

**ROYAL
GUNPOWDER
MILLS
WALTHAM ABBEY**

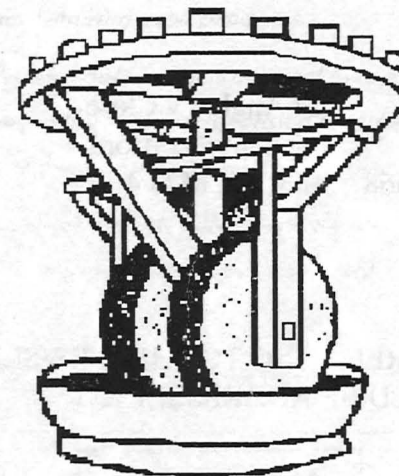
‘TOUCHPAPER’©

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Touchpaper

The Newsletter of the
ROYAL GUNPOWDER MILLS WALTHAM ABBEY
FRIENDS ASSOCIATION



**MARCH
2005**

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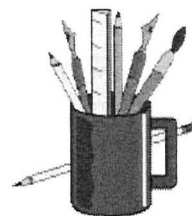
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PLEASE NOTE: Deadline date for submissions to
the next issue is 15th May 2005



Editorial

Welcome to the first issue of 2005 and a belated Happy New Year to you all.

The new season runs from 30th April to 25th September. A good programme of special events have been booked which can be seen in the new site leaflet accompanying this issue.

Our Chairman, John Wright, had a fall while climbing a mountain on holiday in South Africa sustaining broken ribs and a punctured lung. He is now back home and making good progress.

The AGM and Reunion date has now been set (see p 3) and members will find a booking form for the Reunion enclosed together with an addressed envelope for your returns.

Those of you who have yet to renew will also find enclosed a reminder notice (You can use the same envelope for your renewal).

Norman Paul

Touchpaper Editor

**The forthcoming 2005 issues of
Touchpaper are being sponsored by
The Kaiser Trust.**

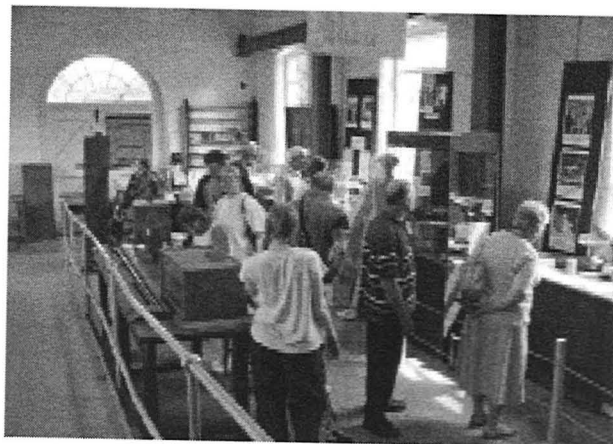
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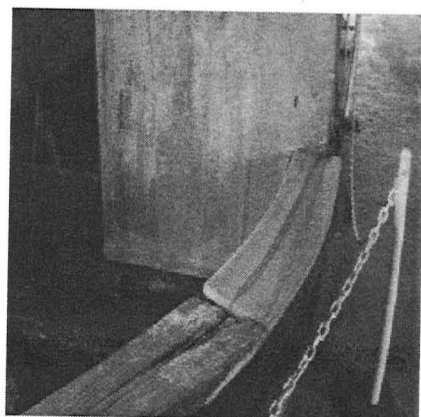
FRIENDS PROJECTS

In addition to the many smaller jobs carried out on site by **working parties** we also undertake major projects involving significant labour and, in **some cases**, money. An example last year was the Laboratory and Rocketry exhibition in the annex of



L157 which is being updated for the coming season. It has proved quite popular with visitors but, unfortunately, we never seem to have enough volunteers to staff it and explain to visitors on open days. Those who do volunteer at weekends are generally too busy acting as guides for the landtrain and other duties.

Current projects include the continuing refurbishment of Fire Alarm Pillars, construction of Large Cannon carriages and some renovation of the Powder Barge in L168.



Replacement of rotted wood

There are also plans to reconstruct one of the canal lock gates and the building of a full scale model of an Incorporating Mill in one of the original bays in L157.



Gerry Miller fitting wheel to axle

With your continued financial support through subscriptions we are in a position to fund all these but, of course, additional labour at working parties would speed completion!

