fear Bryngwyn, Ffordd yr Orsa, Llanrug, Gwynedd LL55 4AG Tel. (01286) 672882
E-mail fear@enterprise.net
Meetings are held on the first Thursday of every month at the Electrical Engineering Building, University of Bangor, at 7.30

HAMPSHIRE
Geoff Mann on 01705 596154

AS OF HARINGEY
In 1999 bimonthly exhibitions are being arranged at Alexandra Palace with a big event planned for Oct. 2000. From Feb 2000 the society will meet twice monthly on the 1st and 3rd Wednesdays.
Sept 15th "Simple Astro Photography" Bob Mizon.

HASTINGS AND BATTLE AS
Paul Colegate, Flat 10, 78 Wickham Ave; Bexhill on Sea, East Sussex, TN39 5SR Tel: 01424 733041

HIGHLANDS AS
Richard Green, 11 Drumossie Avenue, C culpa, Inverness IV2 3SJ Tel 01463 223826

HINCKLEY & DISTRICT Shaun Albrighton, 4 Walnut Close, Hardstall, Nuneaton CV10 0HX (01203 397183).

HEART OF ENGLAND ASTRONOMICAL SOCIETY (HOEAS)
Contact: The Secretary, Keith Middleton, 33 Digby Drive, Marston Green, Solihull, B37 7DU.
E-mail: HOEAS@yahoo.com
HUDSFIELD ASTRONOMICAL & PHILOSOPHICAL SOCIETY - contact Robert Williams 01484-537032
Except where indicated meetings are at 4A, Railway Street, Huddersfield.

ILKESTON & DISTRICT
Mark Thomas on 0115 849 0724 or John Brown on 01777 376 883
The society meets at the Function Room, Erewash Museum, Anchor Row, Ilkeston, Derbyshire starting around 7:30pm.

IRISH AS
Stephen Ryan at PO Box 2547, Dublin 11 or Tel: (from the UK) 00 35311 864 1382

ISLE OF MAN (IOMASS)
Sep 11th IOMAS 10th anniversary exhibition and dinner, Cherry Orchard Hotel with guest speaker Dr. Patrick Moore (subject to availability).
www.bigfoot.com~gary.kewin

LEEDS A.S.
July 14th Public Meeting “The Eclipse”
Sept 8th “The European Space (Astronomy) Programme”
Prof Ken Pounds - Univ of Durham
Oct 13th “The Strange case of the missing white dwarfs and other Mysteries” - Dr Martin Barstow. Univ of Durham
Nov 10th “Astronomy at the End of the Rainbow” - Dr Paula Chadwick - Univ of Durham
Dec 8th “Presidential Address” - End of Year Social.
Venue: Centenary House, North Street, Leeds from 7:00pm onwards. All are made very welcome.

LEICESTER AS
Meeting at Braunston Civic Centre, Leicester
Details: Ann Bonell, 53 Warden’s Walk, Leicester Forest East, Leic. LE3 3G0 Tel. 0116 2349448
http://www.thenet.co.uk/~obiwan/astro/index.html

LEICESTER
Meet on the last Wed of each Month
Contact: Eric Hutton 01462 626032, bookman@rmplc.co.uk
http://www.rmplc.co.uk/edoweb/sites/bookman/las

LIVERPOOL AS
Ken Clarke, 31 Sandymount Drive, Wallasey, Merseyside L45 OLJ (Please encl. large sac) Tel:0151-6383270 / 0151 794 5356 (24hrs)
E-Mail: ggastro@liverpool.ac.uk
http://www.liv.ac.uk/~ggastro/home.html

LOUGTON ASTRONOMICAL SOCIETY
The venue is Theydon Bois Scout Hall, Loughton Lane, Theydon Bois, Epping, Essex.
Meetings every Thursday at 8:00pm.
Contact: Charles Munton. 14a Manor Road, Wood Green, London N22 4YJ. 0181 889 9253, charles@munton.u-net.com

MACCLESFIELD AS
Contact Cherry Moss 01625 611789

MANCHESTER AS
Contact: MAS, c/o Godlee Observatory, UMIST, Sackville St, Manchester. M60 1QD
(0161) 2004977, 24hrs. Fax 0161 2287040.
http://www.u-net.com/ph/mas/

