

Chairwoman's report 2005

Another busy year has passed us by very quickly. This year we have seen our membership reach 90, the attendance at the meetings has increased and we have also seen a rise in the number of youngsters coming to the evenings.

This year we have implemented a newsletter to inform members, unable to attend meetings, of what they have missed. Its detailed and humorous content is written by Antony McEwan and I would like to thank him for taking the time to summarise the evening's activities. I must also thank Trina for stepping into Antony's shoes on the one occasion he was away (we do allow our hard working members time off).

We also have a new website, designed for us by Plexus Media, and thanks to Maarten's negotiations with them, it hasn't cost us anything.

The website was initially set up by Stewart Samson. It was then taken to new heights by Maarten, and given the Spacegazer address. The website was excellent but maintaining it was becoming very time consuming and eventually Maarten decided to find a way to allow other people to upload, or change content. A completely new website programme was required. Plexus Media were able to offer this to us and we now have a number of website editors able to maintain it. Thanks go to Maarten for writing the previous website and finding Plexus Media. Thanks to Andy for spending a long time editing and transferring most of the content from the old to the new site, also to Maarten for his continuing technical expertise and also to Antony as an active contributor. Pat and I are allowed access but there isn't a lot we can do and Andy positively refuses to have pink pages or a ladies section.

Emerging slowly from the mists of ideas is the new observatory. We learnt in the summer of last year that due to the design of the new Visitor Centre at Culloden Battlefield, it would not be possible for our observatory to be part of it. Andy, Rob and I explored the two sites we were offered and chose the old stables.

Rob sketched out a few designs and these were then run past Mr. Bennett, the head of the National Trust for Scotland in this area, and the planning officer, and both were happy with our preferred design.

Mr Bennett, on behalf of the National Trust for Scotland, has agreed to us siting the new observatory at the stables – which will be knocked down – and a 25-year lease will be drawn up.

Funding to the tune of £100,000 will be required to give us a permanent, fully equipped, professional level observatory. We will be expected to find about £5000 to £10,000 and the rest we hope to obtain through various funding sources.

This is exciting news, and with your help and support, it is achievable.

Meanwhile, our present observatory is functioning well, although the telescope has misbehaved. Two solar panels have been added to the walls to provide power for the telescope and the internal lighting. Many thanks to Arthur and Bill for taking such good care of the observatory and David Hughes who helps out when he can.

Observing sessions have once again taken place but this year the weather has been unusually cloudy but the observing sessions we did manage to have have been very good. Thanks again to our observing team of Maarten, Trina, Rob, Bill, Antony, David, Alan Mumford and Tom Hunt, and thanks also to those of you who have managed to

go up to the observatory. We have been pleased to see friends and family of members appear, including Mr. Bennett from the NTS.

We are very proud of one of our junior members, Colin Donaldson, who was accepted for Space School after achieving high marks for completing astronomically related essays and questions, making him eligible to attend Space School in Texas.

We now have our tea, coffee and biscuits organised for us by Pat Williams and her team of willing helpers, Pat Escott, Linda Moncur and Rita Cameron. Thank you ladies very much. This also allows Maarten to spend more time advising you on telescopes and various other matters.

Clothing and mugs can now be embroidered with our logo. After a lot of research by Bill, it was decided that Dallas Embroidery was the best company to do this. Thank you Bill for your hard work.

Thanks too to Alan Mumford who found us the red light pens and ordered them with Highlands Astronomical Society written along the side. Unfortunately, it seems that we were given a bad batch, but Alan kindly sorted it out and all the pens now work. (Perhaps they were infra-red?)

Thanks to Maarten and Andy who still write the interesting and informative Courier articles, Seeing Stars, every month.

It has been a privilege to be asked by a number of organisations to give them talks. These include the Field Club and St Stephens 'Monday Club'. I have also spoken to Primary schools, a Brownie Pack and the Girl's Brigade. Rob, Maarten and I have given talks to SIGMA.

This year we decided to reach a bit further into the astronomical community and ask more outside speakers to the Club. However, we were fortunate in also having a number of members willing to take centre stage. In addition a number of events have taken place throughout the year.

