Sagittarius

40th Anniversary Edition !

The Newsletter of the Astronomy Section of La Société Guernesiaise

April – June 2012

Forthcoming Events

Exhibition
From the Earth to the Solar System
31 March - 13 May
Guernsey Museum and Art Gallery, Candie Gardens.

Lectures
Frossard Lecture Theatre, Candie Gardens. (Entrance free unless stated below)

Dr David Falla
Half a century of astronomy
Wednesday, 11 April, 7.30 pm

Professor Christopher Riley
The Apollo Film Archive
Friday, 20 April, 7.30 pm
(Entrance £5.00)

David Le Conte
Guernsey astronomers, past and present
Wednesday, 02 May, 7.30 pm

Open Evening:
Thursday, 26 April
8.30 pm at the Observatory

Section meets at the Observatory every Tuesday evening at 8.00 pm

Inside

Inserts

Star chart

Sunset, sunrise, moonset and moonrise times

Let's celebrate! – Our 40th Anniversary!

It was 40 years ago that the Astronomy Section was established and held its first meetings, led by David Falla as the Section's first Secretary. In this anniversary year we are celebrating by being involved with a NASA exhibition, a series of three associated lectures, and a special Open Evening.

THE EXHIBITION

From the Earth to the Solar System will be held from Saturday 31 March to Sunday 13 May at the Guernsey Museum and Art Gallery at Candie Gardens. This stunning exhibition has been created by NASA as a contribution to the *Year of the Solar System*, with the tagline: One star, eight planets, numerous moons, and myriad comets, asteroids, and other small bodies: discover our Solar System.

We are pleased to have been invited by the Museum to assist with the mounting of the exhibition, to have a display panel about the Section, and a flyer describing our activities and what is currently visible.

Astronomy Section members are invited to attend the official opening of the Exhibition on Tuesday, 03 April from 6 pm to 8 pm. There is no charge for this event.

The Museum's normal opening hours are 10 am to 5 pm daily. Admission charges are: Adult - £5.75; Senior Citizen - £4.75; Child - £1.50; Child under 7 (accompanied) – Free. Details are on the Museum's website, at http://museum.guernsey.net/.

THE LECTURES

All lectures will be held at the Frossard Lecture Theatre, which is attached to the Museum.

Dr David Falla: ***Half a century of astronomy***.
Wednesday, 11 April, 7.30 pm: Entrance free of charge.

For astronomy, the past half-century has been a Golden Age. The development of new branches of astronomy, together with the invention of new observational techniques, has led to a great advancement in our knowledge of the Universe. David will describe the remarkable discoveries, including some rare events that have excited amateurs as well as professional astronomers.

Professor Christopher Riley: ***The Apollo Film Archive***.
Friday, 20 April, 7.30 pm: Entrance £5.00 (including access to the Museum exhibition *From the Earth to the Solar System*, and a glass of wine.)

Chris Riley has worked with NASA's substantial film archive over the past 12 years. He will discuss the history of the archive, its preservation and curation. His talk will be illustrated with a selection of film clips which show how he has used the footage in the numerous documentary films in which he has been involved in creating this rich collection. These include *Moonwalk One* (the only documentary made about the flight of Apollo 11 at the time of the actual mission), *Moon Machines* (six-part series telling of the trials and tribulations of the engineers who designed the computers, rockets, suits and spaceships that sent men to the moon), and *In the Shadow of the Moon* (the story of the Apollo program told by the astronauts).

David Le Conte: ***Guernsey astronomers, past and present***
Wednesday, 02 May, 7.30 pm: Entrance free of charge.

A number of Guernseymen have made their mark in celestial observation and astronomical research. David will describe the achievements of several 19th and 20th century Guernsey astronomers, and his own work in the 1960s space programme. In its 40th anniversary year he will also cover the history of the Astronomy Section of La Société Guernesiaise.

THE SPEAKERS

David Falla attended Elizabeth College and then went on to the University of Bristol, where he obtained his degree in physics. Upon graduating he joined the research group there led by Nobel Laureate Professor Cecil Powell, FRS, and gained a PhD in particle physics. Several research posts followed, at the Universities of Manchester and London (Queen Mary College). During the time of his research fellowship in London he worked at CERN in Geneva for a short period and then at Rutherford Laboratory, near Abingdon, on the first experiment with the new particle accelerator 'Nimrod'.

