' TOUCHPAPER'© Published by WARGM Friends Association Printed by PRONTAPRINT Bishop's Stortford

# Touchpaper

## The Newsletter of the WALTHAM ABBEY ROYAL GUNPOWDER MILLS FRIENDS ASSOCIATION

[a registered charity No. 1115237]

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2006

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PLEASE NOTE: Deadline date for submissions to the next issue is 15th February 2007



## Editorial



Another year nearly gone! Thanks to all of you who sent in contributions over the past year and I extend a hearty welcome to all those who will, I know, send in many contributions over the next year!

I send my usual, but Most Sincere Wishes to you all for the Christmas Season and With All Best Wishes for the coming Year.

Norman Paul Jouchpaper Editor

and now

A Message from the Treasurer (Yes, it's me again but with my other hat on!)

Time once again to renew your subscriptions. A renewal form and envelope is enclosed for your returns.

Please note that cheques received before the 31st December will not actually be banked until the first banking day in January.

At great expense, the return envelope is stamped - please don't waste it!

Thanks to all of you who returned the Gift Aid declaration sent with the last issue. If you haven't, another form is enclosed. This is important to us as it means that the refund we receive from the Inland Revenue will enable us to do so much more for the site. If you do not pay income tax, still let me know and I won't bother you again! **Norman Paul** Hon. Treasurer



## **CHAIRMAN'S CHAT**

It has been a very good season at the Mills and some excellent events were held. Visitor numbers have been increasing year on year and this year attendance was in excess of 18,000; up by 3,500 over last year.

A fortnight of 'Gunpowder, Treason and Plot' was held over the period of 30th October to the 10th November. This was very popular and almost 1500 children, from infants and primary schools, attended. Particular thanks are due to the Education Staff, who worked extremely hard, and to the volunteers who guided the children between the various buildings.

Flooring in one of the bays in L157, mentioned in the September Touchpaper, is now complete and approved. The next step is the construction of a replica full size gunpowder incorporating mill. It is hoped that this will be completed in time for the opening of the 2007 season.

At the time of writing we are awaiting delivery of a Ballistic Pendulum and a Ballistic Mortar from HSE at Buxton. Our thanks to Tony Barratt for facilitating our acquirement of these valuable artefacts. They were used for testing the explosive power of blasting materials but were superseded a good few years ago. Erecting these in L168, the large exhibits building, will be a significant problem. The total mass of the two is around 14.5 tonnes with the heaviest part being an old prototype sea service mortar dating from the Crimean War which weighs 5 tonnes.

The Mills again took part in 'Make a Difference Day' on Saturday 11th November. The Epping Forest Volunteer Centre organised volunteers to come and assist in clearing vegetation from the canal bed, the wildlife walk, around L122 (Main Lab) and L119. They made a big difference and our sincere thanks go to them for all their efforts.

With very best wishes for Christmas and the New Year. John Wright

## **ISRG REUNION**

24 people attended the ISRG visit on 27 September, I only knew SIX of them, one had a familiar face but I didn't know who he was! Only TWO of them worked there with me! After all I did leave the group in 1967. It was worth the journey to meet and reminisce with Alan Fereday and John Vernon.

Around a dozen of the visitors had never been to the Abbey before. **Roy Atkins** 





## MORE ON THE 'DROP TOWER'

"The picture of the Drop Tower on the South Side Burning Ground reminded me that Gordon Orr, Steve Wood and I of the RO Hazard Assessment Group were (probably – unless someone knows otherwise!) the last people to make use of the tower for testing explosive packaging. This would have been in about 1988. The tower had been built years before (WW2 vintage?) and consisted of a weather proof shelter on top of a scaffolding tower with a ladder for access. It was reputed to be for a 40 foot drop. The floor was of stout timber planking and I believe there was a mechanism in the cabin which would control yhe rate at which a steady rope or cable was paid out. By the time we were involved the structure was quite dilapidated, and had to be looked over by the site engineers before we climbed up.

