



The group that went to Bletchley Park in February—see page 19



New members meeting in February



At Herstmonceux—see pages 16 &17

Bookham and District U3A

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here should be plenty to interest everybody in this Senior Moments with pieces by Chris Pullan on Bookham trivia (where he gets all this information is amazing), a visit to the new Design Museum (well worth going to South Kensington to see), a new member's history of buses with many illustrations—not photographs but very fine watercolour paintings showing great attention to detail not only in the buses but also the people. There is a report on a visit to Herstmonceux by David Putland—another new contributor to our magazine. In the article by Pippa Carter on the visit to Bletchley Park I learnt a great deal about the very complicated operations there in this very succinct article.

The Metal Detecting group made a "gold" find in their recent detection work which all goes to show the considerable diversity of the many groups within Bookham U3A. This makes it all the more surprising that there are as many as 120 members of our U3A who belong to no groups at all! This surely will change with so many activities and all the help and encouragement that can be provided with setting up a new group.

Although more members are now contributing to Senior Moments, there never can be too many, either with articles they have written or information on activities they have requested. It is not everybody who can put pen to paper or fingers to keyboard to produce articles but many more people can express their wishes for particular features that can then be researched and written up by other members. Now if everyone could write such as informative and amusing piece as former editor Peter Brazier has done for Wine Appreciation-I on page I3 this editor's job would become so much easier!

Maurice Baker

Cover photo in Teazle Wood (at bluebell time) behind Tesco by Maurice Baker (access is at the back of the petrol station at Tesco Leatherhead)

NOTES FROM YOUR CHAIRMAN

t seems a long time ago that I wrote my last note. It was back in January and since then many of the spring bulbs and early shrubs have been and gone, all the plants are now well into leaf and the camellias and magnolias are looking magnificent. Time for the lawn mower!

Our February meeting had a change of speaker, everyone turning up to hear from a woman that does stunt work for TV and films only to find a young man ready to regale us with his stories of taking award-winning wildlife photographs. His name was Tom May and his photos were breathtaking even if they did at some time cost him his camera when it was sent to the bottom of the river. I would like to thank all the people that made suggestions to Frank Cross for a substitute speaker and for Frank managing to get such a good speaker with only a couple of days' notice. In March we travelled to Ancient Egypt with Janet Diamond and looked at its long history through a series of objects and how they were significant to this 3,000 year-long historical period.

January saw me off to the Classical History Group where I found out about the Roman Road, Via Egnatia, which headed east linking Rome with Constantinople. In February I went to the opera – El Cid courtesy of Ruth Blood's Opera Group. Not only did I enjoy the opera I was so very impressed that the group had found a production on YouTube, downloaded it, hooked up a laptop to the television so that we could have a thoroughly good afternoon. Then there was the research to accompany the résumé of El Cid which included details of the early theatre and why the staging at this time would have been so simple. I have a couple more invitations to visit groups but would be very pleased to receive some more so that I can fully appreciate all that we do and why people find ours such a lively U3A.

I know that we all enjoy what the U3A has to offer and many of us take full advantage of groups, outings and events as well as our Tuesday afternoon meetings. I have a plea, especially to some of our newer members—if we want a vibrant U3A

we need new ideas and some help. Please, if you think you could arrange an outing or event, talk to one of the Committee and we will help you to hopefully bring it to fruition. The website and membership database are a vital tool for a modern U3A so we also need to expand the number of people with technical knowledge/support for the web and database. Not only is it unfair, it is also unwise for us to rely on a very few people. Sorry - nagging over, but please if you can help let us know. In the meantime have a lovely time and I look forward to seeing you over the next few months.

Best wishes Lynn

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London Walks with Colin Jackson

or the March London walk it was a fine sunny Spring day and were conducted round

well known but unusual parts of the city by a Blue Badge Guide. They know all the best walks in London and constantly point out aspects that are significant and yet generally unknown.



Our guide took us to the entrance to Paternoster Square and we looked through the gate of Temple Bar that was originally one of the main gates into the city and is still used on ceremonial occasions.