MANSFIELD AND SUTTON
Grahm Shepherd on 01623 552276
http://www.innotts.co.uk/~shepherd/index.html

MEXBOROUGH & SWINTON
Mark Benton 01709 587887
Email: Mark.Benton@rotherham.gov.uk

MID-KENT A.S.
Mar 26th “Black Holes” by Emma Nicholson
Meetings held at The Visitor Centre, Riverside Country Park, Lower Rainham Road, Gillingham.
Contact: 01634 308035 or 01634 200718

MILTON KEYS
Pierre Girard on 01234 391489 or pgirard@compuserv.com

NORTH EAST LONDON
Stephen Karpel, 99 Churchfield Road, ACTON, London, W3 6AH
Tel: 0181 992 5751

NORWICH A.S.
All meetings at the Seething Observatory from 7:30pm to approx 10:30pm. Admission £2, under 16’s £1, ample parking.
Situated off the B1332 Norwich - Bungay Road Signposted 8 miles south of Norwich.
B1332 Signpost P Seething Observatory, (Harvey Lane): 1 mile down Harvey Lane/Toad Lane
Frank Lawlor. 01508 493321
e-mail: FLawlor@compuserv.com

NOTTINGHAM
Carl Brennan on 0115 854 8687.
E-Mail: carl.stella@virgin.net

ORWELL
Peter Richards on 01473 659806 oasienvq@btbecs.bt.co.uk
http://www.ast.cam.ac.uk/~ipswich

PAPWORTH
Meets on the 1st Wed of each month (except July) from 7:00pm to 9:00pm in the Bradbury Progression Centre, Papworth Everard, near Huntingdon.
Keith Tritton on 01767 677219 (even) kpt2@tutor.open.ac.uk

PLYMOUTH A.S.
Contact: Alan Penman, 12 St. Maurice View, Plympton, Plymouth.
PL7 1FQ. Tel: 01752 338491.
See separate article else where in this publication for an Eclipse Exhibition.

PONLAF The Astronomy Forum at the Univ. of North London.
Ponlaf hold monthly meetings (last Fri in month) in term-time, when an invited speaker talks on a subject of Astronomical interest.
Pat Prigmore, 0171 753 5126

RENFREWSHIRE ASTRONOMICAL SOCIETY
Meetings are held every Friday evening at 7.30 pm at the COATS OBSERVATORY, PAILSY.
Contact: Mark Pollock TelNo: 0141 561 3554
Or e-mail Ian Martin at lmartin@aol.com

SALFORD AS
Plans to join the great trek to Devon and Cornwall for the big event on August 11th 99 are well in hand.
See special event notice on page 8.
Further Details: Phone or send a SAE to Kath Redford (see below)
Kath Redford 2 Albermarle Road, Swinton, Manchester. M27 5ST
Tel: 0161 7943179.
E-mail: salford@ast.man.ac.uk
WWW: http://axp2.ast.man.ac.uk:8000/~salford/sas/home.htm

SAWTRY & DISTRICT
Brooke Norton on 01487 831683

SCOTTISH ASTRONOMERS
Ken Mackay at Hayford House, Cambusbarron, Stirling FK7 9PR.
http://star-ww网.ww.st-and.ac.uk/~fv/sag/sag.html

SHEFFIELD ASTRONOMICAL SOCIETY
http://www.saqjarra.demon.co.uk/sas/sashome.htm

SHROPSHIRE
David Woodward on 01743 872991 or the Programme Secretary Kevin Wildgoose on 01691 610408 for details on forthcoming events. Examples are:-
Programme Secretary Kevin Wildgoose on 01691 610408 for details on forthcoming events. Examples are:-
3rd Sept  "Astronomy on the Internet" - Simon Clayton-Jones
3rd Dec  "Supernova search for small telescopes" Martin Griffiths.

SOLENT AS  Ken Medway on 01703 582204.