2005 AGM and REUNION

ANNUAL GENERAL MEETING

The Association AGM will be held at the Royal British Legion Hall, Waltham Abbey on Friday 14th May 2004 commencing at 11.00.

Nominations for Committee Members and Officeholders should be sent to the Secretary at least two weeks prior to the meeting.

Any motions or amendments to the Constitution should also be made in writing and be sent to the Secretary at least two weeks prior to the meeting.

The current Officers and most of the Committee are willing to stand again but additional nominations will be welcome.

ANNUAL REUNION

Following the AGM at the Royal British Legion Hall, Waltham Abbey on Friday 27th May we shall be holding our Annual Reunion.

This will start at midday with a buffet lunch served at around 1pm.

As usual the bar will be open

Although there is still a good attendance numbers have dropped over the past few years and a small loss on the event was made in 2004. As you all know costs increase year on year so we have had to raise the price to £9 per head.

Members will receive a booking form with this issue and an envelope addressed to the Treasure to whom payment should be sent.

NEW STAFF MEMBER

VOLUNTEER DEVELOPMENT MANAGER



Grant aided by the
Heritage Lottery Fund

The Company now has a dedicated co-ordinator for volunteers thanks to Heritage Lottery funding.



‘ LIZ ’ WENT

Liz previously worked for ELHAP at the Woodford Bridge Adventure Playground for special needs children and dealt with volunteers there.

Liz started on 1st February and is very keen to meet as many volunteers and gain as much background as possible. She is setting up a database of existing volunteers and hopes to build up the volunteer base with new people.

Initially she is working through a list of people who have expressed an interest which was not possible for the existing small staff to follow up, they being far too involved with the management and day to day running of the site.

RAILWAY ENGINES

Some four years after it's purchase (along with Woolwich and a number of carriages) Carnegie, a unique Hunslet loco has finally made it to Waltham Abbey, shown here arriving at the gate.



Hunslet 0-4-0 0-4-0, 18" gauge, Diesel Locomotive, Carnegie, Number 4524.

Carnegie was built by the Hunslet Engine Co. Ltd. for the Royal Arsenal, Woolwich in 1954, 20 years after the first of her class, Albert, was supplied to Woolwich.

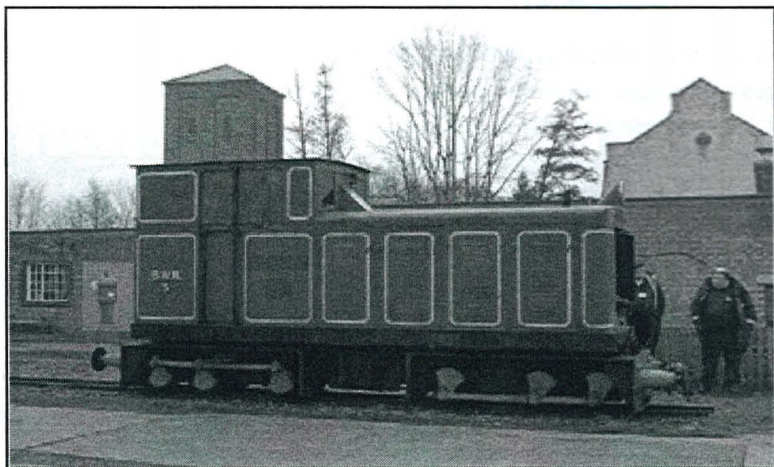
With the closure of the Arsenal's railway in 1961, Carnegie was sold along with an Avonside 0-4-0 steam locomotive and a number of carriages to Bicton Gardens in Devon.

In the late 1990s, Bicton Gardens put the locos and rolling stock up for sale, and as Woolwich Arsenal was a sister factory to the Royal Gunpowder Mills, we felt that it was appropriate that we purchased the equipment.

So in early 2000, with the purchase of Woolwich, Carnegie, and associated rolling stock; Carnegie was stored at the Alan Keef Ltd. site near Ross-on-Wye, with the intention that it would have one of it's gearboxes repaired, though this was never done, due to financial constraints.

In the mean time Woolwich came directly to the Gunpowder Mills and was put under tarpaulins until such time as she could be put back into service.

Late 2004, Alan Keef Ltd. found that they needed the space taken up by Carnegie, for a new contract; so it was decided to return Carnegie to Waltham Abbey; to be put on display.



