



Federation of Astronomical Societies

EDIT ORIAL

It has been quite a year - astronomically and personally.

We have a new Astronomer Royal very supportive of the amateur.

The ECLIPSE happened and those of you lucky enough both to go and to see it must have been immensely impressed. Those that were unlucky on Hawaii at least had a good holiday I believe.

On the personal side the inevitable happened, I retired and in the few months since that finally happened I don't seem to have had time to think - the F.A.S. is only one of our activities and they are all equally as demanding.

Back to F.A.S. business - we are really confused about what the membership wants, we had criticism after the A.G.M. that we had no top professional astronomer at Coventry and after the Northern Convention at Durham we had criticism that the speakers - all top astronomers - were too high powered for the average arm-chair astronomer. Fortunately we have only had one complaint about Cambridge and that was because we hadn't told people that car parking was available!

The newsletter yield this quarter has been pretty meagre but I have winnowed out material from all the Societies that have sent me reports. Please let me have your news, it is one of the reasons I am here.

Have a good winter - let's hope for clear nights with no pollution!

Ken Sheldon

A WEDDING WAS HELD.

A good friend of the FAS, Dr Allan Chapman (Vice-President of Salford AS) and Miss Rachel Elizabeth Woodrow were married on July 20th at Wadham College Chapel, Oxford. The reception was held in the Senior Common Room in the "Old Library". The honeymoon was spent in Boscombe near Bournemouth.

The FAS wish them all the best for the future.

(Report from Kath Redford Salford AS)

F.A.S. Northern Convention DURHAM

The Northern Convention was both a success and a failure. A success because of the calibre of talks on the day and a failure because of the very poor attendance - only 42 people turned up including a large number from Durham AS. Nice to see the Leicester and Cleethorpes regulars, but what happened to the northern societies?

The speakers were Carlos Frenk - "Dark Matter in the Universe". Interesting to hear him starting at the beginning and not just edited highlights.

Next Richard Ellis on "Formation and Evolution of Galaxies", nice to hear a, to me, new speaker who knew what he was talking about.

John Major talking on "Martini - sharpening of Star Images" this was a new idea to me but seemed a very simple method of reducing atmospheric seeing problems. Maybe amateurs will get to that in a few years.

Richard Stevenson spoke about the "Modern uses of Early Astronomical Records" for checking the time of events such as eclipses. There is comprehensive evidence that the Earth has slowed down a great deal. He was looking for someone who knew the early Middle Eastern languages in order to look at their data. Do you know anyone?

Stephen Rayner in "Very High Energy Gamma Ray Astronomy" told us of the techniques used to track the direction of travel of cosmic rays. This involved some clever 'telescopes' for detecting the Cerenkov radiation and some rather simple logic circuits to analyse the light pulse received.

Finally "Galaxy Counts at the Edge of the Observable Universe" saw Nigel Metcalfe with his story of the detection of faint galaxies (mag 26-28) by CCDs. Cosmic rays were their **problem** as they determined the maximum exposure possible before the stored image was 'spoilt'.

A really exciting day at the forefront of Astronomy and to those of us from the far south complemented by our chance to visit Durham. We must say thanks to Paul Money and his group of most excellent helpers from the Durham AS.

F.A.S. Autumn Convention CAMBRIDGE

This was a another real day out with the reward being the quality of lectures.

Two hundred enthusiastic astronomers

converged to hear David Malin talking about "Things to see and do in the Dark". At the end the rapturous applause indicated that no one had been disappointed. This was the keynote talk and set a fine standard for the day.

Our second speaker was Martin Rees with "Dark Matter, Quasars and Cosmology." He deviated in part from his title to tell us about the work done at the IOA on the discovery of the planet orbiting 1829-10. He did go on to his main title and again the audience were not disappointed. After lunch the numbers listening to the speakers fell somewhat as people vanished to the IOA, the RGO and to the Mullard Radio Astronomy Observatory for guided tours. One of the problems of one day events is that of having visits (a tradition now at F.A.S. Autumn Conventions) and speakers but it is difficult to see how you might do both.

