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Issue 31

Federation of Astronomical Societies

THE FAS CAMBRIDGE CONVENTION 1992 September 26 One of the most disappointing astronomical

The day began with a welcome to all by the FAS President Tony Balfour who acted as Chairman for the day. After the welcome Tony introduced Dr Paul Murdin, acting Director of the ROE, who gave a talk on 'The Astronomy of the Invisible' which started with a picture of a Henry Moore to put the point that 'what you see is not necessarily what you have'. From there he explained the observation of dust and gas in our and neighbouring galaxies - particular emphasis was given to the JCM submillimetre wave Telescope and to UKIRT which are the ROE's special responsibility. Fascinating pictures and lots of solid modern astronomy. After a short coffee break we were treated to a talk on 'Why is the Sky Dark?' by one of the great names of British science, Professor Sir Herman Bondi, Sir Herman explained without using any serious maths the effect of 'red shift' which is now the accepted reason for seeing a dark sky. It still is dark in places - they tell us. Lunch followed and then another session full of treats began with Professor Jocelyn Bell-Burnell of The Open University playing a tape recording of a pulsar and then telling us about the development of pulsar research from the days in 1967 when she first recognized CP1919 as a 'pulsar' until the present day when there are over 300 known pulsars. She also introduced the idea of variable and very short period pulsars. This really was an introduction to a special area of modern astronomy from 'one who knows'. Professor Bell-Burnell also got in a plug for the new O.U. course on 'Astronomy'.

objects, i.e the Hubble Space Telescope, was the subject of a talk called 'Results from the HST' by Dr Robin Catchpole of RGO. Dr Catchpole explained why the mirror - the most expensive and accurately ground mirror ever - was faulty, due to an error in the gauging equipment. He also showed us some of the outstanding images that have been produced by the faulty instrument after some of the best image-processing ever. In fact the advances in image processing and de-convolution have been speeded by the HST errors, ironic really. He said and I don't think that we can doubt him that the HST is arguably the best telescope in operation at the moment. The final talk after tea was given by

Professor Malcolm Longair now resident at the Cavendish. He talked on 'Submillimetre wave Astronomy' and expanded on some of Dr Murdin's data. He travelled out and talked of Active Galactic Nuclei, the COBE results - with some emphasis on the mistakes made by the media in grabbing for the sensational aspects of the results. He also mentioned SCUBA which is a Submillimetre Common Use Bolometer Array (hence the acronym) which will hopefully be going into orbit soon.

During the afternoon visits were arranged to the RGO and Institute of Astronomy and also to the Mullard Radio-Astronomy Observatory. It is difficult decision, do you give up a talk to look at these fascinating places!

Also on show all day was the Cambridge AA show of Moon Rocks courtesy of BNSC.

Other trade stands Rather fascinating. included AWR Electronics, Earth and Sky and PC Connections.

At the end of the afternoon Tony thanked everyone involved in the organisation of a super day with special thanks to Dr Philip Taylor of the RGO whose efforts in rounding up speakers is much to be admired. A good day was enjoyed by all present.

EDITORIAL

Welcome to the winter edition of the Newsletter. I find it very strange that in a couple of weeks the nights will be getting shorter since the autumn seems to have vanished in a welter of activity, with little having been achieved. One thing that has happened is the production of the Handbook which should be being printed as you read this and hopefully will be in the hands of Societies by mid January.

There has been another interesting event - at the end of the summer while I was trying to encourage people to write to the DOE I had a letter from Cliff Meredith of Salford AS about light pollution asking me to write to the Local Government News in support of Cliff's fight against what appeared to have been a very cavalier treatment by his local lighting department. I did. Since then Cliff has written again to say 'thank you' but also to ask me to beware of getting into a confrontational situation. He has been accused of being too confrontational and didn't want me to be 'tarred by the same brush'.

Just a little story from two young astronomers.....fun isn't it? A STAR PARTY

92/10/27

Tonight was a very good night for a star party, the sky was transparent. We saw a lot of meteors and at one point we saw a very beautiful sight. it was a large fireball, it lasted about five seconds and then broke up and disappeared. It was a yellow/green colour. We saw quite a lot of sparks come out of it.