He later developed an interest in theoretical astrophysics, and was appointed to a lectureship at the University College of Wales at Aberystwyth, where he remained until his recent retirement. His special interest has been in the application of particle physics to astronomy, but recent published papers have related to subjects such as 'light echoes in astronomy' and also black holes.

It is most appropriate that David Falla, the founder of the Astronomy Section, should give this lecture during its anniversary year.

Dr Christopher Riley, visiting Professor of Science at Lincoln University, is a broadcaster and film maker specialising in history and science documentaries. He has worked on many of the BBC's iconic science programmes from *Tomorrow's World* and *Rough Science* to *Science in Action* and *The Sky at Night*. In 2004 he won the Sir Arthur Clarke award for his work producing the BBC One blockbuster series *Space Odyssey: Voyage to the Planets*. His feature documentary film *In the Shadow of the Moon*, the story of the Apollo astronauts, premiered at the 2007 Sundance Film Festival, where it won the World Cinema Audience Award.

He is the author of more than thirty articles and books on astronomy and planetary science and regularly broadcasts and lectures on these and other topics. His latest book; *Apollo 11, An Owners Manual*, was published by Haynes, in June of 2009, making it into Amazon's top ten science and nature books of the year.

He is the Associate Producer of BBC4's recent documentary *Destination Titan*, Producer of the July 2011 *Space Shuttle: The Final Mission* for BBC2, and producer and director of the unique Yuri Gagarin 50th Anniversary film project *Film Orbit*, which received its global premiere on the 12th April 2011.

David Le Conte gained a Physics degree at Edinburgh University, and worked at the Royal Observatory Edinburgh and the Physics Department of the University College of Wales at Aberystwyth before moving to America in 1964 to work for the Smithsonian Astrophysical Observatory under a NASA contract for the optical and laser tracking of satellites. After managing astrophysical observing and tracking stations during the Apollo programme, he became Executive Director of the Smithsonian Institution's Research Foundation in Washington DC. His last appointment in America was as a department manager at Kitt Peak National Observatory in Arizona. He returned to Guernsey in 1978, and worked as a civil servant specialising in environment and heritage matters. He is a previous Secretary of the Astronomy Section and a Past President of La Société Guernesiaise. He is now a Jurat of the Royal Court.

David's astronomical interests have centred on celestial mechanics and astronomical history, and he has published a number of papers on these subjects.

OPEN EVENING

Thursday, 26 April, 8.30 pm: **at the Observatory.** Free (donations welcome).
The Observatory of the Astronomy Section of La Société Guernesiaise will be open for telescopic viewings of the Moon, Venus, Mars, Saturn, and other celestial objects. There will also be talks and slide shows.

The First 20 Years of the Astronomy Section.

The Astronomy Section was formed at the Annual General Meeting of La Société Guernesiaise on 21st January 1972, following a preliminary meeting of potential members and with the encouragement of the Société President at that time, Jurat J. Le Pelley, and Honorary Secretary Mr R.J.W. Payne, with a suggestion also that the group should become a Section of La Société Guernesiaise.

Astronomical Report

The Astronomical Section was formed at the 1972 Annual General Meeting of La Societe. For some time before then it had been apparent that there would be sufficient support for the formation of a Guernsey amateur astronomical group, and a preliminary meeting of potential members had already been held. The Secretary is grateful to the former President of La Societe, Jurat J. Le Pelley, and to the Hon. Secretary, Mr R. W. J. Payne, for their encouragement in this venture, and for their suggestion that the astronomical group should become a Section of La Societe.

During its first year the Section has gained eleven members, about seven of whom were not already members of La Societe. Invitations to attend our meetings have until now been made quite general, with the result that numbers attending have ranged from fifteen to over twenty. We have been pleased to welcome all our regular participants, amongst whom are several members of the Elizabeth College Astronomical Society.