Paternoster Square has been rebuilt and modernised in recent times. Booksellers used to

take books in handcarts around to likely selling places. Later they setup stalls in Paternoster Square where they were permanently on display. It was claimed by our guide that this is where the word 'stationery' originally came from.

All the narrow streets around St Paul's were built so that they had a view of the cathedral at the end of each street and we made our way through a number of them.

A statue of William Shakespeare can be found in a quiet tucked away garden. It is there to commemorate two of Shakespeare's friends John Heminge

and Henry Condelle who were actors in several of the plays. It was Shakespeare's system to write his plays on separate pieces of pape that he gave to each of the actors and these two men gathered all the sheets he had



written for his plays and put them together to make the basis of the collection we have today. The two men are buried in the

garden.
There is a
great mix of
the very old
and most
modern in
many places
in the city
so that it is
not unusual



to find parts of a Roman wall close up to a modern glass building. The church of St Mary Le Bow was

rebuilt by Christoper Wren after the Great Fire of 1666 and we were reminded that a true cockney must be born within the sound of these Bow hells

Chris & Don Edwards















Bookham & District U3A

Dine and Divas

Dinner plus two singers and their pianist provided for an evening of popular music

Wednesday 24th May 2017 Old Barn Hall

Bring your own drinks and glasses

Doors open at 7:00pm for 7:30pm

Tickets on sale April and May Tuesday Meetings Price £20













Groups ready to welcome new members

Knitting/ Needlecraft Group (new group)

London Walking (new group)

Tai Chi 2 (vacancies)

Travel Experiences (new group)

Science & Technology (new group)

A second Gardening Group (new group)

Suggestions for any other group activity not already catered for.

Thoughtful quotes

Kindness is in our power even when fondness is not.

Treat everyone with politeness, even those who are rude to you. Not because they are nice but because you are.

Never look down on anyone unless you are helping them up,

It's nice to be important but it's more important to be nice.

Don't be yourself—be someone nicer. Heather Jennings 6

U3A Vegetable Gardening

n February we joined up with Bookham, Fetcham and District Garden Society for one of their monthly evening talks. We were treated to a very informative and entertaining talk with Paolo Arrigo from Franchi Seeds, the oldest family run seed business in the world, dating from 1783, talking about 'Italy from seed to plate'. Paolo set the scene with his 90 year old Italian accordian playing a couple of traditional songs. He then took us on a gastronomic journey around Italy from Roman times to present day UK. Paolo also gave us an insight into the seed business explaining how most of the seeds are actually grown in China and Africa and not here in the UK. Franchi Seeds however, are grown in the same climate zone in Italy as our own and therefore have a much better germination success rate. We were then able to buy 6 packets of seeds for the bargain price of £10.

In March we met up for an informal meeting at Anita's, talking about our plans for the coming season. We then visited Angela's garage sale in Eastwick Road buying up vintage gardening tools



before crossing the road to look at Anita's allotment. She now has eight raised beds and looks very different from two years ago when she had the first four raised beds built. She has

successfully grown forced rhuburb for the first time and is starting to plant one of the raised beds with fruit bushes.

In April we visited the Vegetable Garden at Polesden Lacey and were very lucky to have a guided tour by Carol Thorne one of the Resident Gardeners. There has been a lot of work done over the winter and there is now a wonderful new greenhouse which contains vegetable and flower seedlings being potted on ready for planting out. The biggest surprise was the newly built composting area containing four large compartments for different types of composting material. Do look at their excellent five posters which explain what you should only put in your compost.

The vegetable garden was originally where the rose garden is today, but is now housed near the Head Gardeners Cottage. This is available for holiday lets. The cabbages have to be netted to deter blackfly, pigeons and rabbits (they do have a rat and rabbit pest controller!) They use hazel

sticks to support the peas and have sown Epicure broad beans. The shallots were autumn sown and they have planted out Beetroot Golden. Sow parsnips three to a hole filled with compost every 15 cms

known as station sowing.

More fruit trees will be planted in the orchard area as well as



erecting a fruit cage. There is a collection of bee hives, most of which are privately owned with only one belonging to the National Trust. There is a medlar fruit tree which has survived and we were told that it was not worth trying to make medlar jam. The chickens are now housed with electric fences at the back of the orchard.