However the feast of astronomy continued with David Dewhurst talking about "700 years of Cambridge Astronomy" followed by David Green from the MRAO with his "The Historical Supernovae and their Remnants", fascinating stuff both these, one pure history, full of the past of the University, the other how modern radio techniques have allowed us to identify first the radio and then the visual remnants of both documented and undocumented supernovae.

Finally we had Andrew Fabian talking on "Galaxy Clusters and Dark Matter". He put forward a convincing case for dark matter and showed us an image of the Galactic Clusters which really did look like an angel in the sky.

Rosemary Naylor closed the day with thanks to all involved.

Trade space was rather limited but if, as we hope, we go back to the Cavendish Laboratory next year we may be allowed to expand and will have more display area available. We will also know that there is parking and that there really is a route to the restaurant. Incidentally the catering was well done by the Cavendish's caterers.

We - that is those of us from Worcester who made the effort to get to Cambridge - felt that it was a really worthwhile day out and hope that most others felt the same.

Incidentally being an F.A.S. officer does have drawbacks - I didn't get to any of the visits. The job has perks too - I did have the advantage of hearing all the speakers!



Dear Ken,

I would like to thank the organizers of the recent FAS meeting in Durham for the excellent programme of speakers that the few that attended had the privilege of hearing.

Durham University has a small but flourishing Astronomy Department doing pioneering research. We were given a whole day of talks on subjects that are genuinely pushing forward the frontiers of technology and yielding remarkable new results, otherwise little publicised. The lecturers, all from Durham, gave clear professional comprehensive presentations without speaking down to the audience. They also managed to convey the excitement and originality of their work.

For those curious to know what they missed, the topics were :- accounting for the apparent missing mass in the Universe, morphology distributions and counts of galaxies in the early universe, a CCD camera capable of imaging to magnitude 26 and beyond, building multi-slit spectrographs, a successful adaptive optics system to overcome resolution limitations from atmospheric turbulence, a telescope for uniquely detecting gamma rays from specific sources, and determining changes in the Earth's rotation rate from ancient eclipse records.

The meeting was warm and friendly in the FAS tradition. It was a good example of the great advantage there is in having meetings at research departments. There are so many meetings of societies over the country these days that attendances for any one are bound to be limited, but lets hope this was not due to apathy. My plea is go for quality not quantity. This meeting was outstanding, a pity so many missed it.

Dr. Chris Baddiley
(Chairman Worcester A.S.)

ATTENTION!!

If you are going to build or have built a Society Observatory, do you or will you be required to pay rates? If you have problems with claiming rate rebates the F.A.S. Secretary Chris Sheldon has some up-to-date guidelines and the telephone number of a very useful contact.

Ed. I am including meeting details where available and hope that you will go along if you are in the area where one is happening.

AS of HARINGEY Meet third Wednesday of the month at Alexandra Palace Palm Court at 8 p.m. Contact Wally Baker on 081 888 6528 for details of programme.

AYLESBURY AS Meet on first Monday of month at the Observatory. Contact Peter Biswell on 0296 85125. Talks last session included Pierre Girard talking on "Aurorae and Noctilucent Clouds". Before the summer skies arrived members observed some of the occultations involving Jupiter's satellites and the Observatory was also visited by scout groups on a couple of occasions - one group was lucky with Jupiter and Venus but the others - sadly - arrived in rain.

BEDFORD AS Meet on the last Tuesday of the month at Bedford School at 7.30 p.m. Contact Dave Eagle on 02302 5256 for more details.

BAS produce a nice newsletter with useful visual representations of objects such as the position of Saturn's major satellites. Quite useful to settle arguments about whether you saw Iapetus or Titan. Kevin Earp and Dave Eagle are working on a program to plot the positions of all six of the large satellites. They need info about observed positions. Can anyone help? The newsletter also carries a large amount of information on Space matters and also frequently has a Peanuts cartoon. The programme has included "Space Dynamics" by Dr Colin Kirk. On a visit to Cambridge the Society won the Admiral Smyth trophy in competition with Ely and Cambridge. Since they had donated it that was a good result.