SOUTHAMPTON AS
Meetings are held on the 2nd Thursday of each month, except August, in Conference Room 3, Civic Centre, Southampton, at 7:30pm.
Informal Club Evenings are held on the 4th Thursday of each month, except December, at members houses.
Forthcoming events:-
8th July  "Some aspects of 18th century astronomy" by G. Nash
9th Sept  "AGM and Presidential Address".
25th Sept  "75th Anniversary Meeting" at Univ of Southampton. Speakers include Patrick Moore, John Mason, Andrew Lound and David Whitehouse.
Contact: John Thompson, 4 Heathfield, Hythe, S.ampton. SO45 5BJ. Tel: 01703 842 531

SOUTH EAST KENT
John Kemp on 01227 766470

SOUTH LINCS ASTRO. & GEOPHYSICAL SOC.
Contact Mark Underwood on Tel 01775 766084
E-Mail: solags@btinternet.com
Formal meetings are held monthly on the third Wednesday at the Adult Education Centre in Pinchbeck, Nr Spalding. Observatory meetings are held on the second Friday and fourth Saturday of every month at the Peak Hill Observatory in Cowbit.

STAFFORD & DISTRICT A.S.
Meet on the 1st & 3rd Thursday of each month from September to August at 7:15pm at Weston Road School, Blackheath Lane, Stafford.
Contact Lydia Hodkinson at 6 Elm Walk, Penkridge, Staffs. ST19 5NL. Tel: 01785 712065

STRATFORD UPON AVON
Robin Swinbourne, 18 Old Milverton, Leamington Spa, CV32 6SA. Tel: 01926 882187

SUDBURY
Don Simpson, 0191 5670151

SWANSEA A.S.
Maurice Convey, 132 Eaton Crescent, Swansea. SA1 4QR
Tel: 01792 466814
http://www.swan.ac.uk/astra/starpage.htm

TORBAY A.S.
Secretary Tim Moffat (01626) 361041
Meetings at Torquay Town Hall:-
Mar 18th X-Ray Binaries, Amateurs and Professionals" (Dr Paul Roche)
Contact: TAS@halien.net
Web: http://www.halien.com/TAS/

VECTIS AS
John Smith on 01983 865451 or 27 Forest Road, Winford, Sandown, I.O.W. PO36 0Y.
MEETINGS 7.30pm, fourth Friday of each month except December, VENUE Lord Louis Library Meeting Room, Orchard Street, Newport.

WALSALL
WALSALL AS goes from strength to strength, meetings every Thursday at the Free Trade Inn, Wood Lane, Pelsall.
For details of monthly lectures and astro diary phone Alan Ledbury on 01922 632 624
http://wkweb5.cableinet.co.uk/G.Ledbury/WASINDEX.HTM

WEST COTSWOLD
Mr. Robin Hughes

93 Atlantic Way, Porthcawl, Cornwall TR4-8AH. 01209 890736

WEST LONDON
Duncan Radbourne on 0181 952 2816

WEST YORKS
Ken Willoughby, 11 Hardisty Drive, Pontefract, West Yorkshire, WF8 4BU on 01977 795535 Email Terry Cymbalisty on terry@ndl.co.uk
http://staff.ndl.co.uk/terry/wyas

WILLIAM HERSCHEL SOCIETY
Al Crotcher on 01225 31342 or 19 New Kings Street, Bath, BA1 2BL

WILTSHIRE ASTRONOMICAL SOCIETY
Simon Barnes, 88 Oakfield Road, FROME, BA11 4JH
E-mail: simon@rohmann.freeserve.co.uk

WOLVERHAMPTON
The Society meets on alternate Mondays at 7:30 p.m. at Beckminster Methodist Church Hall, Birches Barn Road, Wolverhampton.
For more information please contact the Secretary (note new address from FAS handbook)
Michael Bryce, at Iona, 16 Yellowhammer Court, Kidderminster, Worcestershire, DY10 4RR;
Tel: 01562 863545. Fax: 01562 639392
michael_bryce@hotmail.com
http://www.spaceenthusiast.com/wemfas/was/was.htm

WORCESTER
Change of contact.
S. Bateman. 12 Bozward Street, Worcester, WR2 5DE
Telephone: (01905) 420531
Meetings are held on the second Thursday of each month 8 to 10 pm at Worcester College of Higher Education, Henwick Grove, Worcester Alternative Contact Mr C. Livingstone, 14 Ellsdon Rise, Kempsey, WORCS. (01905) 821360