Nigel got a telephone call confirming that the star party was on...

Lee & Mark Wilson (Aged 14 & 15)

We travelled to Elton Moor where the sky was spectacular (can't say much about the temperature). Nigel set up the binoculars on a tripod, so that we could look at Comet Swift-Tuttle. (a very famous scientist said that next time Swift-Tuttle comes around it will hit the Earth). Since I lasted looked at the Comet 2 hours ago it has moved a considerable amount. It was last seen in 1862 and was discovered in 1737. The

Comet looks like the M13.

About 2030 it clouded over.....but as soon as we had packed up and was on our way home it cleared up as it normally does.......

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I must say "Thanks Cliff", I will take care". It is a pity that gentle words are often not the way to deal with Local Authorities. On the other hand some Local Authorities are helpful, Portmouth, Southampton and Worthing can be taken as examples. Enough of such controversial

confrontational thoughts, I should be thinking of Christmas, Peace on Earth and Goodwill to all Men. May I wish you all a "Merry Christmas and a Happy and Light Free New Year". Clear Skies.

Ken Sheldon

LETTER TO THE EDITOR

A rap on the knuckles for the Editor I'm afraid!

Dear Ken.

I feel that I must reply to the Society News round up of our Society you published in September's Newsletter. Whilst you have gained some impressions of the Society correctly, on others you have not

We currently have a membership of 34, of which 15 are what I would call the "hardcore" of our Society, who attend events We have monthly come what may. meetings, which we try to alternate between those with speakers, and internal society events (yes, we have had some attendance problems with these meetings, but those who know me know that in the newsletter I have tried to coerce, shame, get. any way those other members to attend). I'm pleased to report that at the last two meetings we have had vastly increased attendance 26 people out of 34 isn't bad! Additionally we have monthly star parties, timed to be a Friday/Saturday evening near new/1st quarter Moon. Unfortunately this year we have had 4 out of 10 success with these due entirely due to the weather. (Not light pollution! Your light pollution comment could cost me members! We get members from London come to us to escape the lights there). Additionally we are actively involved in the local schools and clubs (eg Womens Guild) giving talks and running competitions. Furthermore we are now (now, this

weekend) starting to build our observatory at our usual star party venue. (We got the foundations completely dug, by hand, this weekend). So in summary, what I would call a lively,

vibrant society is in as good, or better shape as any other! Yours faithfully, for and on behalf of the

Keyan Pve. Chairman.

Letchworth & District Astronomical Society.

Editor's reply: Thanks Kevan, I presented the information as I read it. I am certainly very sorry if my comments have stopped someone joining your Society. I have always thought that LAS was and is a go-ahead Society. It is quite difficult to interpret

Society politics behind material printed in a Society newsletter, I know, since I have published such material in our local society News in the past.! Ken

If you wish to comment on reports about your Society or if you would like to make a Society report please do so. The only thing to remember is that there is only limited space in the Newsletter so don't make it several sides of A4 - please!!! (an ASCII file on a disk would be kind too! Disks would be returned).

A CONTRAST!

I hope that you read Allan Chapman's letter in the last FAS Newsletter and saw his article in the Independent in October but I want to make the contrast between the Science Museum's attitude and that in Germany more obvious. Read Andy Salmon's report below and think about organising a visit to the S.M. Astronomy collection.

The Deutsches Museum

If you are ever in Bavaria (or Bayern, as it's known locally) pay a visit to the city of Munich (known as Muenchen locally !). The main attraction for anyone interested in science and technology is the Deutsches Museum - the German equivalent of the London Science Museum. This huge building is amongst the finest science and technology museums in the world. It sits on an island in the River Isar, just south of the city centre. It can be reached by foot or by the extensive public transport system in Munich: the U-Bahn (Underground) station of Fraunhofer Strasse, very appropriate for visiting astronomers by the way, or S-Bahn (above ground town railway) station of Isatorplatz. I only spent a hurried two hours at

the Museum because we had just driven for 6 hours from the European Space Operations Centre at Darmstadt! Even so, I can thoroughly recommend the two galleries that I visited: Astronautics and Astronomy. There is a superb collection of rockets, satellites and telescopes - in addition to the Museum's planetarium.

