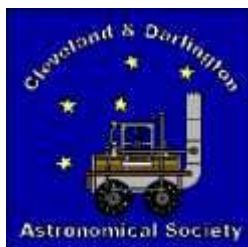




TRANSIT

The Newsletter of



10th December, 2004. Julian Day 2453350



The galaxy to name this month, together with the Messier number, NGC number and the constellation it is in. Last month's picture was The Whirlpool, M51, NGC 5194/5, in the constellation of Canes Venatici

Editorial

November meeting. On November 12th, Dr. Mike Lancaster, of Derby AS, told us of his research on the Magellan Project, in a talk entitled “Venus Unveiled”. His first-hand knowledge and wonderful pictures gave us a detailed insight into the planetary geology of this planet. The radar mapping, even from the Earth, was remarkable in its detail.

December meeting. Friday December 10th will be the evening for a visit by Dr. Pete Edwards, of Durham University, who will talk about “Dark Matter”.

Member’s Night in January. Neil Haggath is wanting to hear from all those people who wish to give a talk on Member’s Night, in January 2005. Only one volunteer has come forward so far. Please let Neil know what you wish to tell us about.

Comet reminder. This month the comet Machholtz comes above our night horizon. Look low down in Eridanus.

York AS meetings. Hazel Collett has sent us the York AS programme of events. Details appear later in this issue.

Aurora Borealis. There have been spectacular auroras recently and I know some members have had good sightings, even as far south as this. If you have any reports and pictures, please let me know.

Support for Transit. Thanks to all those who send in pieces for Transit. The support is terrific. To be able to publish a 16- or 20-pager each month is testimony to all of you authors. Those who have sent contributions which have not been published, please be assured they will all be used. Keep writing!

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Forthcoming meetings at York AS

Hello, I appreciate we are a distance away from you, but I thought you might like to see our meetings list. If any CaDAS members are in our area on a meetings night, they are welcome to come along and join us. If you would like any further information please do not hesitate in contacting me, hcollett@yorkcollege.ac.uk or on 07944 751277.

Hazel Collett

Public Star Parties on York Knavesmire

These are all free and on the following dates.

Wed 15th Dec 7pm - 9pm Moon, Double Stars, Saturn and deep sky objects - Sunset at 1539 UT

Wed 19th Jan 7pm - 9pm Moon, Double Stars, Saturn and deep sky objects - Sunset at 1620 UT

Wed 16th Feb 7pm - 9pm Moon, Double Stars, Saturn and deep sky objects - Sunset at 1715 UT

Wed 16th Mar 7pm - 9pm Moon, Double Stars, Saturn, Jupiter and deep sky objects - Sunset at 1810 UT

Wed 13th Apr 7pm - 9pm Moon, Double Stars, Saturn, Jupiter and deep sky objects - Sunset at 1902 UT

Meetings & Talks

York Astronomical Society hold meetings on the first and third Friday of each month. You are welcome to go along to any of these meetings for the talks and in most cases join them for a short observing session afterwards.

about the problems of producing a Newsletter and how we agreed that it contributed to the cohesion of a Society or Club, and confirming the spelling of his name, we got down to the serious business of questions. . . .

You live in Darlington now; have you always lived in this part of the World?

My parents came from Yorkshire but I was born in Leicester. However, since I left at the age of 16, I haven't been back to Leicester more than a couple of times.

So your schooling was in the Midlands?

I took the School Certificate, as it was in those days, soon after the end of the 39-45 War. That was the time when many University places were reserved for those being "de-mobbed", so it wasn't too easy to get a place. I was going to have to wait for a year, so when an opportunity came along to do an apprenticeship in Civil Engineering, I thought that was the best option at the time. So at the age of 17, I moved to Glasgow to work for Sir William Arrol, a first-class engineering company of bridge builders - they built the Forth Rail Bridge. I stayed with them for about 20 years altogether.

Were you in Glasgow all that time?

No. I have travelled around the World quite a bit. My first experience overseas was when I did my two years of National Service. I was in the Royal Artillery and had a very good posting in Hong Kong. It was an interesting time, learning about mapping and plotting for guns. The use of theodolites and practical surveying was very useful for me when I returned to the Civil Engineering job. Having grown up in Glasgow and being about 22 when National Service came along, I took the Army life in my stride. In fact, I can say that I enjoyed the experience.