The Highlands Astronomical Society celebrated its tenth birthday in **April** with Donald Iliffe, one of the very first members, recounting the tale of how the Club was formed and the name chosen. He then cut the cake, which had been made especially for the occasion by Ashers Bakery.

In **May**, Maarten gave us an account of how the 200" Hale Reflector telescope at the Palomar Observatory was planned and built.

I spoke about the Venus Transit in **June** and how the astronomers in the eighteenth and nineteenth centuries encountered enormous difficulties in trying to view the event. However, their determination enabled them to provide vital information so that the Earth-Sun distance could be determined. The talk was an introduction to the Venus Transit which took place on the 8th June. A number of hardy observers went up to Culloden Battlefield before 6am, equipped with telescopes suitably covered with solar filters, to observe this very rare event – in fact it won't be visible again from Scotland for another 242 years.

Unfortunately the skies were overcast with just the occasional tantalising glimpse of the Sun. Eventually, with the drizzle getting heavier, we all packed up and retired to the Visitor Centre, and consoled ourselves with tea and cake when, about 11.30am, the Sun appeared. It was a mad rush to set up again, but we were treated to nearly an hour of sunshine and the last two contacts.

To celebrate our tenth birthday, almost half of the Club went on an outing to the Glasgow Science Centre and Planetarium. Steve Owens (Ray Owens' son) was very helpful when it came to making the arrangements and we were delighted to have John Brown, the Astronomer Royal for Scotland, give us a short talk in the Planetarium before the show began. We spent the rest of the day exploring the exhibits and hopefully learning something as well as having fun.

Once again the equipment night in **July** was well attended with people and telescopes. Out of the wide variety of telescopes on view, Andy's impressive 11" Celestron had to be the clear favourite, although unfortunately that was the last occasion to date he's managed to lift it, due to a slipped disc.

In **August** we had an open night. First, an astrophotography panel made up of Maarten, Bill, Eric and Andy who gave advice and answered numerous questions on how to take photos using an SLR and digital camera with and without a telescope. There was also information on webcams and CCD imaging. Later, Antony told us the story of the 1987 supernova in the Large Magellanic Cloud, together with a selection of pictures.

We should have seen a good showing of the Perseids this month but disappointingly they were clouded out.

The Scottish Astronomers Group Weekend took place at the end of August in Dundee and was attended by me. It was an interesting and enjoyable weekend with a variety of talks on deep sky objects; what they are and how to observe by drawing or photographing them, using an SLR, digital camera, or webcam. A clear night enabled us to use the Mills Observatory although viewing was spoilt somewhat by the full Moon. We even had our share of drama with the fire alarm going off in the early hours of the morning. We trooped outside in dressing gowns and waited for the fire engines to arrive and check all was well before we could return to bed.

September saw our first outside speaker of the year. This was Dr. Ken Taylor, who used some very beautiful photographs to tell us about his amazing experiences of the aurora, particularly from a town called Yellowknife in the North West Territory in Canada.

The Open Day took place in the Eastgate Centre this year with information about the Society on large boards; various posters showing astronomical images were displayed around the area, a television showed a DVD continuously, a variety of telescopes were set up, there were a number of competitions and games for the children, a petition about light pollution to sign, and a prize draw and quiz for adults to raise some money. Many thanks to Rob for providing the Society information, Inverness Royal Academy for the display boards, Northern TV for the television and DVD player, Arthur for organising the TV and helping on the day, to Maarten, Trina, Antony and Eric for providing the telescopes, Pat W., Pat E. for looking after the competitions, handing out programmes etc., Andy for writing the information about security lights, and Bill, Colin Donaldson, Steven Ross, David Hughes and Lewis, David Martin, Linda Moncur and Tom Hunt, for helping to make the day successful.

A public viewing session up at the observatory took place in the evening. It was very windy but the clouds parted enough to enable us to view a few objects in the night sky. Thanks also to those who helped in the evening.