COTSWOLD AS Meet on the last Saturday of the month at 8pm at Church House Painswick Road Cheltenham. Contact Dick Warden on 0684 72691 for more details. The Society is organising a celebration of its 10th year early next year and have Dr Allan Chapman as their after dinner speaker. Members of the Society set up a weekend camp in the Forest of Dean in early September and were amazed at the improvement in seeing compared with Cheltenham and Cirencester. They intend to go back. Speakers recently have been Tony Ireland on "The 1991 Eclipse" with lots of slides, Chris Sheldon on "History of the RGO" and Alan Wells on "Occultations" The future programme includes "Star Navigation" with Dick Warden,

trevor Talbot and John Fletcher. Other talks about practical observing are planned together with one by Andy Packer on "Cosmology". Andy spent some weeks working at the AAT. **CRAWLEY AS** Meet on first and third Thursdays of the month at Ifield Community Centre at 7.30 p.m. Contact Andrew Dale on 0403 56932. Some of the Society members made the trip to see the eclipse with I believe mixed fortunes.

CAMBRIDGE AA Meet the third Friday of the month at 8 p.m. in The Friend's Meeting House. They also hold regular practical and observing evenings on Mondays and meetings for juniors on Saturday mornings. Contact Rod Greening on 0763 838194 for details of meetings. The Association have been active in their quest for planning permission for the Observatory at Madingley Hill Farm. **They have now got permission and the only problem is the cost of renting the ground! Never-ending isn't it?** As mentioned in the report above Cambridge hosted the Astroquiz for the Admiral Smyth Cup but came second. A video about Cambridge Astronomy is in production. A visit to Jodrell Bank was the summer outing. One of the spin-offs from the practical astronomy meetings at the Vet School has been the 'VetScope' a rather superior Dobsonian and there is talk of the construction of a 7-ft Herschel-(type) reflector. That will be something to see.

CARDIFF AS Meet alternate Thursdays. Contact David Powell on 0222 551704

DUNDEE AS Meet approximately fortnightly on Fridays at 7.30p.m. at the Mills Observatory. Contact the Chairman Colin Steele on St Andrews 77226 for details. The programme for the next year includes a trip to Stirling AS (Nov 22nd), "Interacting Binary Stars" from Dr S A Bell (Dec 6th), A Pickup of the ROE with "Naming what's up there" on January 10th and "Photographic Enhancement of UK Schmidt Telescope Plates" by J.D Waldron of the ROE on Feb 7th. Alternate meetings tend to be observing sessions. Their annual journal contains some interesting snippets about Scottish Astronomers and carries a fascinating letter from their newest Honorary member Neil Bone.

GLASGOW AS Meet monthly on a Thursday at the University of Strathclyde. Contact Malcolm Kennedy on Cumbernauld 725499. The programme for 1991-92 includes a talk by the Astronomer Royal (14th November), Colin

If your Society is intending to hold a Convention or other special event in the future could you please consult with Tony Ireland to see if other nearby groups are also having an event. This year has shown up the problem of multiple meetings on the same day. Neil Bone of 'Astronomy Now' asked Societies to contact the F.A.S. to try and reduce the number of clashes. Tony's address and telephone number are:

8 Merestones Drive, The Park, CHELTENHAM, Glos. GL50 2SS Tel: 0242 245013

members night in January, Dr Colin Steele on "Finding a role for the Amateur Astronomer" (20th February), "From Quarks to Quasars" from Dr James Lynch and the AGM in April with "Another Fine Messier" by Dr Brian Kelly.

LA SOCIÉTÉ GUERNÉSAISE
ASTRONOMY SECTION Meetings are usually held at 7.30 p.m. on the second and fourth Tuesdays of each month at the Observatory, La Pointe. Contact David Le Conte on Guernsey 64847 for info. The observatory was opened in April by Heather Couper and Nigel Henbest. Talks in the past months have included "Revolution in Astronomical Thought" by Dr Neil Turner, "New Images in Astronomy" with Dr David Falla, Geoff Falla on "The Apollo Space Programme", Rev. Peter Lane talking on "Some Early Astronomers" and David Le Conte on "Scaling the Universe". November 12th talk is by Frank Dowding about "The Mystery Planet Venus".