Have you travelled a lot since then?

Oh, yes. The job took me all over the World. I was in Iraq, building a bridge over the Euphrates about half way between Baghdad and Basra, to replace an old pontoon bridge. It was just before the revolution of 1958, which saw the brutal murder of King Feisal and his family. Iraq was very stable when I was there. I worked in a small town, employing the locals and hardworking Kurdish steel erectors. The area wasn't very developed - mud huts and all that. There was a local Governor, whose word was law; a law based on the old Turkish rule.

Did you see anything of the famous Marsh Arabs' area?

That was quite a bit further south and I didn't visit there. It was a huge flooded area then. The Euphrates had 10 foot high banks, which filled up in the wet season and everything came to life, like the Nile. The river flooded downstream.

Were you married then?

No. I married when I came back from a job in Angola, building a railway bridge there. I had periods of building power stations in the UK. The first one was Castle Donnington, which was a new venture, the biggest power station in Europe at that time, using four of the new 100MW sets. Then there was Drax in 1967-70, which was another big development in the Power Station business.

Talking about bridges has reminded me that I watched the first Severn bridge being built when I was at Oldbury Power Station. The office window looked out at the bridge.

Well, I worked on that bridge. The road sections were floated out to be hoisted into position. There was only a short period when the tide was suitable and I was supervising the lifting operation. *I remember the cables took on a very strange V-shape during the construction.* Yes. The Severn deck was a ground-breaking design, which was copied a lot in subsequent designs. The road sections were designed to provide a downward aerodynamic force to stabilise the structure as the wind speed increases. With the advent of computers, more stress analysis could be done by calculation rather than wind tunnel testing.

What about your family?

I have two brothers, one older, one younger than me. We keep in touch fairly regularly; they are in Sheffield and Warrington. I have three children. My eldest daughter was in Stirling for a long time, then they moved with her husband's job to Reading. He was in computers and jobs dried up in Stirling. My youngest daughter lives in Slough and my eldest son is in Plymouth. His wife is Brazilian and we are going to Brazil for a month's visit. The flying route is via Rome and Sao Paolo, although it keeps changing. The place we are visiting is well south. It's a huge country.

Do you like travelling, then, even after seeing the World with your job?

Oh, yes. We went to Australia three years ago for two months and made it into a world circum-navigation. Singapore, Brisbane, Darwin, Perth, Adelaide, Sydney. Then to the USA, with 10 days in San Francisco and 3 days in New York. I had retired from Hong Kong, working on the Tsing Ma Bridge, and came home via Australia. I enjoy seeing places. *Do you have a favourite place?* Not really, but if I was pushed it would be Australia.

We haven't mentioned astronomy yet. You have called yourself an "armchair enthusiast" to me. When did you take it up?

I have been fascinated by astronomy, or really sky-watching, since I was a kid. During the War the night lighting was strictly controlled, because of the air raids, and the skies were really black. Just right for a budding astronomer. *Did your parents encourage you?* Not really. I just took it up myself, learning the constellations, looking at the Moon and planets. No telescope or binoculars, just naked-eye observation. It's been like that ever since. That's what I mean by "armchair".

When did you join Cleveland and Darlington?

In 1997. I remember it because the first event I went to was a lecture at the Endeavour on the Tees at Stockton. The lectures arranged by the Society are first-class. Comparing them with other Societies I know about, ours is much better than most. Some Societies only have viewing sessions and only occasional lectures. The lectures are the big attraction for me. I thought the Cosmos day was excellent and hope it will continue.

The skies in Iraq and the other places you have worked must be amazing. I have been told that when there are lots of stars visible it is difficult to get used to recognising where you are at first.

I found you could recognise the big obvious ones, like The Plough and Orion but the lesser ones become very difficult. Further south they are in strange orientations – particularly south of the equator. We were in the Maldives some years ago and had great fun working everything out.

Do you use binoculars or a telescope ever?

I was given a small terrestrial telescope, which is ideal for projecting the Sun for things like the transit of Venus. I use it for looking at Jupiter and Saturn. I remember seeing the occultation of Saturn by the moon not long ago. The view of the sky from my bedroom window to the east is very good and relatively free from light pollution, considering we are in the middle of Darlington. I saw Mercury from another window facing west. I enjoy just looking at the night sky, becoming familiar with it.