There is a new foilage bed for cut flowers and alongside are cold frames where they are growing all types of lettuce for the restaurant. A trainee horticulturist has designed and planted a new herb garden and the old bothy contains tender overwintering

flowers.

Over the bridge is another new area with final planting, yet to be decided. Last year they grew pumpkins and spinach. Originally the



plan was to divide the area into allotments but there is no easy water access.

Carol gave us a very informative and enjoyable tour of the vegetable garden and it would be a good idea to revisit in the summer to see its progress. A couple of our members were also lucky to be given some comfrey plants – the most gorgeous white and pink coloured flowers.

Anita Laycock

Trivia around the Bookhams

y first topic is an excellent example of inspiration from an unlikely source. One day, I was in Bookham library and came across a book 'Dancing with Mrs

VIRGINIA WOLF
Mrs Dalloway

tt
it
aur

Dalloway' by an American,
Celia Blue Johnson. By the
way, "Mrs Dalloway" is by
Virginia Woolf (1925) and
was included in a London
Times list of 25 books you
should read. I was about
to dismiss it when I realised
it was a book about where
authors get their ideas for their
novels. It has debunked some
of my beliefs – for example 22
in Catch 22 was chosen because
it was different from 11 a number

which was being used for another novel at the time, not because it referred to Regulation

So on page 28, I read 'On an otherwise ordinary day, he was suddenly swept into a daydream that took place far away from the village of Great

C S (Jack) Lewis

C.S.Lewis

Bookham, in unfamiliar snow-covered woods.

covered woods. Falling out of the wardrobe
This far away land was
just as peaceful as the wintry countryside in

England.' How many of you know who 'he' is and the novel referred to? He is C S Lewis and the novel is 'The Lion, the Witch and the Wardrobe.' Now I had heard of him in connection with Bookham but had never known what brought him here.

So my next task was to get his biography and I obtained

the one by A N Wilson. This has several references to Great Bookham. C S Lewis known as 'lack' was born in Belfast in 1898, but his father decided he should have an English education. He went to two boarding prep schools and then Malvern College where his elder brother was asked



Mr & Mrs Kirkpatrick

to leave as he had been caught smoking. In 1914, C S left and was then privately educated by WT Kirkpatrick.

"On an otherwise ordinary day, he was suddenly swept into a daydream that took place far away from the village of Great Bookham"

Kirkpatrick had been his father's headmaster and they remained close and it was he who took on C S's education. As the biography states: 'On 19 September 1914, he stepped off the train at Great Bookham and encountered the legendary Mr Kirkpatrick'. He was 66. C S stayed for three years until he went to Oxford in 1917.

An influence on him was Mrs Kirkpatrick whose favourite occupations were 'Tea parties, bridge and gossip'. It's worth pointing out that this must have been Auction Bridge and not Contract, as the game we play today had not been invented. Mrs Kirkpatrick tried the experiment of introducing C S to girls. For example, there was a family of Belgian refugees in Bookham and C S affected to be smitten by one of the girls.

"It's worth pointing out that this must have been Auction

Bridge and not
Contract, as
the game
we play
today had not
been invented"

Unfortunately
Wilson does not explain
where the house C S
lodged at was. However
another source states
it was Gastons. It was

situated with entrances in Little Bookham Street and Sole Farm Road. The driveway off Sole Farm Road is where



Fairlawn is now. This picture shows a couple of mature trees that may date back to the Gastons era. And the second is what I think was the driveway off Little Bookham Street.

"What intrigued me was the idea that Bookham station had a bookstall"

The house was demolished in 1965. There are Gaston cottages almost opposite Little Bookham village hall.

In March 1916, C S was at Bookham Station when 'quite by chance, on the bookstall, he



Trees of Fairlawn

picked up a copy of Phantastes, a faerie romance for men and women' written by George MacDonald in 1858. Its relevance can by seen by the following C S quote ...'That night my imagination was, in a certain sense, baptized; the rest of me[,] not unnaturally, took longer. I had not the faintest notion what I had let myself in for by buying Phantastes.'

What intrigued me was the idea that Bookham station had a bookstall. Later C S was injured during the First World War and he revisited the Kirkpatricks.