Our contribution to the exercise was merely to provide the drop under free fall, and (since there was no immediate result) pass the package on to Ballistic Assessment for them to test fire against an un-dropped comparable charge. From what I can remember, the charge was a fast burning bundle of thin walled tubes of a modified LU composition (known familiarly as "super-loo"). The normal composition was solventless, but the thin wall requirement rendered this impracticable and the test material was probably extruded as a solvent composition and then dried in the normal way. A version was also produced which had undergone exposure to solvent vapour (known as solvent toughening). A report was probably written by Ballistics (the late and lamented Mr W A W Smith) - I think the results were satisfactory, and would have included the Smith/Howard "Shatter Test".

The photo is of a wooden box which appears to be linked with the photo of the drop tower, and which shows impact damage on one corner. It is quite likely that this is the box we used. Our test was not intended to replicate an air drop by parachute, but was to satisfy some newly formalised transport of dangerous



goods regulations which the privatised Royal Ordnance had to meet before moving experimental formulations on public roads. Movement under Government control is exempt!"

Dave Hewkin

## **Powdermills Hospitals**

One of the remarkable features of the RGPF was the presence of two hospitals inside the factory. The first was the brick built "Sandhurst Hospital" situated near to the Refinery Gate entrance, now Beaulieu Drive. This was built in 1896 because three years earlier there had been an explosion in the factory and casualties had to be taken to the Prince of Wales Hospital, Tottenham, a distance of 10 miles. The hospital faced the canal as most of the transport within the factory was by boat. A cast brick plaque set in a section of the hospital wall was recovered when the building was demolished and the Friends hope to put this on display in the public area.

The second hospital was a women's annex built in 1916 across the road from the Sandhurst for the 3000 women working in the factory during the Great War. This building was Y-shaped and constructed of timber apart from the 5 chimneys. Below a north facing skylight was an operating room; there was also an x-ray room, wards with beds for 8 patients and accommodation for nurses. Later both of the hospital buildings were converted into flats for employees and were demolished when that part of the site was cleared following the closure of the factory in 1991. Jim Hawkins had acquired a set of the 1916 plans for the women's hospital building when he lived in one of the flats and I was asked to make a model of the hospital using these plans. Sheilagh Owens, who had also lived in the flats, supplied photographs. I found I had taken on a bigger job than I anticipated as there are 40 Georgian windows, 7 doors, a veranda plus a complicated roof structure. The model has been completed at last but for various reasons it took almost 4 years! It is now on display at the end of my model railway layout in L168. The hospital model was scratch built using mainly 3mm MDF and polystyrene sheet to the same scale as the railway (6mm/foot).



The model hospital together with the Sandhurst plaque and complementary information will highlight the emphasis of health and safety in RGPF. There were no fatal accidents in RGPF in WW1 and many places such as coal mines were probably more dangerous to work in than the explosives factories. After these hospitals were closed there were still medical facilities including full time nursing staff and an ambulance up to the closure of the site. Tony Barratt

## ' PLAIN TAILS - Further Memories of the Salisbury Plain '

#### 1. A Day on the Ranges and a Question

Sheilagh Owens amusing article in the September 2006 Touchpaper on the antics of the Royal Marine assault engineers on the Salisbury Plain reminded me of a question which originated there in the mid 1950s which I will ask now. Before this I have to sketch in the background.

In 1954 Her Majesty sentenced, sorry assigned, me to a stay on the Salisbury Plain – in those days still a very isolated area with a large military population living in circumstances which had earned it in military folklore the reputation of what was later to enter the language as a gulag. The standard small arm of the Army was, as it had been from the beginning of the 20th century – 'what was good enough for your grandfathers is good enough for you', the legendary .303 Lee Enfield bolt action rifle. Great emphasis was naturally placed on accuracy and to foster this shooting competitions were held between units on the Plain. Competition was fierce as was effort within units to get on the unit team – considerable advantages accrued – days out, foreign travel, i.e. anywhere more than two miles from the barracks and, not to be sneezed at, the personal approval of the CO. Members of the teams were selected by a series of firings on the rifle ranges which gradually winnowed down the number to a team.

Thus under the tutelage of Sergeant Major 'Dusty' Miller we gathered on one of the historic ranges on the open and airy Plain. With equipment and rituals virtually unchanged for 50 years anyone emerging from nearby barracks after a gap of 50 years would have had little difficulty in fitting in.