Do you do any distance learning courses?

The courses I took up after retiring have been week-long summer schools in Oxford. They are on various subjects and take a lot of preparation. There has been one on the History of Astronomy by Andrew Lintern-Ball, and one on the Architecture of the Industrial Revolution. I remember one on Constellations and another called “Cosmic Connections” by Christine Sutton, which connected particle physics with cosmology. We have to prepare a 1500 word essay before we go and do a lot of preparatory reading. It is very participatory, not just sitting back and listening to others talk.

You sound computer literate to me.

Well, I’m not computer illiterate. I use the computer for email and producing the U3A Newsletter; using it for practical purposes, rather than being deeply involved. I am very much involved with the U3A. My wife, Kitty, was in the Darlington branch but it is very popular and I was waiting a long time for membership. So we formed another group, called South Durham. I ran a year’s course for the group, on The Night Sky. I also do a series on Art Appreciation.

What are you reading at the moment?

Things are so busy I can’t fit in much reading for pleasure. *What would you read, if you had the time?* I suppose what one would call the Classics. I read a lot for the Art Appreciation and the Oxford courses. I enjoy things like “The Seven Pillars of Wisdom” - the Lawrence of Arabia book - and biography generally. I enjoyed reading the Kate Adie auto-biography. There are lots of books in the house ready to read when the opportunity comes along

Do you enjoy music and theatre?

I have discovered opera since retiring. I used to think it wasn’t for me but I enjoy it a lot now. I went to the Sydney Opera House and The New York Met to see La Traviata,

A Memorable Visit to La Palma

From Chris Walker

I had just received an e-mail from John, the former engineer on the Isaac Newton Telescope (INT). He said he would be able to help me to visit the INT Group of telescopes situated on La Palma. I had tried previously to contact the official observatory web sites, both English and Spanish but to no avail. As a taxpayer and contributor to the upkeep of the telescopes you would think that they could at least manage a reply. As far as I can make out there are only two public open days to the observatories a year. As both of the open days are in the summer and the only direct flights from the UK to La Palma are in the winter then this was not going to be an option.

In the late 1970s I had gone to visit the INT at Grubb Parsons in Newcastle. The telescope was to be moved from cloudy Herstmonceux to the clear skies of the Canaries. One of the jobs that needed to be done to enable the move was that the telescope mount had to be altered so that it would point to the pole as viewed from La Palma, which would be about 30° high as against the 52° it was pointing to now. This re-engineering was to be done at Grubbs. I had never seen such a large telescope towering high into the roof of Grubb Parsons, the 98 inch INT made a big impression upon me. Ever since Grubb Parsons I had wanted to visit the INT again but this time in situ on the Roque de los Muchachos, the volcano top observatory site in La Palma.

The opportunity to visit came last November when I saw some holiday offers from JMC to La Palma, but how to visit the observatory? In the end I asked for help from noted astro-imager Ian King. How had he managed to get access to the INT site from which he took his photos? He answered that he had friends on the Roque, professional astronomers and that he actually stayed in the astronomers' on site accommodation. This would be of no help to me but he did give me the e-mail of a retired engineer who lived on the Island. He proved to be very kind and useful in arranging my visit to the observatories.

We were now just doing the final checks before landing and if I craned my neck I could just see the Island, which looked very cloudy! This did not bode well for me and my efforts to view the pristine night skies of La Palma. The pilot joked about having enough fuel to redirect to Tenerife as the airport at La Palma was only quite primitive and if visibility was poor a landing could not be made. This would be no good as I had arranged to visit the observatory the next day. My fears unfounded we landed safely but I still wondered about seeing the skies through all that cloud. I had pondered about buying the largest portable telescope I could manage and taking it to La Palma. In the end good sense and finance prevailed. I bought a small 90mm Maksutov and a new set of 7x50 binoculars.