Bookham was at its best; a mass of green, very pleasing to one "that has been long in city pent" ... I opened the gate of Kirk's garden almost with stealth, and went past the house to the vegetable garden and the little wild orchard with the pond... and there among the cabbages in his shirt and Sunday trousers, sure enough, was the old man still digging, smoking his horrible pipe...'

Chris Pullan



I've joined another Group!

ver since I became a member of Bookham U3A, now over 10 years ago, I have ioined groups and the first was to lead the Photography Group with encouragement from Pippa Carter and Peter Hudson and the most helpful assistance of the then Groups' Coordinator, Chris Edwards, who with Don are still members of this group. Later I set up the iPad Group at the suggestion of Jenny Gaskell and Kate Broad, which at first held its meetings in the Waterfield Room with more than 30 members, but now meets once a month at my house. Kathleen and I enjoyed John Dicker's Ornithology & Botany Group for several years where we learned so much about wild flowers and birds. Our interest in Art resulted in us becoming members of Jenny Dennison's Art Appreciation 3 Group, where each member picks an artist to talk about and show some of their work and then I was persuaded some time ago, by Derek Parker, to join the Monday morning Painting Workshop that is open to artists of all abilities and the best in this group could easily hold their own in any art club. I occasionally do a London walk with Colin Jackson's always interesting London walks and I have 'gate crashed' the Military History Group from time to time. I have always had an interest in Architecture and was tempted to join by Cynthia Watson who let me see the new programme where the first session was to

show pictures and talk about one building, anywhere in the world from before 1900 and one from after this date. I found this irresistible, so I prepared my pictures and chose to talk about Christopher Wren's early work—the Sheldonian Theatre in Oxford 1669 and the Herzog

& de Meuron architects for



Sheldonian Theatre Oxford

L.B.

de Young Museum San Francisco

the de Young museum in San Francisco 2005. Although far away, there is a strong connection with England, because the same architects also designed Tate Modern, both the original and the very recent impressive extension to that great art gallery in London.

My attention was drawn to group membership now, because at the recent Group



London's Tate Modern

Leader's meeting a graph was shown of the distribution of group membership throughout Bookham U3A. While a large number of members (more than 120) belong to no group at all and most belong to just 2 groups, one member apparently belongs to as many as 8 Groups!

Being the editor of our News magazine does mean I meet a high number of Group Leaders (I am after all trying to get them to contribute to Senior Moments) and I do receive invitations to join groups from time to time. Ruth Blood recently suggested I should consider the Opera Group, which is tempting but I think I shall join Vegetable Gardening first, where Anita Laycock has now agreed to write a contribution in every

"If you don't yet belong to any group do give it very serious consideration, there is much to be gained"

issue of Senior Moments.

At the present rate I run the risk of achieving the highest number of groups for a single member—so please don't tell Mike Withers I did a lot of cycling years ago!

If you don't yet belong to any group

do give it very serious consideration, there is much to be gained. There are 75 groups within Bookham U3A. If you can't find one that interests you, do consider setting up a new one. There is plenty of help and assistance within Bookham U3A to guide

and support you.



Kathleen & Maurice Baker

History Beneath Your Feet

ave you ever been close to history? I mean, really close: to be the first person to handle a coin that was handled last by someone who lived before Christ was born. It is quite an overwhelming feeling.

My wife and I are keen Metal Detectorists and early in December 2016 we were on a dig in Betchworth, near Dorking. I had been sweeping the ground for about 2 hours when I got an interesting signal so I decided to find out what I had found. I dug a hole about 6 inches deep and straightaway I saw a small disc of earth with a metal edge to it. When I brushed off the earth I realised immediately that it was gold. It was round, no bigger than



my fingernail and had the raised impression of a horse underneath a sun on one side and

raised markings, similar to a wheatsheaf, on the other. I wasn't sure what I was looking at because it was slightly concave and, therefore, unlike any coins with which I was familiar. My wife came rushing over when I shouted, "I've found gold!" We gazed at it because it was so bright and in such a wonderful condition. It was so exciting because Metal Detectorists



can often detect for years without finding anything gold. We recorded detailed coordinates

of its location to ensure that the County Finds Liaison Officer could record it accurately in the Portable Antiquities Scheme and we drove home in a bit of a daze. Interestingly, Margaret had also found her first hammered coin (pre 1650) at about the same time so we both had something to celebrate.