The Astronomy gallery was only opened in 1992 so it is very up-to-date. It is full of interactive exhibits, exquisite models (of places like Brahe's Uraniborg) beautiful telescopes and satellite UV, X-ra and gamma ray instruments. Dominating th gallery is a huge polished metal segmen from a French sub-mm wave telescope. A you would expect the displays explain astronomy at various wavelengths; th contents of the Solar System, the Galaxy ar the Universe.

the planetarium it is said to be worth a vis

Purchase a ticket at the information booth

Though I didn't have time to vis

the entrance hall on your way in. There a some presentations in English if yo German is not up to scratch. Exhibits a labelled in German but the meaning normally self evident. A guide-book English is available in the entrance hall I does not give detailed listing of ALL exhibits and doesn't include the n Astronomy gallery. There are several observatories

the roof of the museum and at least one viewable by prior arrangement: a 30cm Ze refractor The Astronautics gall

(combined with the Aeronautics gall exhibits nearby) has an excellent collecof WW2 rockets - such as the V2. There also many German space exhibits (as yo expect!): the Azur and Aeros satell Symphonie communications satellite. He sun-probe, a "walk-through" Space module and pallet, the Soyuz capsule German cosmonauts Sigmund Jahn Klaus-Dietrich Flade, the German stag Ariane's precursor: Europa, Saenger Bumerang spaceplane models and r Side exhibits include US sp

suits, scientific apparatus that has flow space and a German post-flight Spacelab video programme. It makes you realise active Germany has been (and still is) i field of spaceflight. The Deutsches Museum is

south of the City centre. Admission cha 8 DM (about £3) for adults and there small charge for the planetarium sho recommend trying public transport t there after the problems we found try find somewhere to park.

Andy Salmon Birmingham AS

INTERNATIONAL UNION of AMATEUR ASTRONOMERS The 8th General Assembly of the IUAA and the 1st General Assemb of the European Section of the IUAA is to be held at Wolverhampton University and hosted by The Wolverhampton Astronomical Society.

The event will take place from August 30th to September 3r Accommodation and Full Board will be available on the campus.

This is the first time a General Meeting of the IUAA has been held

England.

If you wish to know more contact Malcolm Astley, 'Garwick', 8 Holr Mill, Fordhouses, Wolverhampton, West Midlands, WV10 6LZ. before December 31st 1992.

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SOCIETY NEWS ROUND-UP

(0752) 706008

One thing I noticed in doing these notes was the fact that there are three events on the weekend of March 26/28 - I presume due to the proximity of Faster but it is a shame.

AYLESBURY AS Meet at the Society Observatory on the 1st Monday of the month. Contact Ian Welland on 0.0944 143090 for more details. In the Autumn session the society have had talks from John Smith on his visit to La Planar. Tony Fanning of the Herschel AS on John Herschel and John Gleikes on Polaris. The Christmas session. Observing takes place when the vender is unlable at the Observatory not Tridon's inflation. The Christmas session or Tridon's inflation and the Christmas a

Solal Plottlenice "Para to Solal work of Sol

'insider' news from NASA and Starlink.

CAMBRIDGE Astronomical Association
A very active group with lots of enthusiastic
'volunteers' who are at the moment engaged
in setting up the new society observatory.

Speakers at the regular monthly formal
meetings have included Richard McKim and
Bob Argyle. Bob allaled on Observing
Double Stars. The Bob allaled on Observing
Double Stars. The London Planetarium
with Patrick Moore talking on the Inner
Solar System. The Vetscopes group
continues its work. The Association meets
regularly for observing. Contact Dr Frank
Murphy on 0223 262421 for details.