We left the arrivals lounge my wife identified John from the photo he had e-mailed to us. He was waiting with his Palmerian daughter, as appropriate to an astronomer appeared as a jovial character and welcomed us heartily. We gave him some essential supplies English sausages (Walls), and PG Tips in return he gave us a map of the Island and

instructions on how to find him. The airport was in Santa Cruz as was John's villa; we on the other hand were staying in a 4 star hotel in Puerto Naos on the other side of the Island. We got on the transfer bus and set off.

For people who have visited only the popular canary islands La Palma can come as something of a surprise. The first thing you are aware of is how verdant the Island is covered in pine trees, more like Madeira than Tenerife and nothing like the volcanic landscape of Lanzarote. Appearances are deceptive as La Palma is the most volcanically active of all the islands. As you move more westerly on the archipelago the islands get younger and more volcanically active, the oldest being Fuerteventura and the youngest being La Palma. The last eruption on La Palma was in 1972; a new peninsula was formed by lava flows on the southern tip of the island. Just to prove how fertile volcanic soil is the peninsula is already covered with banana plantations.

One of the reasons that La Palma is so green is that it catches moisture coming from the west originating from the Atlantic. The airflow is the reason that La Palma was chosen for the observatories. The seeing is excellent on many nights of the year, the reason being that as air flows across thousands of miles of Atlantic Ocean the air currents become laminar. This means there is little turbulence and mixing of the air at different levels and this promotes the best seeing; all the better when you have a high volcano above the cloud level to put your telescope on.

Running from north to south across the spine of the Island is a line of volcanoes. Geologists say the ash and rock that make up this part of the Island are unstable, one day a quarter of the Island could detach itself and slip into the sea this will form a tsunami that will engulf the Caribbean. Two tunnels have been built going straight through the Island east to west, we came out of the tunnel to the western side of the island and like magic the sun was shining on this side of the Island whereas a mile away it was cloudy.

The hotel was right by the sea and the balcony from the room looked south and out to sea. I could just make out El Hierro the next nearest Island. But soon the weather worsened, it clouded over and began to rain. There was a dome with a telescope in the grounds of the hotel and guests could use it once a week. It was supposed to be open tonight but I doubt we would see anything of the stars in this weather. It had been a long day so I had a beer and went to bed.

I woke about three o'clock in the morning; it was very dark in the hotel room. I got up carefully so as not to disturb my wife opened the balcony door and stepped out. The view was astonishing I was looking out as though at the head of a canyon as the multi-storey hotel rooms led away left and right and framed before me the most familiar of constellations, Orion. Orion was familiar but a surreal 24° higher than in England and so bright like a Disney or Spielberg version of the sky. It was impossibly bright as though a dimmer switch controlling the stars had been turned to full. I used the 7 x 50 binoculars to scan through Orion. The Milky Way in Monoceros, which is almost invisible from England, was rich and varied. The best object I thought was the Rosette Nebula. It is a

tight cluster of stars surrounded by a gas cloud and it is a lot more difficult to see than the Orion Nebula but all the more rewarding because of this.

I collected the Maksutov and took it into the hotel grounds to get a better view of the whole sky. I scanned through the southern sky and came across what must be one of the best edge on galaxies in the heavens NGC 253; visually it is like a slightly smaller version of the Andromeda Galaxy, it would be below the horizon from England and is said to require a 150 mm telescope to see it. It is saying something, for the clear skies of La Palma, that this is one of the most striking views of a galaxy and I was looking at it with only a 90 mm telescope. The night sky was perfectly black there was a strange phenomenon in that you only knew clouds were there when they occulted stars as the clouds were darker than the sky.

That is why I was so surprised when behind me I became aware of a bright glow in the sky, there were no towns in that direction and it took a little while to realise it was Zodiacal Light. It was a cone of bright light and stretched up towards Jupiter. Just before I ended my observing I looked at the list of satellites visible from La Palma I had got from heavens-above.com. Soon I would be able to view another object not visible from England and in a few minutes time there it was high in the western sky as bright as a second magnitude star - the Hubble Space Telescope. Even with the naked eye you could tell it was different to the ISS, it had a warm almost gold tint to it as against the neutral silvery colour of the ISS. That was the last of many celestial objects new to me.