As the morning went on and the targets began to appear at ever increasing and demanding distances the proceedings began to take on the air of a gentlemen's shooting party with polite murmurs of approbation at good shots and subtle unwritten relaxations of the normal disciplinary protocols. The atmosphere however was occasionally marred by bellowings from Dusty, who appeared to believe that accuracy could be fostered by extending the parade ground to the range. Any originator of a poor shot could expect to hear a reprimand bellowed a few inches from his ear. This could be quite uncomfortable for the sweating prone recipient. Dusty clearly considered himself to be a man of high humour as the bellow sometimes went like this – ' You stupid \*\*\*\*\*\* you've just wasted sixpence of the taxpayer's money !' No riposte was of course possible and one could almost hear the grinding of teeth. However this was part of normal procedure and it was generally agreed that a jolly good day had been had by all, winners and losers.

Back in the barracks learned debate ensued on the accuracy of Dusty's costing. Such debates could often be interminable – on a private soldier's National Service pay of around £1 per week nobody was going very far. Did a .303 round really cost sixpence or was this a product of Dusty's imagination. An ex accountant from the Birmingham non ferrous metal trade had a brave try at costing the metal content plus presumably a very low production cost with huge economies of scale, but nobody had the faintest idea of how much the cordite filling cost. This brings me to my question. Does anyone have an idea of the cost of the filling in a 303 rifle round in the mid 1950s ?.

2. ISRG - Air Drop Tests on the Salisbury Plain

The Extract from the Archive No.3 in the June Touchpaper on the South Site Drop Tower and Les Tucker's recollections above of the Salisbury Plain in the 1950's awakened memories of my father's, John (Jack) Owens, work for ISRG (we occupied a flat in the converted Sandhurst Hospital in the 1950's, later moving to the new MoD estate).

This work concerned testing equipment dropped by parachute from aircraft. The test area was the wide open windy (sometimes very cold, see photograph) spaces of the Salisbury Plain using a superannuated WWII bomber (Lancaster?) and the point of departure was the Aircraft Experimental Establishment at Boscombe Down on the edge of the Plain.

The photographs taken from the WA Archives) illustrate the process. What must have been really interesting would have been a failed drop of some heavy equipment !



Les Tucker

The following article by Brian Waite under the above heading originally appeared in the November 2006 issue of Old Buckwellians News, the newsletter for Old Boys of Buckhurst Hill High School for Boys. Whilst relieved that Brian survived, one cannot help a certain feeling of wistfulness at the thought of what could have been one of the great invol-

untary manned rocket experiments of all time. Can anyone help with the identity enquiry? If so, please contact the Editor of Touchpaper. Les Tucker

## **Explosive Experiences**

When I left Buckhurst Hill High School for Boys in 1954 I took a job as a scientific assistant at the Explosives R&D Establishment, the erstwhile gunpowder factory at Waltham Abbey. This was in the days of National Service and serving one's country in such a capacity was a welcome alternative to serving it on a barrack square. On one of my first visits to the canteen (where there was waitress service no less, and flowers on the tables, quite a change from school's spartan dining hall ), I shared a table with a youngish lady who asked me if I recognised her. I said honestly that I didn't and was then embarrassed to learn that she had been at my school for some time as an assistant and had just left to take a job in the ERDE offices. Unfortunately I can't remember her name now, but if anyone can identify her I would like to know.

I was first initiated into the mysteries of making 10 pound batches of TNT in big enamel buckets (it's quite safe when wet !) and the more modern explosive RDX but soon afterwards I was transferred to the rocket motor section which was headed by a German speaking scientist who the junior team members firmly believed had actually worked with von Braun, Hitler's rocket expert.

(This was Hans Ziebland, a German scientist who had originally been directed to work at Waltham Abbey by the Government, see Les Tucker's article 'Rockets - The German Connection ' in the June 2006 issue of. Ed.)

One of the largest motors was originally intended for the Blue Streak missile and was fuelled by a mixture of an oxidising acid and kerosene. I was part of a team making temperature and pressure measurements when the acid line sprang a leak, spraying us all with fuming nitric acid. We were wearing some protective clothing but there was a concerted rush to theopen air shower that had been provided for such an event. Unfortunately it had room for only one person at a time and there were three of us, I still have a small scar as a memento.