The FLO subsequently confirmed that it was a coin from the First Century BC produced by the Atrebates, a tribe who, under the rule of Commius and later his son Commius the Younger, lived primarily in Berkshire, Hampshire, West Surrey and West Sussex. So, the last person to touch this coin lived 2000 years ago and before the birth of Christ. Even now I can't get my head around it.

Why am I writing this article? Well, do you have history like this on your land? We could help you uncover it. Metal detecting is, literally, history in your hands. Margaret and I are members of the Bookham U3A

Metal Detecting Group and we would love to discover more history like that. We are a smallish group (no more than 10) who meet twice a month on the second and fourth Wednesday.

We follow all the metal detecting "rules." Holes are filled in immediately and the land made good. Finds are reported and lodged with the Finds Liaison Officer and any value, should items be sold, would be



Margaret & Michael Grinter

shared between us and you, the landowner. There would be a contract to that effect. I don't know whether you recently saw on television the report of the Jersey hoard worth millions and found by two Metal Detectorists. You never know what we might find: you just don't know what history is beneath your feet.

If you would like to discuss how you can help by allowing Bookham U3A to search your fields please ring Frances Fancourt on 01372 454000

Margaret & Michael Grinter

A history of buses

ew Bookham U3A member David Molyneux has an interest in buses and so involved is his interest that

and published Good old M&D his own book beautifully illustrated with some and very many MOTOR SERVICE DAVID L MOLYNEU

he has written titled "Good old M&D'' (referring to Maidstone & District Motor Services Ltd). The book is throughout photographs excellent original paintings

clothing from the Edwardian era through to the 1920s. 30s, 40s and 50s. Some of the people depicted are shown here. The

book costs £15 and it makes an interesting social history of buses during the first half of



of buses, all made by David, in their local surroundings with passengers and people



involved in normal everyday activities. The attention to

detail in the paintings, not only of the buses, is absolutely fascinating. He has captured

various people going about their everyday tasks and also recorded the change of fashion in

the 20th century.

David is not new to U3A. He was a member of Fetcham but has now decided to become a full time member of Bookham U3A. We shall look forward to seeing more of his paintings in due course.

Maurice Baker



David Molyneux

Wine Group-I sees red!

radition dictates that imbibing red wine can result in your nose turning red. Wine Appreciation Group-I put it to the test in March.

Their monthly bottle banter meeting—as always a barrel of laughs—coincided with Comic Relief Red Nose Day and hosts for the evening, Irving and Barbara Jones, set the scene with appropriate facial



adornments. Of course seeking the "nose" of wine is one of the essential elements of appreciating its character and quality and the Jones'

colourful presentation made the process something not to be sniffed at.

Their theme for the evening was the Wine Society's "discovery" of different and unusual products from some smaller and less well known wineries in South Africa and Europe.

After the presentation—two whites and four reds later—the members enjoyed sampling the coffee and cake and party fare that always rounds off the Group's get-togethers.

The vintage Wine Appreciation Group-I has been maturing for almost as long as the Bookham U3A has been in existence. Most of the original members are still raising their glasses on a regular basis but if asked "after all these years are you not bored with wine tasting?" as the March meeting confirmed, the "Nos" would definitly have it! Peter Brazier



Gordon Elsey addressing members of the busy Painting Workshop Group about possible calendar entries

The new Design Museum

his was a visit to the new Design Museum in South Kensington, not far from the tube station, but it did involve quite a bit of walking around this very new museum. It used to be the Commonwealth Institute but has been completely redesigned and now houses all the best of design that was held in the previous building it occupied near Tower Bridge, They



even brought their outdoor modern sculpture with them. Most people travelled up from Bookham on the train and all had coffee before moving

on individually to explore the building and its contents. We took the lift to the top of the building on the second floor where there was an exhibition to do with age, in all its aspects. Before we entered the age exhibits there was a large wall display with many familiar objects



designed in the past. There was even a Marmite jar under the chair!
The age exhibition had so many facets from the numbers who will be over 75 in future years to

the many and various designs to help us cope with everything in advancing years. There was a particularly

ingenious scooter cum basket trolley that I think could be of general interest.