After eating a mega four star breakfast, we collected the hire car and, map in hand, we set off to find John's villa. The roads in La Palma are very quiet, which made driving and sight seeing a less dangerous pursuit. They were however, the most sinuous I have driven on. The coast is made up of a series of ravines (barranco), which must be negotiated and make for a long journey something which does not look far on the map. The sun was shining behind us and looming up in front of us I could see the Caldera De Taburiente and there right at the very top glinting in the sunlight were several small white domes, the destination of today's trip.

Almost as soon as I had seen them they had disappeared obscured by cloud rising out of the Caldera. We drove through the tunnels in the opposite direction on our way to Santa Cruz and after about half an hour we found ourselves on a little driveway leading up to John's villa. The villa was not a typical Canarian design as it was on two floors but it did look very Spanish and it had a glorious view over the bay. I could see cruise ships coming in to dock for the day. John got his stuff together, said goodbye to his wife and asked that we use our hire car as he was not sure his old car could make it to the top!

A short distance from John's house there was a junction to the left sign-posted to the Observatorio Astrofisico. Straight away the road started to climb steeply and soon we drove into the clouds. With all the pine trees and light rain it seemed more like Scotland than the Canaries. Every few hundred metres rocks had tumbled down onto the road, dodging these made the journey somewhat exciting. Although John had lived on La Palma many years he was still very interested in what was going on back home and we

chatted as we drove. He also told me about how he had been involved with the BBC Astronomy Night and for those who saw the program it was John's telescope that was used to image Mars. It had been sighted on the side of the William Herschel Telescope dome.

He said that he thought that the Observatories could be under threat as the funding for astronomy was going to the super big telescopes in Chile and Hawaii. If the observatories on La Palma were to close this would be a great shame as I know that it has often been said that the INT Group punches above its weight with many discoveries being made because of the flexibility and accessibility of the telescopes. We rose higher and the cloud thinned, trees gave way to rock and we followed the contour of the Caldera sheer to the left of us dropping near vertically 7000 ft with cloud now and again bubbling over the rim. We came to the astronomers' accommodation and John went inside to get permission to go in the domes. First stop was the William Herschel Telescope.

The dome was massive, it seemed almost too bright to look at, the sun was beating down on it and a ring of blue sky had opened. The blue of the sky was so deep I felt that I should be able to see stars in it. As impressive as this building seemed from a distance, up close somehow it seemed unfinished. When you see any official building of this size there are always lots of cars parked around it, signs and plaques but there were no such adornments around this building. It had the feeling of the military - utilitarian; how a dome on a moon base may look one day, purely functional.

We walked in through the entrance John punched a few codes in the door lock and we went inside. There was a lift that took us up to the observing room, walking along the corridor I could see a heavy door with a small window in. The telescope was segregated from the astronomers and their equipment as any leakage of heat could ruin the good seeing. Quickly we went through the door so as not to let the heat in. Straight above us on a heavy plinth was the William Herschel Telescope, all this metal and mechanics made the place feel like an engineering firm but it was cleaner than any engineering firm I had ever been in and the thing that was being manufactured here was information on the night sky. We walked up some steps and onto a gantry that led round the inside of the dome; from here you could get a better view.

The telescope seemed somewhat stubby, not that many times longer than it was wide. To the side of the telescope is a light tight room, to get into it you had to step into something that feels like a magician's box; it is a black cylinder that you turn and step out into a room full of electronics and light sensitive equipment for exploring the cosmos, but to an observer from the outside it seems that you have disappeared. The equipment inside this room was so sensitive to light that even a single LED can flood all the detectors. We went back out into the dome again and whilst we were walking towards the observing room we could hear the dome creaking. John said that it was ice melting, it formed during the night and on one occasion an unsuspecting astronomer had parked his car too close to the dome, he had returned only to find a large sheet of ice had crashed down onto the car proving that a ton of ice and an automobile do not mix. It was with some

trepidation and a quick step that we left the William Hershel dome for the Isaac Newton Telescope.

On the way to the Isaac Newton Telescope we passed a small telescope, small being relative as it was still 1 metre across. The Jacobus Kapteyn Telescope is moth balled and is no longer used though it is perfectly functional. There has been talk for some time for putting an amateur facility on La Palma; would it not be feasible for someone to donate this telescope for amateurs. One can only imagine the inspirational effect and fantastic results that could come from such an instrument. A short way on and slightly down the mountain was the INT and I felt excited at being reacquainted with the scope I had last seen a quarter of a century ago. When entering the dome of the INT it seemed more like walking into a large school or university than an observatory sitting miles high above the Atlantic.