Another experimental motor was fuelled by hydrogen and oxygen. The hydrogen was delivered on large trailers each carrying a battery of enormous red cylinders arranged horizontally and secured by chains. I had climbed on top of the trailer to unfasten the chains when a colleague opened the valve of the top cylinder preparatory to connecting it to a feed pipe. An immensely long bluish flame immediately shot out. It missed him, but I found myself momentarily sitting astride a hydrogen cylinder which appeared capable of imminently taking off into the stratosphere and making me the first BHCHS former pupil to go into orbit. Luckily the culprit hadn't let go of the valve key and had the presence of mind to immediately turn it off again, when the flame died as rapidly as it had arrived. All the insouciant gentleman could say was "Never mind, there must have been a bit of grit in the valve ", No Health and Safety enquiries in those days!

I was nominally employed at ERDE for 9 years but they sponsored me to do a degree and then a doctorate at University for the last 6 of them and at the end I got transferred to the UKAEA so I never returned to Waltham Abbey, but I cannot forget the rickety old bicycles painted in camouflage colours provided for getting between the two main parts of the site along the canal towpaths and the MOD police at the gates who were armed and kept their ammunition in an old biscuit tin with a picture of the Queen on the lid. Brian Waite

## **GUNCOTTON**

Gunpowder was the first propellant for guns but it had two serious defects, (1) it tended to degrade over time, no matter how well stored. (2) it made too much smoke when a gun was fired, both obscuring the target for the next shot and giving the guns position away to the enemy. Many experiments were carried out to cut down the smoke, for example using carbonised straw instead of charcoal (Brown Powder), but nothing worked. In 1846 Professor Christian Friedrich Schobein carried out experiments on various materials by washing them in Nitric Acid, one of the materials, cotton, was found to produce a powerful, if unstable propellant, Guncotton and in the summer of 1846 he visited Woolwich to demonstrate the new propellant. A British patent was soon obtained and a factory set up at Marsh Works, Faversham in Kent. In July of 1847 there was a major explosion at Faversham killing 20 people and that effectively killed off guncotton manufacture. In 1862 the Austrian Government offered the British Government a new process for making guncotton and a War Department chemist, Frederick (later to become Sir Frederick) Abel with a Major Young, travelled to Austria to inspect the plant. 1863 saw a pilot plant built at Waltham Abbey and after much experimenting Frederick Abel was able to stabilise the material. However it was still no use as a propellant but was used extensively for shell fillings and demolition charges. Professors Abel and Dewar continued experimenting and in 1889 a mix of 37% Guncotton, 58% Nitroglycerine and 5% Mineral Jelly (Vaseline to you and me) was named Cordite as the 'dough' material was extruded into long sticks or 'Cords.' A smokeless propellant had been found at last and is still in use today as the main propellant for large and small weapons.

#### **STEAM & DRYING STOVES**

The 'cords' had to be dried after extrusion and this was carried out in specially constructed drying stoves. Until the introduction of a central power house to supply steam & electricity to the site, power was supplied by individual buildings feeding steam and/or electricity to small groups of buildings. Steam stove No.4 and S90 are typical examples.

Both buildings are believed to be where the heat exchangers and fans would have been housed, that fed hot air to the drying stoves such as No.29 shown complete with the racking that carried the trays of Gun Cotton. To the left (and out of shot) of No.4 stove was the boiler house and electricity generating building, all of which (apart from some foundations) is long gone. No.4 stove would have supplied warm air to around 12 drying stoves of which No.29 was one. S90 supplied warm air to 11 stoves. The drying stoves would have had a wooden building inside the brick and earth circle, that housed the now exposed drying racks.

The iron pipe poking over the wall is about 12 inches in diameter and blew warm air in to the building via a circular pipe that ran around the edge of the racks at their base, from there it escaped via roof vents. Later the design was changed and the warm air was fed into the top centre of the buildings, escaping through vents in the base of the building.