The Design was not only in the various pieces on display

but also in the building itself with one feature being particularly appealing. This was the main staircase from the ground floor that was



very wide but the centre part of the steps had been turned into benches for people to sit on.

The shop was full of many specially designed pieces that could appeal to all tastes and wallets.

As always Colin had found a suitable pub for our lunch where he had pre-booked two tables for us all. There was the intention to



walk round Holland Park after lunch but by

then it was raining so we all made our way home. The Evening Standard we read on the train going home stated 'The Design Museum has had more than a quarter of a million visitors since it opened only 12 weeks ago'.

Maurice Baker



Out & About with Bookham U3A

OUTINGS & THEATRE VISITS
To book please contact Anne Glyn
Theatre Matinees (by coach)

The new arrangements for organising outings in Bookham U3A

nne Glyn is the coordinator for Bookham U3A outings. This means individual members are now expected to come forward to arrange "one off" trips. Anne can assist them with details of the most appropriate coach companies to consider etc. There is no need to think of only 52 seater coaches, but individual members will book the transport and venue. Once this is done they will inform Anne of the date of the outing and she will announce it at the monthly meeting, hand out booking forms, collect the money, issue receipts and make up the list for the outing. Any other assistance or advice they need will be provided. (see the write up on page 18)

Possible venues include Sissinghurst Castle Gardens Kent; The Red House, William Morris, Kent; William Morris Gallery, Walthamstow; Mini Car Plant, Oxford; The Linnean Society, Piccadilly London; Dulwich Picture Gallery; Down House, Kent; Kelmscote, Oxfordshire; and the list goes on.

All these venues give details on their websites about visiting.—Ed

PLANNED OUTINGS

The Royal Pavilion, museum and gallery, - the date is July 19th The cost is £27.50 Historic Rochester on September 19th, again from 9am until 4pm at a cost of £17.

U3A SURREY NETWORK STUDY DAYS

Fri May 19th

The talk presented by Val Woodgate is entitled Signs & Symbols - The **Hidden Messages in Paintings**. More information and a booking form can be found here.

Fri Jun 16th

Einstein 101 & His Continuing Legacy, presented by Roger Luther.

South East U3A Forum

June 19 to 22

The South East Forum Summer School will be held at the University of Chichester from Monday 19 to Thursday 22 June 2017.

The Annual Conference on the theme Learn, Laugh and Live! will be held at the Meridian Hall, East Grinstead on May3rd. The keynote speakers are Sam Mauger, the new CEO of the Third Age Trust, and Marianne Talbot from Oxford University talking on "Is moral truth relative or absolute?"

In celebrating Surrey U3A Network's 100th Study Day more than 200 members were at the Yehudi Menuhin School and Pippa Carter produced a beautifully decorated cake to mark the occasion.

BOOKHAM OPEN GARDENS 2017

Sunday June 18th June - 10am to 5pm

This year's event will feature at least 10 varied and attractive private gardens Enjoy looking at some lovely gardens and pick up ideas in a friendly and relaxed atmosphere.



At least 10 private gardens, the Grange Centre, Manor House School and Little Bookham Allotments will be open.

Visit to Herstmonceux Science Centre

n a bitterly cold grey February evening 41 members of the local Bookham and East Horsley U3A Science & Technology and Astronomy Groups visited the Observatory Science Centre, formerly the Royal Greenwich Observatory (RGO), at Herstmonceux in Sussex. The visit was a fascinating insight into the



The Group



30"Thompson Reflector



Easy to move 5 Ton telecsope

equipment used by the Observatory to carry out its job of photographing and measuring astronomical features like the position and distance of stars. For those of us interested in instruments

For those of us interested in instruments it was great to be able to see and touch telescopes built over a century ago but still used for science up to late 1980s when the RGO moved to Cambridge and telescopic observations would be made from more suitable environments. It was interesting to see the various designs of telescopes and mountings each designed for a specific job and also to appreciate the buildings into which they had been put. All of the telescopes had equatorial mounts (one axis of rotation parallel with the earth's axis), were driven by electric motors and had smaller telescopes attached to them to track the object under investigation. An operator kept the guide star aligned with a crosswire in the alignment telescope eyepiece as computer control had not yet arrived; this was a very tedious operation!