There were offices that were no longer used and workrooms stuffed with electronic equipment for servicing the other telescopes on the mountain. The INT itself had a more regal feel about it, as it was clad in wood veneer. Observing from the UK it stood nearly upright on its fork mount but from here the pole star was a lot lower so it appeared to lie down. Linda and I walked up onto the gantry to look down the tube of the telescope, John opened the Iris that covered the mirror and there below us we could see our own faces reflected back up at us. The move from England had been very expensive and it would probably have been more cost effective to have built a telescope from scratch. None-the-less the INT had been a very successful telescope in its time on La Palma.

We headed back to the William Hershel Telescope to have a cup of coffee. The astronomers had a kitchen area and about four astronomers and engineers were there talking shop. One was an astronomer from Queen's University Belfast, talking about the installation he was helping with; a group of telephoto lenses on one mount each one connected to a powerful camera. The array synthesised a single camera of immense power covering an area about as large as the constellation of Orion. Many times during the night the same area was re-imaged. If an anomalously brightened star was detected this could well be caused by gravitational lensing of the star by a planet. The array was called WASP and after coffee we went down to look at WASP.

WASP was housed inside a run off roof observatory and at the back there was a bank of computers for processing the data from the cameras. Although the main aim was to discover planets, the astronomer said that nobody was monitoring the entire sky on a regular basis, so nobody new what they might find. I said that it might be better for the telescope to be named 'Serendipity' and that what he was doing was somewhat similar to William Hershel's gauging of the heavens - only then William would track through the sky and shout down his results for Caroline to record. Somewhat low-tech in comparison to today. Since I have returned home I have heard that WASP is up and running though I have not heard of any discoveries yet. Lately WASP has been featured on The Sky at Night and it seems to be working well, indeed there are plans for a second WASP in the Southern hemisphere.

The time was getting on. It was winter and even at this latitude the sun would soon set. I did not really fancy a ride down the mountain in the dark dodging the boulders but the cloud that had dogged us all day at last seemed to be receding down the volcano. I took this opportunity to drive up to a higher promontory that overlooked all the other telescopes. On the way we passed the GRANTECAN . It is a enormous silver dome, which will house a 10.2 metre telescope over twice as big as the W.H.T. It will become functional in 2006. The road winds round and up until you are overlooking the INT array and you can also see the tower of the Nordic solar telescope. The domes of the observatories seemed to float on the cloud but because of the low angle of the sun and the rim of cloud something had happened I had been hoping for all day.

To the right of the INT there was a display of an optical phenomenon called a glory or spectre. It is an iridescent halo of light and if you look carefully you will see the shadow of your head forming the centre of the halo. After taking some photos we got back in the car, as we had to make haste down the mountain so as not to be caught by the night. It had already become very cold and as we headed off down we drove into the cloud it rained all the way back to John's house. We dropped him off, thanked him and said goodbye. We drove back across the Island and were just in time to get back to the hotel for tea but today had been great, a dream fulfilled.

The rest of our holiday was really enjoyable we went on walks and explored the island in the hire car. For a winter break even for those not interested in astronomy La Palma is a great away from it all place. Only one low point; I lost the digital photo memory card from the trip, having left them in the hotel security box. Oh well, I will have to go back and retake them!

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Apollo – The Truth!

by Neil Haggath

Last year, Alex serialised in *Transit* a lengthy article about the so-called “Apollo Hoax” conspiracy theory – the absurd idea that the Apollo Moon landings were faked. The author of this article was clearly firmly on the side of the conspiracy theorists.

I said at the time that I wouldn't waste my time debunking this ridiculous notion. However, I've since decided – and some readers may well agree - that it would be a good idea to have a set of standard answers to hand, so that if we get into an argument with a dyed-in-the-wool conspiracy theorist, we can shoot his arguments full of holes, without even having to think about it. Besides, I decided that it would be fun to pull all the conspiracy arguments apart, just to demonstrate how laughably stupid they all are!