In due course, and hopefully before the start of the 2005 season, Woolwich will also be put on display alongside Carnegie, to make an additional attraction to our railway display in the Large Exhibits area, and to the 2'-6" gauge railway under construction next to the land-train route.

It is worth noting that both locos are unique examples of their type, being the only survivors of the Woolwich 18" gauge system as well as the only ones of their types to survive the scrap man.



Locomotive Specifications

Carnegie:

Hunslet 75Hp. Articulated Diesel Locomotive, with coupled 0-4-0 0-4-0 wheel arrangement.

Year of manufacture 1954, Engine Number 4524.

Gauge 18"

Weight 13 tons 5 cwts.

Length 21'-2"

Width 5'-1 1/2"

Height 9'

Woolwich:

Avonside, 18" gauge, 0-4-0, Oil Fired steam Locomotive.

Year of manufacture 1916, Engine Number 1748.

Weight 11 tons 5 cwts.

Length 15' 5"

Width 5' 4"

Height 8' 6"

Cylinders 8 1/2" → by 12" stroke.

Both locos are non-runners at present. Woolwich needs a ten year boiler certificate, and Carnegie has a faulty gearbox on the rear bogie. And of course we have no 18" gauge track at present, on which to run them. However we live in hope that all these obstacles can be overcome, and that we will end up with, not only a 2'-6" gauge railway (which is currently under construction), but a working 18" gauge railway as well; in the not too distant future.

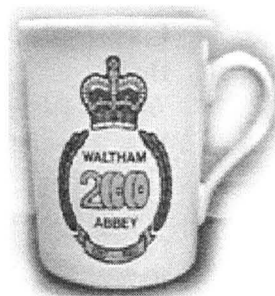
J. Wilson

Railway Volunteer for the Royal Gunpowder Mills.

So, Why Did I Join The Friends?

Recently, while reorganising my desk prior to the arrival of an (allegedly) more ergonomic upgrade I picked up the mug in which I keep small screwdrivers, paper clips, pens and other small items filed under “I’m-sure-that-will-come-in-hand-sometime”. Its been with me a while now and has made quite a few job moves and yet somehow remains in one piece. A picture is attached – sorry it’s a bit grainy.

When new it had a gold trim, but that has long since worn off. I wonder how many ex-colleagues still have one of these gems on a mantelpiece? It was issued in 1987 to commemorate 200 years of Government Ownership - just 2 years before we were sold off to help subsidise BAe’s balance sheet. It’s lasted better than my Royal Ordnance T-shirt did.



Why Join The Friends?

It was asked in the Dec 2004 issue why people join the Friends. Well, here is my pennyworth. Andy Newell and I joined PERME on 1st April 1980 – for some reason Eric Baker *et al* on the recruitment board must have liked me. April fools day - what an appropriate day for it. On arrival we were ushered into the sanctum of the head of P1 (Steve Bell) - and he gave us the pep talk. Then he looked at our degrees. Andy he had no trouble with – chemistry I think - but mine “Astrophysics! What are we going to do with you?”. That filled me with confidence. It turned out I was to be in P1 Branch working for Jim Hawkins. So, as Andy also ended up in P1, we went over and arrived just in time for the morning tea break. That brought its own wonderful revelation. Firstly, Jim was out for 6 weeks ill and then “Why did we recruit you? We close in two years.” This from Mike Healey (later OBE) who had got it pretty much right as usual.

For the next 9 years I worked with/for some great people – Frank Baker, Kate Turner, Jacqui ????, Roy Carter, Allen Webb, John Alexander, Andy Newell and pretty much everyone in P1 Branch - on projects like the Modernisation Programme, first with the flaky Leaffields 3” press and later doing the job properly in R616. I even got a chance to help out with the biggest innovation for years, Roy Carter’s automated twin-screw extruder.

When it appeared likely BAe would not be interested in serious research I bailed out and spent 8 years in academia before rejoining the MoD at DERA Farnborough and then later making the jump to the Dstl Malvern (previously RSRE) where I am today. I can tell you now; the MoD is a bit different these days – apart from everyone still being underpaid.

The reason I joined the Friends is because WA was unique. Talented friendly people at all levels, an attitude of let’s get the job done (however tough), a great history, a beautiful site, some real innovation and, of course, the Christmas Party in the shifting house. Oddly enough, after all this time I am still proud to have worked at PERME and felt the afterglow of the great years of the MoD research labs. I would hate to have seen the place reduced to yet another distribution depot, housing estate or golf course and its history gone for good. Apart from helping to keep the North Site as an entity the Friends represent a fitting reminder and tribute to history of the Establishment. The shame is that I always seem to be out of the country when we hold the reunions!