Our meetings during this first year have been held quarterly, with the intention of having more frequent meetings in the future if the demand is sufficient. At the first three meetings of 1972, members of the Section gave the following talks, on widely differing aspects of astronomy:

1. "Man's View of the Universe: a survey of modern astronomy" by the Secretary.
2. "Finding One's Way around the Sky" by Mr. R. W. J. Payne.
3. "The Planet Mars" by Mr. F. W. Dowding.
   "Sunspots" by Mr. R. Edmondson.
   "Meteors" by Mr. D. Waugh.

At our fourth meeting we showed two films, obtained on loan from the Central Film Library, entitled "Universe" and "Seeds of Discovery", the latter being on the subject of space research during the current decade.

It was recently decided to form a small committee to consider the possibilities of setting up a telescope for the use of the Section. A site has already been suggested, and has been viewed by interested members; the practical problems of acquiring or constructing a suitable instrument are being discussed.

We hope that the Section, equipped with a telescope of adequate size, will be able to engage upon some practical "field work". While the field work of other Sections of La Societe is concerned with more local matters, the Astronomical Section will be studying fields which, although in some ways more remote, are as much a part of our environment as those fields than are closer to home.

D. F. FALLA.

From Transactions of La Société Guernesiaise 1972

During the first year the Section gathered eleven members, and quarterly meetings were held. The first public meeting, held at the OGH Hotel on April 6th included a talk by Dr David Falla FRAS as Secretary of the Section, on "*Man's view of the universe, a survey of modern astronomy"*, and there was further discussion of a future programme based on a questionnaire which had been circulated. Other founder members attending the first meetings included Frank Dowding (the present Section Secretary), Geoff Falla, Richard Edmondson, David Waugh, John de Garis, John Upham, and Elizabeth MacPhail. Other talks given included *"Finding One's Way around the Sky"* by Société Secretary Reginald Payne, and *"The Planet Mars"* by founder member Frank Dowding, with short talks also on the subject of Sunspots, by Richard Edmondson, and Meteors by David Waugh. Talks were given at the OGH or at the Guille Alles Library's Société room. It was also decided to investigate the possibility of setting up a telescope for the use of the Astronomy Section at a suitable site.

With the encouraging success of the Section's first year, quarterly meetings were continued in 1973, with a talk on Nebulae given by the Section Secretary David Falla, and in September there was a first observational meeting, held at St Martin's Point with the loan of David Waugh's six inch reflector telescope. Very good views were obtained of the Andromeda Nebula and Jupiter with its moons. A suitable site for observing was also found at the lower part of Fort Saumarez, L'Eree, with the permission of Mr H. Dessau. With the Section's grant from the Société in 1973, a number of books were purchased, including the 1973 edition of Norton's Star Atlas and the Handbook of the British Astronomical Association, with subscriptions also for regular issues of "The Astronomer" and "Hermes", the journal of the Junior Astronomical Society, these also being added to the Société Library.

In 1974 the Section obtained the use of an 8.5 inch Newtonian Reflector telescope from Mr R. Higgs, on permanent loan. The telescope was renovated by several members of the Section, with mirrors and optical accessories cleaned professionally, or replaced where necessary. The quarterly programme of meetings and talks was continued, with further reference books and periodicals added to the Library.

Work was completed in 1975 on the assembly and testing of the Newtonian reflector, with the valued help of David Waugh, and John Upham at his engineering workshop - this also being used for temporary storage of the telescope. A heavy duty steel tripod stand for the telescope mounting was purchased from Astronomical Equipment Ltd.

The Newtonian reflector was then able to be used by members of the Section on many occasions, at several locations, and in 1977 the Section was also grateful to Reginald Payne for

donating his 3.25 inch refractor telescope, made by Troughton and Simms in the late 19th century. This telescope, when fitted with a more suitable mounting, was expected to be particularly useful for lunar and planetary observing. The problem of finding a permanent home for the Section and equipment continued, however, but in the meantime Derek Johnson had offered space at his Vale home for temporary storage and use of the telescopes.

In 1978 a Zenit-E single lens reflex camera with an adapter for a telescope was used to gain some experience in astrophotography, with quite satisfactory photographs of the Moon obtained. The Section also welcomed Mr and Mrs David Le Conte, Mr Le Conte having had a distinguished career in astronomy, including his scientific work as an administrator at Kitt Peak National Observatory in Arizona, and with NASA in the work of tracking satellites and spacecraft. By the end of 1978 the Astronomy Section had expanded to around twenty members.