As with many of the buildings on the Gunpowder Mills Site, as No.4 & S90 became obsolete, they were re-used for other purposes, in this instant, the testing of small explosive charges, with No.4 suffering little damage, but S90 losing a large section of it's entrance and roof. John Wilson

## Nitroglycerine Production at Waltham Abbey

The first Nitroglycerine factory was built to the south of Waltham Abbey in 1890 alongside the existing Gun Cotton factory which was erected in 1885 on 100 acres of land known as Quinton Hill Farm. The factory operated without problem until 1894, when an explosion, later attributed to the process buildings being too close together, meant that the factory had to be re-built.

By 1897 the demand for Nitroglycerine had grown and a second factory was built at Edmondsey Mead on the site of the original Royal Gunpowder Mills, to the north of Waltham Abbey and the buildings you can see from the land train ride are what remains of this factory. Nitroglycerine is a very unstable compound. If allowed to get too hot or cold, it can explode, it can't be pumped or handled roughly, so the safest way of making it, is on a hill, using gravity to gently run it down lead lined gutters from one process to another. The Quinton Hill Farm site, as it's name suggests, was on a hill, so the natural contours of the land could be used to flow the Nitroglycerine from one process to another. But Edmondsey Mead is flat, so a hill had to be built and the photo below shows the hill (E2) nearing completion in 1897.



Glycerine and acid was brought from the acid factory along the railway track (the wagons being manually pushed) to the hoist and then wheeled along the top track, where the acid & glycerine were run off into the top building ready to by mixed in the next building down, who's round roof can just be seen.

The various photos below show the hill as it is today. The internal view shows the circular brick well around 25 feet high and around 50 feet in diameter. The well would have been built first with the earth banking being added as it grew in height. The process building was wooden and free standing within this well, probably with a circular stairway from ground level to the top, between the brick well and the building. Returning to the first photo for a moment, note the scalloped top of the hill, by the round roof. This would allow any explosion to by directed out of the hill and thus reduce any damage to the plant within.

External view





Internal view

The photo of the ground floor entrance through the hill shows the typical curved tunnel, that is used on many of the site's buildings and acts as a damper to any explosive force. John Wilson



## A Year in America (1965-66)

Many scientists at Waltham Abbey spent time in America, usually at university or as part of the scientific staff at the embassy in Washington DC. I was a reluctant half of an UK/USA exchange with a scientist from Picatinny Arsenal in New Jersey, some 40 miles from New York. In making the best of this exchange I opted to reduce the time spent in America by travelling on the Queen Mary which took 5 days to get there (instead of 6 hours flying). I still have some of the mouthwatering menus as a souvenir of the trip.

My exchange partner joined Jack Powling's Combustion Group on South Site where he enjoyed a salary, with foreign service allowance, much in excess of that of Dr. Lionel Bellamy, our Director! In addition he had access to the American PX and the Section did quite well for cheap booze and cigarettes.

I will not dwell on my taxed, parsimonious overseas allowance but I did get to San Francisco twice, Denver and Salt Lake City at HM's expense, although I had to fund my own trip to the Bahamas for a holiday and Montreal for a long weekend.

Fortunately I met a Scotsman who had a flat near the UN building in New York so most weekends found me exploring Manhattan Island in the winter and Long Island with some American friends in the summer.

Meanwhile, my exchange, Louis Bottei, was courting Margaret Toomer (Dr. Young's PA) and they eventually married. When she went to live in America she found an answer to 'Trick or Treat". She dressed as a witch to answer the doorbell and with a hideous scream put the fear of God into the kids!

In 1966 the return home was again on the Queen Mary (rather than the Queen Elizabeth which alternated with the 'Mary') - five days early to minimise the stay in the USA and to enjoy civilised travelling.

I found the Americans most hospitable and friendly and the country good for a long distance travelling holiday. I've never been back as I feel that I've seen as much as I want; been there, seen some of it and avoided the T-shirt!

## **Bryan Howard**

Cordite to Conservation

As a wildlife enthusiast and conservationist I reckon that the WARGM's nature reserve is one of its best features. After all it is not a "Site of Special Scientific Interest' for nothing. Even for the general visitor, just looking to have a good day out, the nature reserve has gems to behold: be it, the sight of a kingfisher or emperor dragonfly flashing by, or simply a brood of fluffy ducklings on Millhead Stream. The deer, of course, are the stars and never fail to raise a delighted reaction from visitors. The large carp too, always impress and even the rabbits and herons can generate a ripple of excitement from land train passengers, Clearly these encounters with nature make a big contribution to the whole visitor experience.