The conflict between those who wanted the Observatories to blend into the countryside without a great deal of thought for those who were going to work there, must have made carrying out serious research a challenge. The fact that the instruments took most of the night to come to equilibrium because of the green copper domes was another problem. if only they had been painted white! And, all those steps to negotiate and perhaps an unwelcome trip into a fish pond whilst carrying your valuable photographic plates back to the lab to prepare and measure them.



Telescope Domes C&F

It's amazing to think that when we had the Isaac Newton Telescope at Hertsmonceux we had the fifth largest telescope in the world on the South Downs; in England, but even better to think that



26" Thompson Refractor Employs a 26" dia. Lens to collect the light

it is now perched high above the clouds in the Canary Islands experiencing twice as many clear nights as it had done here. But every cloud has a silver lining, because the closing of the RGO leaves all the other telescopes back here for us to enjoy and learn from and enabled a Science Centre to be built! The attached photographs show the



Beautifully made Orrery

telescopes we were privileged to meet. What amazing engineers those Victorian folk were!

Our evening was enhanced by enthusiastic guides and later by an even more enthusiastic amateur astronomer and a 'twilight meal' in the old Optical Laboratory.

Observatory Facts

The Scientific History of The Royal Greenwich Observatory at Herstmonceux

he Royal Greenwich Observatory (RGO) was founded at Greenwich in London in 1675 by King Charles II but was moved just after the Second World War in order to escape the lights and pollution of the city. The site at Herstmonceux was chosen as the



38" Congo Schmidt telescope



Yapp 36" reflector (employs 36 concave mirror)

most suitable in the UK. By the mid-fifties the observatory was fully operational. The existing telescopes were augmented in 1967 by the giant 98-inch Isaac Newton Telescope (INT) once housed in the silver dome to the south of the main complex. During its days at



Close up of the Orrery

Herstmonceux, the RGO built up an enviable reputation for world-class astronomical research. Each year Herstmonceux Castle was the venue for a major conference attracting top

astronomers from all over the world. RGO was also responsible for more routine work, involving the careful mapping of star positions, monitoring of solar activity and provision of a national time service. It was from the observatory's atomic clocks at Herstmonceux that the familiar 'six-pips' were sent by land-line to the BBC for broadcast. Today, the BBC generates the 'pips' for themselves. Another facet of the RGO's work was the production of annual almanacs which contained the carefully computed positions of the sun, moon, planets and stars for every day of the year. This work was carried out jointly with the US Naval Observatory in Washington DC.

Unfortunately, even Herstmonceux is not a good astronomical site in world terms and the unreliable UK weather meant that the Isaac Newton Telescope (INT) could not be utilised as much as it should have been. With the advent of cheap air travel in the sixties it became feasible for astronomers to travel to other observatories in order to use telescopes in the best possible locations. Eventually, the decision was taken to establish a major overseas observatory in the northern hemisphere and to move the INT there, where it could be put to better use. In 1979 the telescope was dismantled, removed from its dome and completely refurbished before being installed on top of an extinct volcano on the Canary Island of La Palma in 1984. Here it forms part of the International 'Roque de los Muchachos Observatory' run as an overseas facility by the Royal Greenwich Observatory. With its main telescopes located abroad, resources for maintaining

the instruments at Herstmonceux diminished and they were used less and less. Eventually, the decision was taken to move the Observatory again, this time to a new site at Cambridge, adjacent to the University's Institute of Astronomy. The Observatory moved to Cambridge in 1990 leaving behind the Equatorial Group of Telescopes.