CAMBRIDGE Young Astronomers an offshoot of Cambridge AA who are very active. They meet monthly at the Friends Meeting House, Jesus Lane, Cambridge between 10 a.m. and noon. They have a newsheet with practical observing information and some theory.

COTSWOLD AS Meet last Saturday in the month 8 pm. until 11 pm. at Church 12 pairs with Road, Cheltenham. Contactis The Society has had talk to Peter Cadopolon on Formation of the Elements and John Fletcher on Film Processing with a practical demonstration. A Balloon debatie to Chemonstration. A Balloon debatie to Chemonstration A Balloon debatie to Chemonstration A Balloon debatie to Tutte 12 parts at the Parts at

DEVON Astronomical Association. Out on the limb of Britain as they are, the West Country Astronomers have formed a loose association of about 9 or 10 societies to help maintain contacts. They meet twice a year usually a Spring meeting usually in April/May and an AGM in October. At this years AGM Dr Allan Chapman spoke on "The Victorian Amateurs" and as usual was well received. The new Secretary is Sheila V

La Societe GUERNESIAISE Astronomy Section A thriving and active group who would I am sure welcome visitors from the Mainland. The contact is David Le Conte on 64847. The programme has included talks and a NASA video presentation. David attended the FAS Cambridge Convention and visited three Scottish Observatories.

HAMPSHIRE Astronomy Group Meet regularly at the Chanfeld Observatory engularly at the Chanfeld Observatory month. Contact Rod Dods on Wastronia Control Contro

HEART OF ENGLAND AS Contact Jean Poyner at 67 Ellerton Road, Kingstanding, Birmingham B44 OQE. HOEAS are an active group who working under Midland skies produce good results and an entertaining neweletter.

newstetter. When the society meets weekly on Friday night and has an busy programmes to the best way to find out what is on next is to contact Robert Williams, to other the society of th

RISH AS It is a pleasure to verlcome a new FAS member Society. The Irish AS is an energetic group whose members are involved in all facets of observing. They are also organising an ASTROFEST '93 to take place on 26.28 March. The excellent Orbit is published bi-monthly and contains good articles and observing notes. If you are in Dublin or Hire your contact is James Lynch on 820 2135 or 842 2160.

on 8,00/135 or 842 3100.

LETCHWORTH & DISTRICT AS The society is busy with the contraction of a the new Society Observatory. They have regular meetings at Plinston Hall with guest speakers who have included Iain Nicholson that you have included Iain Nicholson that part parties at Standalone Farm Centre. Good newsletter with up to date NASA and SurBasc One news. For more details of the Society programme contact Eric Hutton on 0402 431988.

LIVERPOOL AS Meet monthly at the City Museum on the 3rd Friday. Observatory meetings at the City Museum every Wednesday between 7 & 9 p.m. Contact Ken Clark, 31 Sandymount Drive, Wallasey, L44 Ol.J. Speakers have included Paul Doherty on 'Astronomical Art' and Paul Money. The newsletter carries observing information and results plus reports of visits and many other

informative articles.

NORTHEAST LONDON AS The society meet normally on the third Sunday of the month. Contact Bernard Beeston on 081 363 5696 for details of programme and venue. Speakers have included Peter Simmons on Croydon & La Palma and an internal meeting with Andrew Lawrence and Bernard Beeston contributing. Interesting suincets in the newsysteet

NORWICH AS Meet two three times month but contact secretary Malcolm Iones on 0508 78392 for details of where and when Speakers have included Peter Rea on 'Farly exploration of the Moon' and will include Paul Money in January and Merlin Ellis in February. The move from Colney Lane to Seething appears to have run into a snag - NHS plans may have changed. The new Radio-Astronomy Group seems now to be under way, details from Malcolm Jones, A cutting from the local evening paper showed a letter from Emma Drake one of the NAS youngsters, about light pollution, illustrated by paper with the Voyager picture montage of the planets! (Not Emma's idea!). PLYMOUTH AS Contact Sheila Evans on 0752 706908 for more details of programme. Founded in 1965 and still going strong PAS meet on the second Friday of the month at the GK Community Centre in Alfred Street, not far from the YMCA in Lockver Street. Meetings include something on the current night sky. Observing evenings are planned when conditions allow and the Society has a library. In a recent quiz PAS beat Tavistock AS (narrowly) but everyone enjoyed it. The coming season should see a visit from Patrick Moore who is the Society's Patron. A couple of visits are planned to the University of Plymouth planetarium. The Chairman Alan Penman is very active in the fight against light pollution and is in contact with local councillors and MPs.