In **October**, Dr Lyndsay Fletcher gave us a talk on the recent advances with RHESSI which is an instrument designed to understand energy release in solar flares. She explained how it was shedding new light on the way coronal mass ejections and solar flares are interconnected with the Sun's magnetic fields and how they have discovered that massive amounts of energy are released during these explosions.

We were delighted, this month, to welcome back Dr. Mark Sims, Mission manager for Beagle 2, who came to update us on the mission, possible reasons for why it failed and the future of Mars exploration. He was unable to give a definitive answer as to what may have happened to Beagle 2, but from about 150 possibilities, narrowed it down to 12, with the most likely being the temperature variations in the atmosphere leading to density variations, causing the parachute to open too late. Dr. Sims' greatest fear was that Beagle 2 had landed safely, but due to a broken connection, cannot communicate with Earth. They feel they have learned a number of valuable lessons and hope that a modified Beagle 2 will be chosen as a lander for a European mission to Mars.

Many thanks to Andy for the projector and Geoff King for the enormous screen he borrowed from Eden Court. Thanks also to Trina, Colin and Steven who sat at the front desk and sold raffle tickets, Arthur, who with Lorna his wife, had Dr. Sims to stay with them and the many others who brought raffle prizes or helped out in some way. This was a joint meeting with SIGMA and ADAS.

The last Lunar eclipse for a couple of years was, regrettably, clouded out.

Dr David Gavine gave us a fascinating talk on Sundials in **November**, how they work, the allowances which have to be made for the varying length of day, and a little about the history of timekeeping.

In **December**, Trina told us about the many different kinds of satellites in orbit around the Earth. This 'orbital zoo' has proliferated since the first satellite in 1957 and now provides a huge amount of useful data.

Downstairs, Ray Owens gave a Childrens Talk on the Solar System to about 40 youngsters belonging to members or their friends. This was a great success and the children enjoyed the raffle and refreshments afterwards. Thanks to Arthur and Lorna for braving the noise and excitement to help organise the children. Fortunately they were all accounted for at the end of the evening.

Andy presented a DVD entitled 'A Space Story' for the first meeting of **2005**. This was about Story Musgrave, an astronaut who worked for NASA for 30 years, and his mission to service the Hubble Space Telescope.

This was the month that Colin went to Houston in Texas where he had a great time meeting a number of astronauts and working hard on the organised activities.

My talk in **February** asked the question: "What has the Space Industry Done for Us?" It seems there are now an enormous number of spinoffs, developed from technologies originally used in the space industry which have been found to benefit us here on Earth in many different ways.

This month we had a record attendance of 65 people and our new website went live.

In **March**, The intriguing title 'By a Suitable System of Gears and Levers', was Arthur's way of actually explaining how precession, something to which the Earth is subject, works. The clever use of equipment, a bicycle wheel and a high-tech chair, operated by Antony, demonstrated this phenomenon beautifully.

I would like to thank all our speakers for the wide variety of entertaining presentations this year.

The last questionnaire we issued was about four years ago. We have been able to address a number of the problems and requests identified by it; for example, a new venue and more observing nights. We felt it was time to draw up another one and this was done by Maarten and distributed to you, the members, to help the Committee provide a Society which you will enjoy and in which you can take an active part.

Finally, I would like to thank my Committee of this year. Pat, our Secretary, Trina, our Treasurer, Maarten, Arthur, Bill and Colin, each of whom have contributed in so many ways and have been a great support to me. I am sorry to see Trina and Bill step down and wish them all the best with their busy lives, and to thank the others for agreeing to stand for re-election – although Pat escapes this time having one more year of office. I would also like to thank my Sub-Committees without whom we would have had a lot more to do. These are the Media Sub-Committee of Maarten, Andy and Antony, the New Observatory Sub-Committee of Andy, Rob, and I, and the present observatory Sub-Committee of Arthur and Bill. I would also like to thank Christine who sits at the door, Fiona, one of the Green House staff who prevents unwelcome visitors making an appearance and who, after locking the front doors, often joins us at a meeting and, of course, all of you who not only attend the meetings faithfully, but help out where you can. We value your support and are delighted to see so many of you each month.