A Last Gasp

I thought one or two of the readership might like to know that February 2005 will see the publication of what is probably the last scientific paper with its origin in Waltham Abbey. Polymer International will carry a paper entitled “The Dielectric Interaction of Dibutyl Phthalate with 12.6%N Nitrocellulose” by Frank Baker, Kate Turner and Grant Privett. They don’t write titles like that any more, and nor again will we – it took us ages to get back into the right mindset to understand the work. But, let’s be honest, 99% of you will find watching paint dry compelling stuff by comparison, and its hardly likely to make the Best Sellers list, but it does highlight how unique Waltham Abbey was in being able to routinely work and research such a nasty material as dry nitrocellulose.

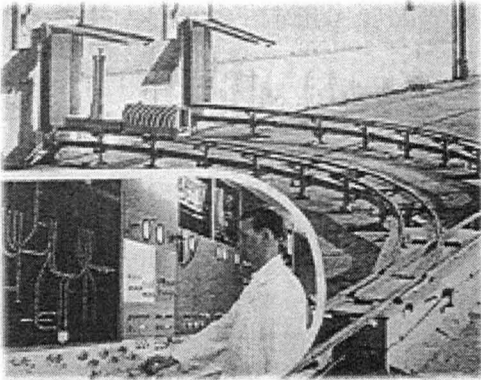
Some of you may also be interested to know that Frank Baker – who has not changed a bit - retired last summer from the Cavendish Laboratory at Cambridge University where he had spent some years making electron microscopes do far more than they were ever designed for, while Kate Turner is now a system manager and I earn a crust doing image processing for Dstl - an Agency of the MoD.

Grant Privett

I’d like to make this a regular feature so let’s have your story. It doesn’t have to be long although I found Grant’s contribution very informative. It does help us to understand why so many diverse people have joined for different reasons and the feedback is always encouraging. Editor.

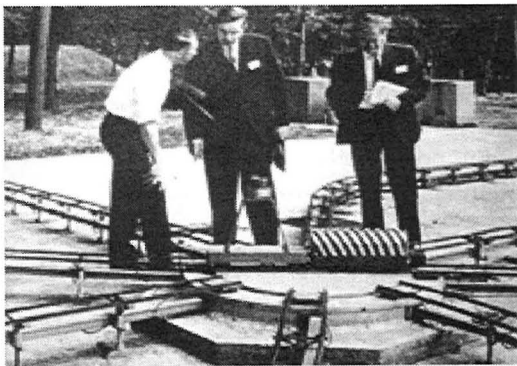
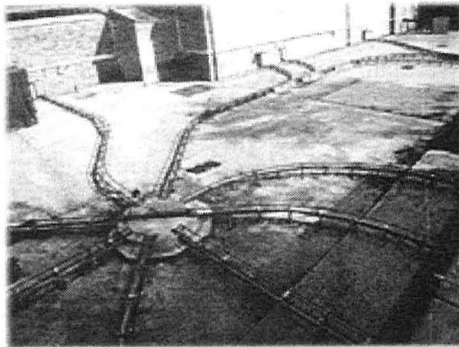
The 'Second Railway!'

Note: This article should be read on 1st April 2005



It is well known that the first steam driven mills in 1857 were served by a hand pushed tramway conveying material from the mixing house at the Millhead and that this was followed over the years by development of a rail system over the North and South sites which also linked to the main Great Eastern line at the south west boundary of the South Site.

What is less well known is that in the post WWII era a miniature remote controlled 5 1/2 inch gauge railway was introduced on the South Site. The intention was to convey hazardous materials. But a secondary intention was to employ it to improve efficiency of staff movement around the site, with staff boarding on running boards as it moved around the site.



The photograph shows a member of staff demonstrating the system to a visitor. For some reason the visitor appears to be having some doubts as to mode of operation. Fitness tests were required to ensure that staff had the necessary agility to perform the boarding operation safely. It appears that the plan was abandoned when none succeeded in passing the test.

It is hoped that members of the

Railway Group will soon commence building a replica system to be installed in the large exhibit building and that they will give demonstrations of boarding techniques.