P.O.N.L.A.F. Meet monthly at the University of N London in term time on the last Friday at 6.30 p.m. Contact Tony Corbett on 071 607 2789 Ext 2103/2100. Speakers this term have included Maurice Gavin on "CCDs in Amsteur Astronomy." I find the newssheet informative about London

meetings. SALFORD AS A long letter from Kath Redford gave the news of Salford's activities this summer and autumn. Kath, who has been ill, asked me to reduce it to a useable length so here goes. The major event was a trip to Scotland when the SAS group were joined by 3 Liverpool AS members. An almost uneventful journey started at 0745 and was broken by a misguided trip into Gretna Green and an unscheduled stop in Hawick when Salford fireman Chris Lawson stopped the coach to give first aid to an unconscious pedestrian. Nice touch that, Chris. At the R.O.E. the group were made welcome and had an opportunity to look at the Lecture Room, where they were briefed on the R.O.E. by Caroline Davis and her astronomer husband Chris. Visits to the Plate Measuring Library, Starlink, Main Library, Visitor Centre and Shop. A visit was then paid to the Jewel & Esk Valley Planetarium where they were entertained by David Gavine (aurora watchers note). Next Calton Hill Observatory and the City Dome with a film show. Home again arriving at 23.30 after a very full and exciting day. Contact Kath Redford on 061 794 3179 for more details about the future programme.

SOLENT Amateur Astronomers Contact is Ken Medway on 0703 582204, SAA have two working observatories, Toothill and Itchen which are open for observing on a regular basis on the 1st and 2nd Tuesday of each month and obviously at other times by arrangement. They celebrate their 21st anniversary in September next year. Speakers have included Storm Dunlop talking on 'Variable Stars' and Victor Clube on 'Galactic Evolution'. SOUTH AS Contact secretary John Smith

on 0494 442425 for details of the programme and meetings. The Society's Monthly Notes contains a wealth of observational detail and the November edition has an excellent and practical article on observing Mars.

SOUTH WEST HERTS AS With an Observatory (High Top) manned on a regular basis and planetarium facilities SWHAS can be considered to be an active society. There has been a certain amount of labouring by the members to bring the Cooke refractor back into operation. Speakers have included Jeremy Workman talking about Mars and its exploration.

WEST OF LONDON AS Meet at The Nave in Uxbridge on 2nd Monday of the month. For details of programme, contact Arthur Davis on 081 866 3858. WOLAS have a very full programme of formal and observing sessions. The recent speakers have been Neil Bone on 'Meteors' and Richard Hook of ESO talking as an insider on the HST. 17 society members have visited La Palma this autumn WEST YORKSHIRE AS By now I will

have missed the WYAS Christmas Dinner -I tried to move my local dinner by publishing the wrong date in our club newsletter but it didn't work! As you know from my previous comments WYAS are always doing something but I haven't found out yet who won the Balloon Race. Phobos is still a top society Magazine, keep up the good work.

from the box on page 2 WAS have been and will be busy. They are also involved in the Preston weekend on March 26-28. LYRA. the WAS magazine, has been running an interesting series on CCD imaging by Steve Clifton. Details of the varied programme from Malcolm Astley on 0902 783212. WORCESTER AS Meet at 8.00 p.m. in the Worcester College of Higher Education on the second Thursday of the month and afterwards at the local.