WORTHING AS
All monthly meetings are held at the Heene Church Rooms, Heene Rd, Worthing @ 7:30pm
Contact: Dave Storey at dave.storey@controls.eurotherm.co.uk
http://www.nquin.demon.co.uk/was

WYCOMBE A.S
Contact Paul Millington 125 Telford Way, Downley, High Wycombe, Bucks, HP13 5SZ Tel 01494 637901
e-mail yix76@dial.pipex.com
The Society meets 3rd Wednesday of the Month at Woodrow High House, Cherry Lane, Amersham Buckinghamshire at 19.45hrs
Web site http://www.wolf359.demon.co.uk
Society Diary

CENTRAL SIDEWALK
Stuart Williams 26 Matlock Road, Walsall, West Midlands, WS3 3QD.

Larger articles from societies may be found elsewhere in this newsletter. If you have sent in an article but don’t see it in this issue, don’t despair. Due to space restrictions I may be holding it back for the next issue.
Soughton Astronomical Society Presents:
THE 5th EQUINOX SKY CAMP.
{Sponsored by Broadhurst, Clarkson & Fuller, London}

As seen on BBC's Country File
Friday 10th September
Until Sunday 19th September

At the DOWER HOUSE TOURING PARK,
EAST HARLING, THETFORD, NORFOLK.
ENGLAND NR16 2SE Tel: 01953 717 314

This is a well proven dark site for Astronomy in the wilds of Norfolk, approximately 8 miles from Thetford.

Cost Per Pitch per night: Prebook £6.85 On day £7.35
It is strongly recommended to book a pitch prior to attending.
If prebook minimum stay 2 nights please quote reference number SC5 when booking.

Main Event Day: Saturday 11th September

Guest Speakers Confirmed:
Mike Maunder - 1999 Solar Eclipse,
Tony Sizer - TBA and Ken Harrison - TBA

Astro Boot Sale

Prize Raffle

Evening Bar - B - Q

For full details send an A5 SAE to
MIKE COOK, 2 SUNSET DRIVE, BROXHILL ROAD,
HAVERING-ATTE-BOWER. ESSEX. ENGLAND. R.M.4 I.Q.L
TEL: - 01708 375 146 or 0961 832 827
(All Enquiries must reach me by last post 1st Sept)

HOPE TO SEE YOU THERE!
Breckland Astronomical Society
Project Oracle

The society is pleased to announce details of ‘Project Oracle’ (Observing, Recording, Automated, Celestial Learning Experience).

‘Project Oracle’ consists of the combination of an 8½" reflector telescope, a Astroid 2000 CCTV Camera, a Starlight Express CCD Camera, an SVHS VCR, an LCD Fujitsu Projector and Screen. This facility will enable ‘Real Time Viewing of the Night Skies’ for up to 100 people, sitting in comfort of a village hall or scout hut for example. If the skies are not clear on the night then a recorded show can be given.

Funding for the project came from two sources:
The Royal Society & British Association for the Millenium Award Scheme gave a grant of £4555 which enabled the purchase of the Astroid 2000 CCTV Camera, LCD Projector, SVHS VCR and sundries.
The Particle Physics & Astronomical Research Council (PPARC) gave a grant of £1200 which enabled us to purchase the Starlight Express CCD, Flip Mirror System and a set of filters.

The society will be working in close liaison with the Breckland District Scouts and Guides Association, who are partners in organising the venue for taking the Oracle facility to different locations in central Norfolk and northern Suffolk to promote the ‘Public Understanding of Science and Technology’ (P.U.S.T.).

All enquiries regarding this project and arrangements for the showing of ‘Real Time Viewing of the Night Skies’ at different locations, starting in the Autumn should be directed to either:

Spencer Allen, Vice Chairman, Tel No: 01953 850571
John Spelling, Secretary, Tel No: 01603 812009
Terry Porter, District Commissioner, Breckland District Scouts, Tel No: 01842 761227

NASA Researches Wormholes

NASA Scientists are investigating the possibility that “wormholes” exist in space. Wormholes were first predicted by Einstein who’s calculations showed that shortcuts could exist in the fabric of space-time allowing journeys across the Universe to be made almost instantaneously, as in the film “Contact”.