The 1980 Report of the Section recorded that although fewer than usual meetings had been arranged, observations with the Newtonian telescope and astrophotography had continued when the opportunity and weather conditions had allowed. The programme of occasional talks continued with two given during the year, by David Le Conte on the subject of *"Time and the Celestial Sphere"*, and by the Section Secretary on the subject of *"Exotic Stars and Black Holes"*. The Section still remained in need of a satisfactory base for future activities, with storage space for its equipment and an expanding library including charts and periodicals.

In 1981 the Council of La Société decided to build an extension to the Guernsey Museum, for a permanent headquarters. This was welcomed as it would provide better opportunities for the Société's Section activities including the Astronomy Section.

During the year the Section's Newtonian telescope was fitted with setting circles, to allow celestial coordinates, as given by standard catalogues, to be set for viewing any object.

The Section's Spring 1983 lecture at the Candie Museum Lecture Room was given by Frank Dowding, on the subject of *"Jupiter encountered by Voyager"*. This provided an up to date account of this space probe mission, with slides showing remarkably detailed features of Jupiter and its moons for the first time. The Section was offered during the year a good observing site at the home of new member John Taylor. The site, having an elevated position adjacent to L'Ancresse Common, had a specially constructed observation platform with good views of the sky in all directions, electricity supply and storage facilities. This seemed excellent in every way, and the Section's main telescope was moved to the new site. Geoff Falla had also devised simplified charts based on the

constellations, and listing particular Messier and NGC objects, nebulae and star clusters which could be observed with the telescopes available.

The Section Secretary's Easter 1984 lecture was on the subject *"Astronomy from Space"*. This included results obtained from the International Ultraviolet Explorer satellite, and IRAS - the Infrared Astronomy Satellite, these extending the observable spectrum which had only been studied previously with optical telescopes. The observations had also revealed completely new objects.

Later in the year the Section was dismayed when it was announced that the Newtonian telescope, originally made available by the owner in 1974 on a permanent loan basis, had been reclaimed for family use.

In March 1985 David Le Conte became Secretary of the Astronomy Section, acknowledging the work previously done by David Falla as founder Secretary, in setting up and running the Section, with a core of enthusiastic members, even though he was based in Wales for much of the time. The return of periodic Comet Halley after around 75 years was a main topic of the year, with exhibits and displays set up at Candie Museum and the Guille Alles Library during November and December, with publicity in the Guernsey Evening Press and considerable public interest. The Section organized a "Halley Watch" evening in the playground of Les Beaucamps School on 12th November, with several hundred members of the public attending, and using eight telescopes provided by Section members for viewing the comet and other celestial objects. A small group of members, consisting of Frank Dowding, Geoff Falla, John Taylor and the Section Secretary, and with the help of Dr Lawrence Pilkington was set up to guide the Section's programme. It was agreed that more should be done to stimulate interest in the subject of astronomy, in particular through education to young people.

During the year the Section also launched an Appeal to fund a major new telescope for the island, and this made a good start with £1,000 donated by the end of the year. Observing activities continued, led by John Taylor and based at his home, using his 4 inch refractor telescope. The programme of lectures continued, by David Falla and by the Section Secretary on the subject of comets, in particular the return of Halley's Comet, and with the Section Secretary giving a talk at the Teachers' Centre on the value of Astronomy teaching in schools.

In April 1986 a lecture by Section Secretary David Le Conte was given in the newly completed Société headquarters at Candie Gardens. The lecture was on the subject of *"Celestial Objects for amateur observers"*, and was followed in May by a lecture on Transient Lunar Phenomena by J. Hedley Robinson, FRAS supporting the view that the Moon was not dead, as usually supposed. Another talk was given in

June, by Dr Lawrence Pilkington on the subject of the Hubble Space Telescope. The Section had made good use of the new facility for meetings at Candie, but other activities during the year were rather sporadic because of limitations in observing facilities and weather conditions. Several observation and slide show evenings were held, however, for groups of scouts and guides.