There has been a varied programme of events this Autumn including involvement with a public meeting in the Lickey Hills Country Park and culminating in November with the AGM (no changes) and quiz, won this year by Gary Leedham. Pride of place for the winter falls to January and February when the Society hosts Professor Bondi and Professor Peter Wilmore. WAS hope to hold a Convention in mid May next year. There is an active nucleus of observers and we hear that there is a high quality CCD imager in the Society. Maybe there will be some good results. Ring Ian Gray on 0386 for more details of programme.

WORTHING AS The Society is now involved in refurbishing the Observatory and all with the aid of a grant from Worthing Council. The usual feast of meetings for the local enthusiasts has included several astrophotography sessions run by Dave Storey. Skittles and a new set of evening classes. At the AGM there was a major reshuffle due to departures from the district and the new Secretary is Nick Quinn. The newsletter is still a good read and I always learn something from it! Ring Nick Ouinn on 0903 213001 for programme details...

THERE IS ANOTHER WAY OF GETTING SPACE INFORMATION.

I hope that you read the very interesting and informative article on Information Systems in August's Astronomy Now by Ian Ridpath. I was fascinated by it but there was one omission in the list of sources. At no extra cost - it had an initial one - I can walk into my "shack" and switch on my Amateur Radio Packet system. From that I can get all the NASA information on Shuttle flights pre, during and post mission. I can also get up to date information on probes such as

Galileo, Magellan and Ulysses. Russian information is much scarcer than it used to be! Many Societies have a Radio Amateur on their strength, I know of ten that do but from the newsletters there are many more. WOLVERHAMPTON AS As you will see If you are interested in Writing for Publishing or CCD Imaging or Weather Satellites or Penumbral Lunar Eclipses or just in making sure that your Society is not being overcharged rates on Observatory or Meeting Room have a look at the FAS Handbook due out in January (price £3.50) - your Society Secretary gets a copy free but you can buy one if you wish. Writers are lan Welland on an update on Rate Relief, Terry Platt on CCD Imaging, Nick Quinn on Weather Satellite Reception, Alexander Vincent on Penumbral Eclipses and last but certainly not least, Writing for Publication by the Editor-elect of Sky & Telescope, Timothy Lyster.

'These are all 'straight from the horses mouth'.

If you don't know whether your Society has a radio amateur, ask, because some of them can't forgive Tony Hancock for his send up of the 'Ham' and do not advertise their other hobby plus the Press use of Ham or Radio Amateur to describe the illegal users of scanners. If your Society hasn't got an amateur then approach the local Amateur Radio Society, not CB club, and ask if anyone uses Packet Radio. I would expect a yes, since about a third of hams do use it. If you approach one of the packeteers he will almost certainly log onto the local BBS and give you a listing of files with Space, NASA. Solar. Sundat or Amsat in the 'for' column. A disk formatted in his system mode and a complete set of data should be yours just for the asking. But beware! I find that in a month I can accumulate about 200 pages of information on Space data and Solar data. Chris finds the Solar data extremely interesting and comprehensive since it contains data on flares of all types, locations of sunspots and outbreaks together with a forecast of effects on Earth. If you can find an amateur with satellite packet who can receive the orbiting BRSs

then the data will be at most one day old, if you need to use the local BBS then it may be three days or so old. Certainly another fascinating piece of technology astronomers and space enthusiasts can use. Remember though that

you do need an Amateur Radio licence to operate Amateur Radio equipment. There is an examination but it is not too difficult and all those rotten non-observing nights spent in the pub could be better used in studying for the exam! A winters drinking money saved would just about pay for the equipment.

ASTROFEST 1993 5-6 FEBRUARY

KENSINGTON TOWN HALL See ASTRONOMY NOW for details

FAS Meetings for 1993 1st May AGM and Convention at the Herbert Lecture Theatre Coventry. July 10th Summer Convention Hosted by the Chiltern and Thames Valley Group September 25th Autumn Convention at The Cavendish Laboratory Cambridge

Publication dates for Newsletter deadline February 23rd March 14th deadline May 25th June 14th September 14th deadline August 25th December 10th Deadline November 21st

Evesham

1994 June/July Summer Convention & WYAS anniversary - Pontefract Views expressed are not necessarily those of

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