

# History of Section & Observatory Construction

## Astronomical Report

The Astronomical Section was formed at the 1972 Annual general meeting of La Société. For some time before then it had been apparent that there would be sufficient support for the formation of a Guernsey amateur astronomical group, a preliminary meeting of potential members had already been held. The Secretary is grateful to the former President of La Société, 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 Société.

During its first year the Section has gained eleven members, about seven of whom were not already members of La Société. 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:

- "Man's View of the Universe: a survey of modern astronomy" by the Secretary.
- "Finding One's Way around the Sky" by Mr. R.W.J. Payne.
- "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 Société 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 (Secretary)

## 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.

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". 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.

In 1989 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.

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. The Astronomy Section was able to have some observations and several meetings resumed at Les Vauxbelets later in the year.

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 conversion of the site 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 main 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"

With plans submitted and approved in October 1992, work began on building the observatory and telescope installation. Excavation machine work by John Lesbirel and concreting by builder Alan Le Prevost for foundations and pillars was completed by the end of the year, with the assistance of astronomy section members, for main building work to begin in 1993. The beginning of 1993 also marked the launch of the Section's more comprehensive newsletter Sagittarius, compiled by David Le Conte, and named after that constellation because of Guernsey's most favourable southern observatory position in the British Isles.

Main construction work for the observatory began in January 1993, with the design based on a strong wooden building with roll-off roof and large fold-down panels for lower angle observations. The choice of suitable cladding material for the building seemed difficult, until it became known that new electricity generator equipment had arrived in the island. The equipment had been transported in large packing cases made of strong wooden planking, and on David Le Conte's initiative the States Electricity Board was very willing to save this material from dumping by offering it to the Astronomy Section. This was a very suitable solution for cladding the lower half of the building. Other unwanted material at the States Works Department could also be used, so that almost all of the observatory structure was obtained from recyclable materials, with assembly of the frame and covering materials completed during the first two months of the year.

During February Dr Lawrence Pilkington's 14-inch Celestron telescope and Schmidt camera were installed and aligned, with Mars being the first object to be observed. With the observatory operational, the astronomer Patrick Moore was invited to the island for the official opening ceremony. He arrived on March 9th, visiting the observatory briefly before attending an evening meal with astronomy section members at the Fleur du Jardin Hotel. After that, there was a return to the observatory to view Mars at its closest for very many years. The following day the observatory was opened, well attended by those involved in its construction, and Patrick Moore was presented with a very suitable knitted Guernsey, with the presentation by new Section Secretary Geoff Falla on behalf of Section Members. In the evening Patrick Moore gave a talk at Beau Sejour on the subject 'Looking for Life - a Survey of the Solar System', and during his short stay there was also time for Press and TV interviews and other talks.

On April 6th, the 21st anniversary since the astronomy section was formed, David Falla gave a talk on Particle Astronomy, with cosmic rays such as from supernovae, and neutrinos from stars such as the Sun. The first year of the new Sagittarius newsletter was received with much approval, increasing in content with articles in particular by David Williams on the origins of days and months as units of time, and by Mark Humphrys beginning a major series of articles with the local group of galaxies, and major constellations. Daniel Cave also began a series of valuable contributions, beginning with the new generation of telescopes including the Hubble Space Telescope.

At the Annual Business Meeting in January 1994, it was decided to install solar mirrors so that solar activity could be shown. Two six-inch mirrors - a flat reflecting mirror and a concave focusing one with a focal length of about 70 feet, the distance to near the back boundary of the observatory site.

In September a proposal was put to the States of Guernsey for the construction of a granite obelisk monument at the harbour Weighbridge, to mark the 50th anniversary of the island's liberation from the German occupation. The monument, designed by artist Eric Snell, including a curved wall to show the Sun's shadow point accurately during the day of liberation, also needed much calculation work completed by David Le Conte, and was approved.

The two solar mirrors, which had been ordered for the observatory early in 1994, arrived in February 1995 and proved satisfactory, giving about an 8-inch diameter image of the Sun when projected onto a screen on the inner wall of the main building. There was fine weather on May 9th 1995 for the ceremony at the new Liberation Monument, with a huge crowd present, and attended by HRH Prince Charles for the unveiling of the obelisk. The Astronomy Section also put on a display on the Albert Pier for the day, with Peter Langford arranging transport of the C-11 telescope from the observatory, and display material.

For a total eclipse of the Moon during the early evening of September 16th, several telescopes were taken to the car park at Jerbourg Point. Several hundred people came, with the Section's C-11 telescope, Debbie Quertier's Newtonian, and Brian Le Page's Celestron all being used with queues at each telescope.

At the Annual Business Meeting in January 1998, it was announced that application was being made to the Le Riche Centenary Fund for a contribution to the cost of a new Meade telescope, with La Société Guernesiaise having agreed to pay half the cost of the new observatory building.

In preparation for the 1999 total eclipse of the Sun, and visible locally, special viewing spectacles were being made available from David Le Conte's company Eclipse 99 Ltd, with the Section receiving profits from the sales. On June 17th Patrick Moore opened an eclipse display at Candie Museum, and on August 9th the astronomer and writer Heather Couper also returned to the island, giving a talk

'Darkness at Noon' for the coming eclipse. A book on The Channel Islands Millennium Eclipse was produced by David Le Conte, published by La Société.

The Royal Astronomical Society held its National Astronomy Meeting in Guernsey for several hundred astronomers during the week of the eclipse, with a day free for a visit to Alderney on August 11th. Eclipse day was fine with sunny periods, allowing the different stages of the eclipse to be observed successfully, with Jessica Harris producing a comprehensive summary of the day's experiences and transport of telescope equipment to Alderney for the occasion.

There was another Open Day at the observatory on October 26th, with several hundred people visiting, and interviews for a Guernsey Press feature. It was announced that fundraising was going well for the purchase of a larger telescope.

With funds available, new telescope equipment including a 16-inch Meade reflector and a 5-inch Takahashi refractor supplied by True Technology arrived on December 2nd, and after final adjustments were ready for observations, with the official launch date on March 10th, 2000, an opening for Société members on the following day, and public open evening on March 14th.

#### Geoff Falla

Extracts from Geoff Falla's articles in the Sagittarius Newsletter of April-June 2012 and 2015 The links to the full articles can be found below;

- Sagittarius 2015
- Sagittarius April-June 2012