HUDDERSFIELD A & PS Meet weekly on Fridays. Contact Paul Harper on 0484 606832 for details of Society meetings.

KETTERING & District AAS Meet monthly on the first Tuesday. Contact Colin Finch on 0933 224784 for details of where and what. The past few meetings have had "The Astroquizz" organised by Stephen Williams, a talk on "Small Moons and Broom Stars" by Paul Money and a "15 minute rule" with short talks from the membership. A summer outing to Jodrell Bank was a enjoyed by all, once they had caught their coach!

LIVERPOOL AS Meet on the third Friday of the month at 7.00 p.m. in the City Museum. For more details send a SASE (30p stamp please) to Mr Dave Whittle, 17 Sandy Lane, Tuebrook, Liverpool, L13 0BT. LAS are active in bringing astronomy into peoples lives and take every opportunity to stage their excellent displays and publications. Typical of these was the visit to the Summer Fair at Redgate County Primary School where solar projection techniques were demonstrated. Some of the members made the long trip to Mexico for the July eclipse and were I believe successful in 'capturing' the event. The observers operating locally have been to Brenig several times and have been successful in their aims for the night. One of the most frustrating trips out was made by Dave Owen and Jason Glover to observe the grazing occultation of 36 Tau when they only caught two brief glimpses of the Moon but actually saw the emergence.

LUTON AS Contact David White on 0525 60773 for details of meetings. Unfortunately the publication date means that we have missed the opportunity of telling you to attend a meeting organised by the Society on "Sky awareness" and light pollution. However I will print the story of the Dall Telescope Project so far.

On the 21st of August an intrepid team of L.A.S. members began work at Putteridgebury College near Luton. They came armed with spades, wheelbarrows and a large amount of good humour and determination. By the end of the day most of the hole for the foundations had been excavated. The following week all the materials were transported to the site ready for

the Telescope pier. The work proceeded according to plan and Rob Miller of Astro Motivations will start work erecting the all-aluminium observatory which will house the 15" Dall-Kirkham Telescope. The original wooden Observatory which was built by Horace Dall was considered unsuitable for relocation to Putteridgebury and has been sold in order to raise more funds and ensure the completion of the project.

NE LONDON AS Meet on the third Sunday of each month between 3 p.m. and 6 p.m. at Wanstead House, 21 The Green, Wanstead. Ring Bernard Beeston on 081 363 5696 for more details. The programme for the last year has involved 5 outside speakers, 7 talks by members including 3 by the Chairman. "Films and Optics" by Bernard Beeston, "Uranus" by Jeremy Workman and "Exiguity" with John Stevens being covered.

PORT TALBOT AS Formerly the Astronomical Society of Wales. Meet on the first Tuesday of the month in Room 5 of Port Talbot Arts Centre at 7.15 p.m.

Contact John Minopoli on 0792 580395 for more details. The programme for the Autumn includes "Some comparisons in Astronomy" by Ted Featherstone, "Dynamics of Galaxies" by Martin Griffiths and "Helium and the Early Universe" by Dr Mike Edmunds.

SALFORD AS Contact Kath Redford on 061 794 3179 for information about events.

Members observed the "Dance of the Planets", some photographs were taken. A good number of members attended the Manchester AS Convention at Parkers Hotel. It was a good event. Ken Irving of SAS was a speaker.

Ken Irving and friend observed the eclipse from Tuxpan in Mexico. Their trip was a "low budget" adventure and Ken has some stories to tell. Keith Jones went to Hawaii and then on to the West Coast Observatories. Luckily both groups saw the eclipse. The society took part in a Perseid Meteor watch on two nights at the Observatory, which culminated with a bolide. Tony O'Sullivan has had a successful August and September observing with 85 deep sky objects from the Manchester area. Society members travelled to Scarborough for the Star Party (observing Comet Hartley afterwards) and to Birmingham for the N.A.S.S. Both events were rated as worth going to. Observers have seen Venus as a daytime object.