The most important news for 1987 was the acquisition of the Section's own telescope, an 11 inch Celestron reflector, obtained as a second-hand instrument complete with drives and accessories. Testing and adjustment showed that the telescope was in good order, and would be a considerable asset for the Section's future observing programme. With the increased possibilities for observing, meetings were held to discuss the various objects visible at different seasons of the year. The meetings were led by Geoff Falla, combined with observing when possible. Observations were still hindered, however, by the lack of a more suitable base, and in the meantime financial support was still needed to meet the full £3,000 cost of the telescope. It had been acquired with financial assistance, in particular from the late Mr Harold de C. Harston, OBE who was very interested in the Section's activities, and had been shown a view of Comet Halley - which he had also seen in 1910!

During 1988 a good observing site was found at Les Tielles, Torteval, which was used on a number of occasions, but as it was not available as a permanent site the search for a suitable location continued.

Regular meetings were held as usual and the Section's library was expanded, with the donation of British Astronomical Association books from Doug Walton, and with a quantity of astronomy books from the Grammar School. A Perseid Meteor watch on the night of 12th-13th August by six members of the Section, led by Lawrence Guilbert, counted 70 meteors in one hour including some bright, persistent ones. Details of the meteor count were submitted to the Meteor Section of the Junior Astronomical Society.

Meetings in 1989 included a talk by Michael Maunder (a former President of the BAA) entitled *"Chasing Eclipses with Camera and Telescope"*, a travelogue of his solar eclipse experiences illustrated with many beautiful photographs.

The Section's Celestron 11 inch telescope was moved during the year to a vacant cottage at Les Vauxbelets College premises, and observations from there included a good view of a total eclipse of the Moon on 17th August. A photograph of this was published on the front page of the Guernsey Evening Press, there was a broadcast of the night's observing on Radio Guernsey, and Frank Dowding made a video recording of the eclipse which was shown on Channel Television - also earning a fee for Section funds. The year was also a

major period of sunspot activity, with Lawrence Guilbert and Geoff Falla making regular observations of the sunspots. Lawrence Guilbert and Section Secretary David Le Conte gave an on-site interview with Radio Guernsey about sunspots, with Lawrence explaining his particular interest in the subject over many years, and with sketches made of the Sun's surface showing the sunspots. (He had modified a telescope, using attachments for projecting the Sun's image, so that it could be viewed safely.)

On January 25th, 1990 there was a near disaster when the whole of the corrugated roof and frame on the cottage at Les Vauxbe1ets was blown off in a severe gale, and was found in the driveway. There was a successful rescue of the telescopes which were being stored there, but the activities of the Section were affected by this incident for several months.

A Spring appearance of Comet Austin was rather disappointing in its magnitude visibility, but there were good views of the bright Comet Levy which reached naked-eye magnitude in August, and was observed regularly by Section members. In July, Peter Rouse of Channel Television gave a demonstration of weather satellite data and communication systems, including the Meteosat geostationary satellite and the Soviet Mir Space Station. The Astronomy Section was able to have some observations and several meetings resumed at Les Vauxbelets later in the year, also taking part in the Société Open Day held at St Matthews Church Hall, and having displays at the Summer Shows. The major event of the year, however, was in obtaining the Société tenancy of an excellent observing site at La Pointe, St Peter's, with existing buildings, electricity and water supply, parking space, and very good views of the sky. This was the culmination of a search lasting over a period of several years. The Société Council agreed a lease, and following a meeting in October, Section members started a programme of refurbishment and preparation of the site for use as an observatory. Considerable work was needed on the main building, including the repair of floorboards, replacement of windows, and work to improve the ceiling, repainting, and the clearance of brambles and undergrowth in some of the surrounding area. In the meanwhile it was still necessary to use the Société headquarters at Candie with meetings also at Les Vauxbelets. The highlight of 1991 was the official opening of the observatory on 18th April, by two well known personalities, the astronomers Heather Cooper and Nigel Henbest, both also writers and broadcasters on the subject of astronomy. The opening was featured in the national magazine Astronomy Now and on Channel TV, and Frank Dowding also made a video recording of the events. The two astronomers also gave an entertaining evening presentation at Beau Sejour of *"ET- Please Phone Earth!*" with discussion on Drake's Equation and the probability of life elsewhere in the universe.