When the estate passed into the hands of Queen's University of Kingston, Ontario, Canada, Science Projects (a company with charitable status) proposed the idea of a 'hands-on' science centre, located in the old telescope buildings. The proposal was backed by both the local district and county councils and, as a forerunner to the permanent centre, a travelling exhibition known as the Discovery Dome visited the site for three months during the summer of 1994. The Observatory Science Centre opened in April 1995. The domes and buildings and telescopes are being renovated and the Centre is a major venue for exhibitions, lectures and educational programmes. Research and training facilities are being developed in conjunction with local universities, colleges and technology-based businesses.

The renovated telescopes are providing a unique facility for schools, colleges and astronomical societies. The 26-inch Thompson Telescope Satellite Tracking at Herstmonceux throwing some light on the mysteries of the universe.

David Putland 27 February 2017

Organising a U3A outing

ookham U3A has now adopted a different format for organising outings, visits and trips. In so doing, and as leader of the first trip, I have been asked to write a short article on how it operates.

To begin with, individual U3A members would be welcomed to come forward to the Committee and offer their services in organising a trip they think people would enjoy.

All that needs to be done is to book the venue, get details for the day, food, seniors' rates etc and book transport — Reptons Coaches are most friendly, helpful and reliable and know us well. Choose a coach for as many you may wish to take. I chose a 34 seater, thinking it was better to fill it and have a waiting list—this worked well.

Ascertain the cost of the tour or venue, add cost of coach and tip for driver then divide the total by the number of people going. This will give you an actual cost per person – always round up rather than down.

The administration of sign-up sheets, members' names, details and the taking of money should be left in the very capable hands of Anne Glynn who will be at her desk at all monthly Meetings. She will liaise with you throughout.

We had absolutely no problems at all from start to finish. — It would be good to see further trips being organised by members to keep the continuity of the format and for all the members' enjoyment.

I am sure many of you can follow this one – we look forward to it.

Pippa Carter

Bookham U3A visit to Bletchley Park

letchley Park, nestled in the countryside at the time of WWII, within easy distance of London and halfway between Oxford and Cambridge Universities is now surrounded by the massive commercial and industrial town of Milton Keynes

(roundabout world). Bletchley Park and its

outstations were at their peak, home to around 10.000 men and women instrumental in the

codebreaking operation during WWII which many historians believed helped to shorten the war by up to two years, saving countless lives. They tackled the complex task of intercepting, deciphering, analysing and distributing the intelligence derived from enemy radio signals, while their work remained shrouded



in the highest levels of secrecy. The techniques developed here played a major role in the Cold War and, in many cases, remain highly relevant today. It was also where the world's first electronic computers were installed and

operated.

Breaking Enigma The Enigma used rotors to scramble messages into unintelligible cipher text, The German military adapted an early commercial version,





marketed to the banking industry, and believed it to be impenetrable. Each one of the machine's billions of possible combinations generated completely different cipher text. Finding those settings - most of

which were reset at midnight every day - was the challenge faced by the Codebreakers.

The standard three-rotor Enigma was capable of being set to approximately 159,000,000,000,000,000,000 possible combinations.

The Bombe machine was developed by Alan Turing and Gordon Welchman to speed up the breaking of Enigma, so that messages were still operationally relevant. The Bombe helped deduce the day's Enigma settings, of both the rotors and the plug board, by eliminating the many incorrect possibilities.

The surviving fabric of Bletchley Park shows every stage of the advances made in cryptographic, computing and intelligence processes. War work

began in the Mansion, then expanded into hastily built timber huts and later brick, steel and concrete blocks, most of which still stand today. This urgency was sanctioned by Winston Churchill and the

construction of the blocks marked the Allies transition from defensive to offensive military operations, including the bomber offensive, the break out

from North Africa and preparations for the invasion of Europe.

2014 was an exciting landmark year for Bletchley Park. Following 22 years of hard work by the BPTrust it saw the completion of the first phase of essential restoration at the WWII landscape, iconic codebreaking huts and the transformation of Block C into a vibrant and atmospheric Visitor Centre. The next phase will cost in the region of £20 million and take ten years to complete.

The BPTrust feels a responsibility to safeguard this important site which will be a permanent and fitting tribute to those extraordinary people who undertook the work that helped change the very course of history.

Pippa Carter





Group Leaders meeting



Art Appreciation-3 meeting dicussing the artist John Waterhouse



Colin Jackson's London walk.—see page 5