The Society celebrates the 20th anniversary of the official opening of its Observatory on 26th October.

SCARBOROUGH & DISTRICT AS Meet monthly on the evening of the last Saturday at the Scarborough Public Library. Contact John Harper on 0723 352533 for more details. An active group with several working telescopes who have an Observatory planned. They also produce a planisphere and their own tape version of "The Night Sky". In August they ran a very successful Star Party at Basin Howe Farm, Sawdon where they were made welcome by Chris and Sheila Anderson. The 100 people attending with a total of 50 telescopes from societies as far apart as Stevenage and

bright stars by the Moon were observed but the highlight for many observers from less favourable locations was the deep sky observations after midnight. The Society also took advantage of the BNSA loan scheme for moonrocks to hold a Lunar Exhibition at the Library where they had 4000 visitors.

STEVENAGE AND DISTRICT AS Meet on the last Thursday of the month at the Stevenage Leisure Centre starting 8 p.m. Contact Graham Lambert on 0438 742280 for more details. In common with most Societies SADAS are looking for new members. The society are busy with the collection of cash to pay for their new Observatory now under way. The members saw Eclipse slides from Peter Bowers followed by a demo of Peter's SBIG-4 results. Other speakers have been Iain Nicholson (the Society's President) talking on "Introductory Astronomy" The regular star parties have continued and the lucky one's who turned up in September had some of the best seeing that we have had for some time. Like most other groups the Perseids were a dead loss.

WEST YORKSHIRE AS The Society meet at the Rosse Observatory, Carleton Centre, The Grange, Carleton. Contact Ken Willoughby at 0977 795535 for more details. The Society's programme is very comprehensive with a good mix of external and internal speakers. The last few months have seen talks on "Northern Meteors" from the Rev. Cyril Blount, "Lady Astronomers" by Dr Anne Smith (now Anne Burnell) and Dr John Dyson. Society talks have covered topics from "Sundials" to "Big Bangs" to "Globulars Old & New". One of the members, Rob White, has produced a comprehensive computer program called 'CONSTELLATION CAROUSEL' which sells for £2.50 plus 50p p&p. The harder members 12 in all, including nephews and nieces,

DATES FOR YOUR DIARY

1992

May 2nd 1992

FAS AGM at the Herbert Lecture Theatre Coventry.

AGM a.m. Lectures p.m.

July 4th 1992

FAS Summer Convention at Leicester

Organised by Leicester AS

September 26th 1992

FAS Autumn Convention at Cambridge. This date is provisional.

the Nidderdale Way. All who took part enjoyed it! The WYAS Astromind Quiz was won by Mike Hodgson who represents the WYAS in the Yorkshire final at Blackburn Welfare AS (near Brough) Best of luck to all contestants, The Society newsletter PHOBOS is a work of art with masses of really good reading.

WOLVERHAMPTON AS Meetings are held at 7.30 p.m. on alternate Mondays at the Beckminster Methodist Church Hall, Birches Barn Rd, Wolverhampton. Contact Malcolm Astley on 0902 782212 for more details.

This is an active society but I have no real information on their programme. The Society Magazine LYRA is another excellent publication with lots of Observing material and Space News.

WORCESTER AS Meet Second Thursday of the month at Worcester City College of H.E. Contact Ian Gray for details Tel: 0386 47352. The Society have been active travellers around the country this summer. Several members travelled to Durham and Cambridge. They also had a Society stand at the NASS in Birmingham which generated some interest. The highlight of their public involvement was the interaction with Birmingham AS and West Midlands AA at a Public Viewing session at the Lickey Hills Leisure Complex. A good evening was had by many visitors with excellent views of Saturn. The past programme has included talks by Dr Eric Dunford of Rutherford Appleton Labs on "IRAS & ISO" and Dr Cedric Martys on "Deep Sky Schmidt Photography". The Autumn session commenced with an Open Meeting with Bob & David Lloyd on a visit to the COAA and Steve Webb and Ken Sheldon on "Computer programs for the Amateur Astronomer". A Public Meeting was held with a talk by Dr Bill Thornton, veteran of two Shuttle missions. A visit to the Rutherford Appleton Labs is planned for October.