As we know, the nature reserve is a legacy of the Mills long history; a period over which the site altered and adapted according to the needs of the day. That of course is how it survived the centuries. Times continue to change and now the past is the site's future as it were! The nature reserve is a vital part of that future, not just for the Mills in its current form, but in the wider environmental scheme of things.

It always seems ironic to me that a place dedicated to the production and testing of noisy destructive materials is now concerned with preservation and tranquillity. Thank goodness it is too. With so much of the natural world under threat every green space has its part to play in worldwide conservation. Creation of these areas is not just about protecting wildlife; it is also about getting to grips with issues that affect the bigger green picture, such a global warming, which have serious consequences on our own species. A phrase often used by conservationists is "Think Global, Act Local', which I believe is being applied at the Mills.

Thanks to the nature reserve, rare species like the otter and water vole are making a local come-back and, with many derelict buildings and structures, damp alder woodland and waterways providing secluded and quiet habitats, the area is rich in wildlife diversity, well befitting its SSSI status. It is particularly significant too because here both heritage and nature conservation uniquely intertwined and that's what makes the site very special indeed.

Of course the Mills is largely about the past and we know that during its fascinating history it played an essential role in winning wars to protect our national security. Production of gunpowder and cordite for those causes may well have long since ceased in site but still - in a different way - the Mills is quietly doing its bit to safeguard that same green and pleasant land that these conflicts sought to preserve.

**Phil Smart** 

## F H Doe

'Dickie' Doe died in hospital in October. He started at the RGPF in 1935. He was seconded to Wrexham in Wales during the war but returned to the Abbey. At Waltham Abbey, he was a leading figure in the field of energetic materials. He was an acclaimed expert in explosives research and development. In particular his contribution rested in explosives processing and manufacture. His knowledge of both cast explosives (i.e. those based on TNT) and rubbery explosives (e.g. Poly-X) was exemplary.

He will be remembered not only as very knowledgeable but as extremely practical in his approach to all problems and challenges. He was truly a 'big' man and exuded the reassurance and confidence that, to leave a task in his hands, would always lead to a viable and reliable result. A lasting memory of him will be his positive attitude. He would never dismiss a challenge as being impossible without giving it careful thought - he would usually come up with an answer!

Dickie's reputation extended beyond Waltham Abbey and on more than one occasion his experience and expertise were directed to help with problems faced by RARDE. Some of these problems were urgent and very serious, having a bearing on the production and function of explosive munitions. The significance of this involvement shouldn't be under estimated as Waltham Abbey and RARDE were 'rivals' in the explosives business and sometimes the rivalry wasn't as friendly as it should have been (!) so Dickie's involvement was a testimony to the esteem in which he was widely held! In 1976, he moved to take up a senior position at RARDE, Woolwich.

On a more personal level, Dickie was always very kind, patient and understanding to junior staff and would always do his best to help and encourage them. However, he didn't suffer fools gladly and would have sharp words for those of whatever rank whom he considered to be wasting his time or that of his staff. He was greatly respected and will be warmly remembered by the 'fraternity'.

Dick was also very active on the social front and for many years ran the "Old Comrades Association' and was secretary of the Benevolent Fund. He continued this activity when he retired to Chedburgh, organising the local community when a new village hall was built.

## **Cliff Blunt**

We have only recently heard that Cliff died last Easter. Cliff worked in the Stores from 1961 until the site closed in 1991. Ever helpful and ever cheerful. Outside of work he was a leading light in the local chapter of the Civil Service Motoring Association. Even when he had to give up driving he still managed to attend their meetings. Remembered with great fondness.



Dave Lee Dave Lee passed away on 1st October 2006 following a long struggle with Multiple Systems Atrophy. He Joined Waltham Abbey on 2nd March 1959, initially working on South Site for Steve Bell, and then moving over to the Main Lab on North Site, doing general analytical chemistry under the guidance of, amongst others: Frank Carver, John Wright, John Bell and Eddie Gallagher.