A formidable problem is the entrance to such a wormhole is likely to be very narrow, but it is thought that “negative mass” could be used to expand wormholes to make them large enough for spacecraft to pass through.

It is thought that many different sizes of wormholes exist, from microscopic to those over 100000 km in diameter. At present we have no means of knowing their whereabouts.

From Bridgend AS Newsletter No129

Isle Of Man Astronomical Society

The big news is our observatory building and dome is in place. The building is fantastic, Colin Hill has definitely lived up to his statement that it will be “a proper job.” The whole structure is of massive strength and I can see that it has been built to stand the worst of the Manx weather.

A lot of work needs to be done on the interior, please offer your help if you can. Interior partitions, floor joinery, plumbing, wiring, painting and numerous other jobs need doing. There are likely to be many work parties needed, so if you have not seen the building I am sure that you could arrange to look at the building when it is open and possibly offer help at the same time.

Once finished the observatory will be a top attraction and of great benefit not only to our society but to the whole Island.

On behalf of the society I would like to thank Colin Hill who has not only given a huge financial help to the society but has also put a lot of thought, hard work, time and effort into the project.

Thanks also to members who have given donations, both large or small, and to the observatory work subcommittee who have given a lot of their time and in some cases money to the project.

A lot more is yet to be done and we do need to come up with some more fundraising ideas. Now we can see the dome on the hill we can all see what we are working for. Keep up the good work everyone.

The Man 2000 Committee have turned our application for help down for the second time. I can’t understand why it is a project for the future.

J.W. Martin

Salford pre-Solar Eclipse Event

The society is holding a pre-solar event for the public at the Observatory in Chaseley Field, Chaseley Road, Salford, on Sunday July 11th, from noon onwards, for visitors to obtain information on the big event on August 11th.

Free of Charge

All Welcome.

For further details contact Kath Redford on 0161 7943179 or send a SAE to 2 Albemarle Road, Swinton, Manchester. M27 5ST
Our contribution to the Shrewsbury Science Festival last July was very much appreciated. At the invitation of the tourism and leisure section of the council we put up a display of telescopes, slides, CCD image processing, information panels etc in the Music Hall. One of the telescopes pointed through an open window to NASA images of the planets on postcards fixed to the Market Hall some 50 metres away! Outside, in the square, we had giant horizontal and equatorial sundials which were intended to be used to teach interested passers-by how to properly read a sundial with a view to inviting them to go into the Music Hall, see the displays and read a beautiful 18th century brass sundial on the end of the market hall. Sadly the sun never came out all day and so the equatorial driven reflector that was to have back projected images of the sun (cardboard and tracing paper screen) stood lamely there, unused. However it, and the panels about the sun and this years total eclipse, generated some very interesting questions and comments from the public. We ended the day with Peter Golding in the giant Astrodome. Incidentally Arnold Wolfendale had contributed to the Festival by giving a SETI talk at Shrewsbury School.

Our recent activity seems to have focused on asteroids and comets. We have had presentations from member Stephen Laurie and Jay Tate of the Spaceguard Foundation, whilst Lembít Opik has been busy amusing, and hopefully persuading, other MPs to take seriously the need to think long term about detectable asteroids. On Friday Victor Clube comes to give us more doom and gloom, thoroughly in line with the current spate of disaster programmes seen on television.

The Cornwall Eclipse

No recent Astronomy newsletter of the present time fails to mention the upcoming Total Solar Eclipse so I thought I should too.

Every local society, I'm sure, are making plans to travel to Devon, Cornwall or Northern France or even further! As this is the only total eclipse in the UK during my lifetime and passes only a few miles south of my parents I shall be trooping off down to Devon.

I hope you all are able to experience the eclipse in clear skies and savour the event of a lifetime (for most of us), but remember safety first!! You'll be needing your eyes afterwards to drive home!

Remember, the safest way of viewing the eclipse is indirectly by projection of the image of the Sun and NOT thought an optical instrument.

Useful Eclipse information sites:
http://www.r-clarke.org.uk/eclipse_main.htm
http://www.halien.com/TAS/Eclipse/index.htm
http://www.cornwall-eclipse99.com/

Rob Barter (FAS Editor)