It is hoped that later on in the session their President the Astronomer Royal will visit the Society.

WORTHING AS Meetings are held on the first Wednesday of the month. Contact Paul Carter on 0903 213001. The society have a busy timetable with observing sessions on Ferring Beach. From that site they actually observed the Perseids! Another session there was a beginners evening on "Using Binoculars." A Geminid Observing party has been planned on the beach on December 14th. Another outdoor venue was Worthing Sea Front with public viewing of Moon and Saturn. Speakers have included Paul Money. The eclipse had Richard Godley there representing WAS and again he saw it and enjoyed it. Some of the members braved the traffic to go to the NASS at Birmingham (nice to have met you Pam). Again the Worthing News WASNEWS is an excellent production.

Ed: I find that the quality of newsletters has improved immensely in the last year or so - presumably due to the improved technology and expertise applied to their production.

It is probably invidious to compare Newsletters but some do catch your eye!

F.A.S. HANDBOOK 1992

The Handbook should be with Societies early in the New Year.

Contents will include articles on: something to do on poor nights i.e. Computing for Amateur Astronomers, something to do with the family at weekends, "Exploring Megalithic Alignments" and something for those fantastic nights when we can see the stars! namely "CCD Astronomy"

All the other material - places to visit, Astro retailers, Astronomical organisations are all there. Ask your Secretary for the loan of the book (the Society gets one free) or consider lashing out.

***** SECRETARIES

Please send your Society news, Newsletters and Society details to:

Ken Sheldon, Whitehaven,
Maytree Road, Lower Moor,
PERSHORE, Worcs.

WR10 2NY

Thank you.

If you NEED Astrophotography chemicals or film talk to Mike Maunder (SPEEDIBREWS) on 0932 346942.

New kits on their way!

Don't forget that the F.A.S. has two other publications both at the printers now. They are the **ASTROCALENDAR** (fantastic value for money!) and **OBSERVATIONAL ASTRONOMY** by Steve Lubbock.

Contact Alan Drummond for prices.

ONE REASON FOR NEEDING A COORDINATOR.

If you look at the events calendar for Saturday **November 16th** (lets face it a most unlikely date for anything) you observe that we have the following events.

SAGAS 18th Birthday Convention at Assembly Rooms, North street, Chichester. 10 a.m. to 5.30 p.m.

JAS Planetarium Meeting at the London Planetarium 11 p.m. Guest Speaker Helen Sharman - MIR cosmonaut.

Oxford University AS Annual Symposium at the Nuclear & Astrophysics Laboratory. Trade stands.

UKSEDS Space weekend at Leicester University.

You have to make your choice but it is difficult. Wouldn't it be better if they had been spread out? Consult Tony Ireland!

Salford's Fabulous Day Out.

In my efforts to slim down the report in the last issue of the Newsletter I managed to produce some inaccuracies. The worst of these was the description of Dr Willstrop's new design of wide field of view telescope. This is used by the IOA i.e. it is current not was as I stated. The primary mirror is also something out of the ordinary - described by Dr. Willstrop as "nearly parabolic". The telescope also has 10.75" secondary and 16" tertiary mirrors. Field of view 5° and guide scope is an 8" Celestron. This is the second prototype and a much larger one is planned.

I hope that this has put the record straight.
Ken

*Published for the FAS by Ken Sheldon.
Printed by John Knight & Sons Printers, 53 Littleworth St., Evesham
The opinions expressed in this publication are not necessarily those of the Council of the F.A.S.*

BEWARE!

When showing people the Sun, by projection, make sure that there is no way that they can look through the finder of the telescope. It **MUST** be capped with opaque material which cannot be accidentally knocked off.