The conversion of the former German

Mess hut into a base for meetings and observing was not achieved without a great deal of work by members of the Section, considerable assistance from a number of local businesses, and from landlord Hugh Lenfestey. There was space in the building for use as a meeting room and library, and there was just enough room also to keep the main Celestron C-11 telescope and several smaller ones. Section member Lawrence Guilbert had made a wheeled trolley and ramp, and a concrete pad with power connection point was built so that the main telescope could be rolled out of the building when needed. During the year there was observation of one of the best planetary conjunctions of recent years, of Venus, Mars, and Jupiter, and at the Section's annual business meeting Geoff Falla was elected as Assistant Secretary.

With the completion of the Astronomy Section's first 20 years there was still a need, however, for a purpose-built observatory. With plans in mind for this and for a larger telescope, work on this new facility began in 1992. The Section had increased to around 40 members, and David Le Conte's Newsletter sheets of Section activities were soon to be expanded and relaunched, as "Sagittarius".

Geoff Falla

The 2012 Transit of Venus.

The last issue of *Sagittarius* included a brief account of the circumstances for the transit of Venus across the disc of the Sun on 06 June 2012. It will be the last occurrence of this phenomenon until 2117, so this will be the only opportunity for us to see it. Indeed, Guernsey will not experience an entire transit until 2247!

Many of us witnessed the 2012 transit, when Guernsey was in an excellent position to see it in its entirety. We actually saw some two hours of it before thick fog rolled in, obscuring the vision completely. For this 2012 transit we are not in such a good position, and will see just the last 50 minutes of it, at most.

The transit starts at 23.03 BST on 05 June. As that is night-time here it will only become visible when the Sun rises, some six hours later, at 05.05 BST on 06 June. By that time the transit will be nearly over. By 05.36 the limb of Venus will start exiting across the limb of the Sun (third contact), and the event will end at 05.54 (fourth contact).

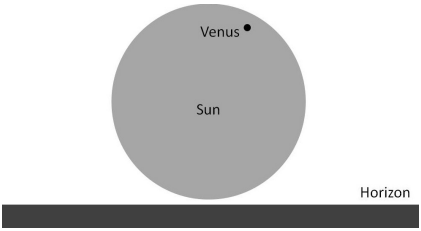
During the transit the planet will be at the top right of the Sun (see diagram). The relevant times are:

Time (BST)	Event
05.05.11	Tip of Sun rises
05.05.38	Tip of Venus rises
05.05.45	Whole of Venus risen
05.09.15	Whole of Sun risen
05.36.00	Third contact
05.54.00	Fourth contact

Because the event will take place on the horizon, it will be essential to have a clear view of the point where the Sun rises over the sea – in the north-east. Even at the end of the transit the Sun will be only 5º above the horizon.

Given favourable weather conditions the Astronomy Section will be setting up instruments just north of Bordeaux Harbour in Guernsey (49º 29´ 30" N, 2º 30´ 14" W), and members are invited to this area. Observing will take place from alongside the path leading north, right on the coast, from the small parking area, and/or from the embankment alongside it (accessible by steps further along the path), depending on which instruments are used.

We plan to use the 11-inch Celestron and/or the six-inch Newtonian telescopes, protected by solar optical quality filters. We may also use the heliostat, which safely projects an image of the Sun.



Solar filter glasses will also be available. The angular diameter of Venus (less than one arc-minute) is just 3% that of the Sun, but it should just be visible without optical aid (but with solar filter glasses). Any member who would like appropriate glasses to view the transit from another location should contact me in advance. A donation (eg £2.00) to the Astronomy Section is suggested. I may also be able to provide optical filter material for use with telescopes.

Warning: Looking at the Sun is potentially dangerous at any time. In particular, optical instruments, such as binoculars, telescopes and cameras, should not be directed at the Sun unless a specialist solar filter is used. Such filters attenuate the light of the Sun 100,000 times, not only in the visible light, but also in the dangerous, but invisible, ultra-violet and infra-red. Ordinary sun-glasses do not provide the necessary protection. While the rising Sun may appear sufficiently attenuated to look at directly, it is wise to be very cautious, and take sensible precautions in order to avoid possible serious eye damage.