In 1978 he moved up to the Health and Safety Executive in London on promotion, where he rapidly won the respect and admiration of his bosses, as was evidenced by the fact that he rose to the rank of Temporary Grade 5 (Deputy Chief Scientific Officer). His work was of a sensitive nature and not without an element of personal risk, but he had an innate sense of what was right. In this respect he could be a formidable opponent for those that did not match up to, or share, his high professional standards. The practical outcome of this was, I am sure, that his actions saved quite a few lives and certainly made a major contribution to the safety of us all.

Dave was a very sociable chap. He was a leading light in the Waltham Abbey Social Club and a founder member of the Waltham Abbey Literary Society. He could, and did, eat and drink for England, and was great company. He had a very alert and enquiring mind, and he often amazed us with the huge span of knowledge that he brought to bear when faced with obscure questions at the pub quizzes.

After taking early retirement in the mid nineteen nineties, he made Majorca his second home where he and Margaret spent many happy years. There he cultivated a great circle of friends and he showed much appreciated hospitality to his Waltham Abbey chums when they visited his Spanish home.

I will remember David for the fact that behind a somewhat gruff exterior there was a very decent and caring person who had an instinctive feel for when to offer help when it was needed. I never heard him say an unpleasant word about anyone. He will be missed not only by Margaret and his family, but also by his many friends in the Waltham Abbey area and in Majorca and his HSE colleagues. **Geoff Hooper** 

## **Derek Needham**

Derek died suddenly following a heart attack on 25th October 2006. He was 82. Although he had suffered a slight stroke a little while ago and was progressively becoming more deaf, he remained active and alert right up to the day that he died. He had been a keen sportsman. Derek joined ERDE in the Combustion Section in 1950 and then moved into Heat Transfer under Hans Ziebland. He left Waltham Abbey in 1971 to help the Navy in town. Derek's time at Waltham is not detailed since he outlived most of his friends and colleagues such as Tony Davis, Ron Smith and Bill Smith. He had a long and happy retirement with his wife Christine during which they had many coach holidays visiting historic sites and sampling the local ales. He will be missed by all of those who met him on a fortnightly basis at the Sibthorpe Arms during his "sunset" years, and by the Enfield Archaeological and Waltham Abbey Historical Societies.

## TOUCH

## Reply to Nancy Harris's comment in Sep 06 issue ...

You are correct Nancy, we both joined ISRG on the same day; 30 August 1948. We reported to Powder Mill Lane at 8.30. I had been there since 8.15 because I had to get a trolley bus from Tottenham that got to Waltham Cross before 8 am in order to get an 8d workman's return ticket (3.4p for you youngsters. I had to spend carefully, my starting salary was only £165 per year with a £15 increment). We waited at No 9 until 10 o'clock when we were met by Colin Meek and Charles Erwood and taken to ISRG on South Site. They had both been transferred from The Fryth when the labs there closed. It was their normal arrival time as both still lived in the Knebworth area and took turns to drive in. Colin Meek was the PSO section leader, he had a pre-war Standard 12 saloon that had seen better days. When sat in the rear seats you could watch the road passing under your feet! Charles (EO) had a 6 cylinder MG Magnette; if its still around it will now be worth quite a lot.

Four others had also been transferred from ISRB to WA, Jack Owens (Assist.Scientific) and three Lab Workers, Fred Stalton (ex Battery Sergeant Major, Royal Artillery ex Woolwich Arsenal), George Doe (ex RA Gunner) who acted as a storeman and Wally Linsel. Wally was a watchmaker who did all the delicate bits for Charles' fuse section (and taught me how to use a lathe).

Others had been transferred from ERDE including Ada Spanswick (Clerical Assist.) who thought she was Colin's deputy and Bill Gibbs. Bill was a Lab Worker who made the tea and cleaned the office building. He got very annoyed if anybody used his nick name, "Fifteen two". It was alleged that he was called this because during 39/45 he processed 2 bags of cordite each day while everybody else did 15. Also from ERDE were Tom Mitchell (Fitter/Turner) and Bill Hawkins (Storeman). The first direct recruits to ISRG were Madge Plumber who became Charles Erwood's assistant in early August 48 and Mr Lansdell. Lansdell was an Eng II who ran the main workshop, NOBODY ever dared use his first name. Nancy and I were next to arrive, my destiny was to be Charles' second Assistant. A month or so later Jean Weston (Assist. Scientific) joined us. Jean and Fred ran the Pyro Lab for a year until Jim Bell was de-mobbed near the end of 1949.