There are already several web sites devoted to debunking this idiotic theory; nevertheless, I decided to have a go at writing my own. I've just completed my own comprehensive debunkment, which responds to all the main conspiracy arguments, including those in the serialised article and several more. My eventual aim is to put this material onto a web site, but for the time being, it exists as a Word document.

My essay is far too long even to be serialised in *Transit*; however, if anyone is interested in reading it – whether to prepare your own anti-loony defences, or just for

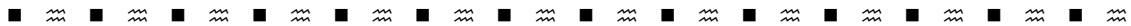
some amusing reading – then please e-mail me at neil.haggath@ntlworld.com, and I'll send you a copy. Those with dial-up connections, please note that it's a 700 kB download. If I don't know you personally, then please be sure to include the word "Apollo" in your message subject, so I can easily identify it; I'm afraid I'm plagued with lots of spam.

More on Morons

As a follow-up to my e-mail to Jim McDade, I got a reply from him not long ago. It turns out that he and Bart Sibrel actually came face to face on some American TV programme. Jim *did* challenge Sibrel to explain the hammer and feather experiment (done by Dave Scott on Apollo 15). Sibrel's response was that the feather was a fake one made of metal, and that the film was slowed down to make the objects appear to fall under lunar gravity! Er, now let's see; it doesn't take a great amount of brains to see the flaws in that one, does it?

1. How exactly could the film of the objects falling be slowed down, while at the same time, Scott's speech, and the his movements, were still played at normal speed? I don't doubt that such a thing could be done with today's film technology, but not in 1971!
2. If you were to make a "feather" out of metal, and make it look anything like realistic, then the metal would have to be extremely thin, like a piece of aluminium foil - which means that, if dropped in air, it would still fall pretty much like a real feather!

Neil Haggath



I Don't Believe it!

from John Crowther

Last year's Town Guide, put together by Redcar Business Association and Town Centre Management, had the following section: -

"The Origins and History of Christmas – December 25th

In the days when man was totally dependent of climate and weather to grow his food, he was greatly influenced by seasonal changes and almost all the ancient peoples of the World held a festival at the time of the winter solstice – 22 December – **when the Sun is furthest from the Earth** – to encourage and celebrate its return.”.

Note the words I have put in bold. Being ignorant of the truth they have printed the opposite of what is really true. I once heard similar words from a teacher. The sad fact is that few people will spot this, which to us is an obvious mistake.

I hope they don't make the same mistake this year.

Maths Challenge – or is it A Joke?

From Bob Mullen

Not a 'Joke Fit For a Ten Year Old' but my thanks to Newsnight viewer Chris Lee for this Riddle Fit For a Ten Year Old:

Which is the odd-number-out in this sequence: 2, 4, 8, 16, 33, 64?

Answer on the Back page.

Quote/Unquote

From Brian Cooper:

“No room at the inn? Of course there was no room at the inn. Stands to reason. It was Christmas – everywhere would be packed.”

Dandy Nichols in “Till Death Us Do Part”, Christmas special in the 1960’s

[Brian also points out that the quote attributed to Orson Welles in the last issue was in fact made by Graham Greene, who put the words into the mouth of Harry Lime in “The Third Man”.]

Aurora Report From John McCue

[Spectacular auroras have been observed all over the British Isles in the past few weeks. I have some pictures from Edinburgh, which I could hardly believe and which I hope to publish in a future edition. Here is a note and a picture from John at the planetarium. Has anyone else anything to report on these auroras? Ed.]

Hello everyone,

Just a belated report on the aurora of Wed. 10th Nov. The best part of it was that I had a visit to the Planetarium at the time by groups of guides and brownies who were doing their Stargazer badges. They saw the whole display. Marvellous. They also presented me with a badge at the end!

John.



The Back Page Pictures



Brian Blakeley, interviewed in this issue.



A couple of pictures from Keith Johnson as a preliminary to a new quiz subject – Recognise This Feature Of The Moon. On the left a montage of first and last quarters. On the right an overall view to let you start swotting up on the big mare and craters. The features will be chosen by Michael Roe, so don't blame me! One problem with astro-pics is deciding whether they are with refractor, reflector or as seen with binoculars. No clues will be given, just to add to the interest.

And finally . . . the answer to Bob's maths challenge. No 16, it's the only one which comes with fried rice. (*You see what I have to put up with? Ed.*)