Another safe method is to project an image of the Sun onto a piece of white card with a telescope or binoculars (with a lens cap over one side). In this method you stand with your back to the Sun, taking care not to be tempted to look through the instrument. The pinhole projection method often used for observing solar eclipses is unlikely to provide sufficient scale to see the tiny spot that is Venus.

To see more of the transit you will have to travel. The entire transit will be visible from: north-west Canada, Alaska, east and north Asia, east Australia, New Zealand, or the Western Pacific Ocean. Some travel companies are laying on special transit tours.

A map showing the extent of coverage of the transit can be found at http://www.transitofvenus.org. That site also provides a lot of general information about the transit. Other good sites are: http//eclipse.gsfc.nasa.gov/transit/transit.html and www.astronomy.org.gg/links.htm. You will also find four articles written by Astronomy Section members at the links page from our website (www.astronomy.org.gg/links.htm).

Let's hope for clear skies on the 6th June!

David Le Conte

Geoff Falla's regular roundup of articles from popular Astronomy and Space Journals

A Search for planets around nearest star system. A search has begun for planets which may exist in the Centauri system, the closest system to our own Sun. The Centauri search will concentrate on alpha Centauri B, where it is thought terrestrial-sized worlds may be found. (Astronomy Now, January 2012)

The best observing sights of 2012. The most important observing times of the year, including the springtime opposition of Mars, Jupiter at its closest with opposition in early December, with even better viewing of the equatorial belts, and four main moons, and a chance of seeing a transit of Venus on 6th June. There will also be the August meteors of the Perseids which this year will be without much moonlight to spoil the event. (Astronomy Now, January 2012)

The Top Ten Space Stories of 2011. Top stories of the past year, with these including the last NASA space shuttle launch, after 30 years of missions involved largely in the supply of building materials and crew for the International Space Station. Other major stories include the detection of gamma ray bursts from the Crab Nebula pulsar, the best evidence yet for water on Mars, and the discovery that a "Trojan" asteroid is sharing Earth's orbit. (Astronomy, January 2012)

How the Universe reveals its Secrets. From the most distant supernova to our own planet, understanding the chemistry involved is a key to finding out how the universe works. (Astronomy, January 2012)

The First recorded Transit of Venus, in 1639. Following the previous Venus transit across the Sun in June 2004 (and a brief chance of seeing the last one of this century on 6th June), a look back at the first recorded transit, predicted and seen by the young English astronomer Jeremiah Horrocks on 4th December, 1639, from a Lancashire village near Preston. (Sky and Telescope, January 2012)

How could Aliens find us? The search is on for life, and intelligent life, in space, but could alien life

discover our own existence? Artificial light would be mostly faint to detect visually, but there are other emissions such as radio and radar waves which could be detected more easily. (Sky and Telescope, January 2012)

A Beginner's Guide - Galaxies. A description of our own Milky Way Galaxy and how other galaxies were first discovered; the three main types of galaxy which can be spiral, elliptical or irregular in shape; the formation of galaxies, and how some of the brighter galaxies can be observed with the use of a small telescope. (Astronomy and Space, February 2012)

Space Exploration - Past and Future. Marking a half century of space exploration, in particular the NASA achievements from the first orbital flights to the Moon landings and construction of the International Space Station. Also a look at the future role of humans in space, the prospect of a return to manned lunar missions, and the increasing involvement of private companies and other countries in space travel. (Astronomy, Special Issue, February 2012)

The Moon - Formation and Exploration. A set of articles focusing on how the Moon was formed, with several alternative origin theories including the recently favoured collision theory. Also a look at lunar geology examined as a result of the Apollo landing missions, and the most detailed survey being carried out by the Lunar Reconnaisance Orbiter mission which began in 2009. (Astronomy, February 2012)

Quest for the first Black Hole image. Einstein's General Relativity Theory of gravity predicts the formation of black holes. Plans are now going ahead to create a network of radio observatories working together, in effect forming a planetary size dish. This Event Horizon Telescope should reveal how black holes grow, and will put what is currently known about gravity to the test. (Sky and Telescope, February 2012)