**Roy Atkins** 

#### Erratum ...

On looking back through my 'Touchpapers' I happened to glance at my article printed in the June 2006 issue. I said that the ill-fated Blue Water project was replaced by the American Corporal missile when I should have said the LANCE missile - a bad slip of memory!

All the best for Christmas and the New Year. **Barry Newman** 

An appreciation .... We last visited the site during the August Bank Holiday and were both impressed with the standard of the main exhibition which we felt gave an excellent introduction to the work of the Factory and the importance of the transport systems. The Land Train is a good idea and enabled us to view the extent of the site in comfort and the two day ticket enabled us to walk around to inspect the buildings and see what has already been achieved. We do hope that the canal system can be reconnected to the river and flooded sometime with the lock reinstated and perhaps the boats restored to join the road train (and perhaps the railway) as a means of viewing the grounds. The volunteers were most helpful and informally knowledgeable making the visit most enjoyable. David Wood

#### The German Connection Contd.

Further to the article in Touchpaper of June 2006 on German scientists employed at the research establishment, including Hans Ziebland, the Archive was recently visited by Hans Ziebland. No, not the original but his son, also Hans Ziebland. After living in Austria for some time Mr. Ziebland is now resident in Hoddesdon. Les Tucker

Had this sent to me recently by e-mail and, having a space (due to lack of items for this feature) thought I would share it with you. Norman Paul



PERHAPS BRIAN HARVEY COULD USE THIS ON OPEN WEEKENDS

## DON'T FORGET DEADLINE FOR MARCH 2007 ISSUE 15th FEBRUARY 2007

## **FRIEND'S BOOKLETS**

So far we have published three booklets:

Listed Buildings at the Royal Gunpowder Mills (now in its 3rd Edition)

Woodland Trees of the Royal Gunpowder Mills Waltham Abbey

and recently Beam Engines at the Royal Gunpowder Mills

These will be joined by a fourth booklet which will be available in the New Year entitled:

## **Trials, Tribulations and Pranks**

This booklet is a compilation of the many contributions that have been made of staff recollections, some serious and others of a more humorous nature over the 14 years of 'Touchpaper'; beginning with the early newsletters dating from 1992 to June 1998 and then, after the foundation of the Friends Association, from September 1998 up until December 2006.

There are almost 60 entries ranging from Reminiscences, Reports of Trials, Humorous Happenings and Pranks from the RGPF days up until closure in 1991.

It is quite a lengthy, but we think enjoyable, read and although we have yet to get costing for printing it may be a little dearer than the previously published booklets - but well worth every penny! FULL DETAILS IN OUR NEXT ISSUE

## LATE NEWS

As we go to press we hear that Jim Jeacocke died mid-November. Jim was the most prolific and entertaining writer of articles for Touchpaper over the past 14 years and these are all in the forthcoming booklet.

A full obituary will appear in the March 2007 issue.

## FUTURE DATES FOR YOUR DIARY

**2007 Season starts 28th April** Events so far confirmed:

28/29 AprilMedieval5/6/7 May(Spitfire Displ19/20 MayS27/28 MayMulti16/17JuneW23/24 JuneMilitary28/29 JulyRegi4/5 AugustVictory18/19 AugustAnn1 / 2 SeptemberHe15/16 SeptemberEs29/30 SeptemberGuy Fay

Medieval Siege Society VE Day (Spitfire Display on BH Monday) Steam Fair Multi Period Event WWI Event Military Vehicle Show Regia Anglorum Victorian Experience American Civil War Home Front Essex Militia Guy Fawkes Experience

Friday 11th May Friends AGM and Reunion

details and booking form in March issue

Saturday 12th May **Gunpowder & Explosives History Group** Advance Notice of Spring Meeting 'CHARCOAL' all welcome - details in next issue