Postcards from Deep Space. Some of the stunning images obtained recently from ground and space-based telescopes, studying objects in the most distant regions of space. (Astronomy Now, February 2012)

Dinner Time for Black Holes. With stars and gas clouds revolving around galactic centres in stable orbits, what causes some of the stars and gas to be sucked into black holes at the centre of a galaxy? (Astronomy Now, February 2012)

Unresolved Mysteries of the Universe. There are mysteries in the evolution of stars, planets and galaxies which are still not understood with any certainty, including how planetary nebulae are formed, the origin of gamma ray bursts, and the modern mysteries of dark energy and dark matter which may require an adjustment in the laws of gravity. (Astronomy Now, March 2012)

The Possibility of Water and Life on Mars. Recent photographs of Mars have shown gullies in sloping areas where water may have flowed. It is also thought that Mars may have conditions underground where some forms of life could exist. Areas of high methane concentration, which may have a biological or perhaps a seismic origin have been identified recently on the Martian surface. (Astronomy Now, March 2012)

Obituary
Hugh Lenfestey (1934 - 2012)

Hugh Lenfesty at the opening of the refurbished Observatory Building 21 November 2009

John Hugh Lenfestey, landlord of the site of the Astronomy Section's Observatory, died at the age of 77 on 01 February 2012, having suffered from cancer for some five months.

I had known him as a friend for about 30 years, having made his acquaintance through a mutual interest in Guernsey history and La Société Guernesiaise. He was indeed a history teacher, when I first knew him, but it was after his appointment as the Island's first States Archivist that I really came to appreciate his many fine qualities. As I had been involved in setting up the post I took a great interest in his work, and was astonished at how, starting literally from nothing, he rapidly set up an archives service which was professionally and knowledgeably run, and which soon gained the trust of departments of the States, so that they saw the value of placing their archives with his office.

That first office was in the former Town Hospital, now the Police Station. It was a derelict building, and at times he seemed to be camping out in the only habitable part of it. Nevertheless, he made the most of the situation. I recall visiting him there at lunchtime on one occasion, and he immediately invited me to share his packed lunch. He laid out a tablecloth, and provided home-made bread. It seemed a bit bizarre to be dining in such elegance, in derelict surroundings. Later he moved the office to rented premises in Victoria Road, by which time he had taken on several staff, who, under his guidance, provided an excellent service to the States and members of the public.

Hugh was extremely knowledgeable about all aspects of Guernsey history, but especially the mediæval period, the origins of place names, and fiefs (of some of which he was Seigneur). He was always ready to share his knowledge, and I found him a good

person to turn to on any obscure question.

Indeed he was always ready to help in any way. One day, after talking about the benefits of vraic as a garden fertiliser, he turned up with his tractor, and we went down to Rocquaine (he knew the best places to gather vraic) and got a load for my garden.

He was also interested in my enthusiasm for astronomy, and one day, in 1990, after the Astronomy Section had lost its operational base at Les Vauxbelets (a storm having blown the roof off), he suggested I spend a day with him looking for a new site. We spent the best part of a day looking at his various properties in St Pierre du Bois, including several bunkers, but all had disadvantages (poor access, too remote, no electricity, etc). We had just about given up when he mentioned a builders' store which had just been vacated. We went to have a look, and I immediately said "This is the place!" The rest is history. After other members had agreed we started renting it, and set to work converting it to the Observatory which we use today.

Hugh was always a gentleman. When we met he would formally and somewhat ceremoniously shake hands, then burst into a smile and a laugh. He invariably wore shorts, sandals and T-shirt, even in the middle of winter, occasionally deigning to wear a Guernsey if it got really cold. The only times I saw him wearing a jacket and tie was when he appeared at Chief Pleas as a Seigneur. A true Guernsey donkey, he would sometimes dig his heels in, but always with a joke and a smile. He was dedicated to his parish, served as Senior Constable, and ran the Rocquaine Regatta for very many years. He seemed happiest when driving his tractor, and would sometimes turn up with it at my house, ready for a cup of tea and a chat. I will miss a good friend.

David Le Conte

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