OARE WORKS

The old ICI Oare works where gunpowder was made is being cleared and a number of significant artefacts are to be disposed of, including this iron edge runner Incorporating Mill.



We had hoped to obtain this Incorporating Mill but English Heritage are being difficult as it differs in some respects from those that used to be at Waltham Abbey although the basic principles are the same.

MYSTERY OBJECT

The object pictured here is puzzling and no one seems to know what it was for. It is of wooden construction, 3' x 2' x 3', leather lined and can be emptied by swivelling forward. It is not known if the metal object in front is part of the artefact but it may be one of a pair of legs to raise the wooden cradle.



One suggestion is that it may be a 'measure' of a gunpowder green charge to an Incorporator using volume rather than weight.

Any ideas anyone?

MATTERS CULINARY

I. In the hiatus between the closure of RGPF and the opening of CRDD (Chemical Research and Development Department), the first suggested name for the Establishment - not many people know that we were left to our devices; we spent the time clearing out solutions that were no longer required (I have mentioned earlier how I turned 3 miles of the Lea bright green) but Ted Hitch thought he had a better way of using his time. To this end, one morning, he brought in his shaving kit and an egg to boil for his breakfast. He boiled the shaving water, set the egg to boil and retired to the Extraction Room to shave. While he was frantically trying to get a lather from his shaving soap (we had liberally dosed the water with alum) we noticed that the egg was white shelled. Realising that the egg would look the same without its shell we 'titrated' the shell with glacial acetic acid until it stopped fizzing. By the time short tempered Ted came to retrieve his egg he found it somewhat difficult to handle!

II. The Guncotton Lab had a very high roof which was ventilated by a skylight which was 'blacked out in the war and more or less permanently fixed shut lest it be inadvertently left open. Thus, above the door level, there was a 'dead space' which was virtually unventilated. At the height of the war (or should I say the depth) we were, perforce, virtually vegetarian and while on night shift my evening meal consisted of a large potato which I boiled in its jacket in a large beaker. Sometimes, for variety, I also cooked some white cabbage. The latter always cooked in the fume cupboard so that I did not fill the dead space with the smell of boiled cabbage; fearing the wrath of Percy Smith when he arrived the next morning.

One of the guncotton chemists observed my activities and decided to join me in my 'home cooking'. We had a large gas ring in the lab on which we boiled the kettle for tea but one night when I left the lab to visit the toilet I returned to find that he was busy frying kippers on the gas ring (where he got them from I do not know). The smell was indescribable and I warned him that he should not be around when Percy arrived in the morning. We eventually managed to clear the air but it took about two weeks. I have never fried a kipper since!

Jim Jeacocke

TOUCH

Carrot... Top That!! As a change from writing about Gunpowder, NC, RDX and all things that go bang, here's a change. Can anyone beat this giant carrot which I grew last year. I pulled, what I thought was a handful of carrot tops and this whopper came up. Normally they have one cluster of leaves at the top but this had about eight - hence the big growth.



George Savill

Rabbit Wave... A man was driving along when a large rabbit hopped out into the road. He swerved but unfortunately the rabbit was hit. He pulled over and was upset to see that it was dead. A blonde woman came along, pulled over and asked what was wrong. "I feel terrible" he said, "I accidentally hit this rabbit and killed it." "Don't worry" she said, went to her car, pulled out a spray can and sprayed the contents on the rabbit. Miraculously the rabbit came to life, waved a paw at the two humans and hopped down the road. It stopped, turned and waved again. Hopped, turned and waved, repeating this until out of sight. "Amazing" said the man "but what was in that can?" She turned the can round to show the label. It said 'Hair Spray - Restores Life to Dead Hair; adds Permanent Wave' Works on Rabbits too! **Sheilagh Owens**

EDITOR'S ADVICE FOR THE DAY

If you have a lot of tension and you get a headache,
follow the instructions on the Aspirin bottle:

"TAKE TWO ASPIRIN" AND "KEEP AWAY FROM CHILDREN"!!!!

Gunpowder - Who was right?...In his article in the December 2004 Touchpaper on gunpowder in Surrey Dave Hartley cites the acerbic 18th century commentator William Cobbett's comment on gunpowder (and banknotes):

Two of the most damnable inventions that have ever sprang from the minds of man under the influence of the devil

About a century later the great Victorian historian Thomas Carlyle came up with a somewhat different view, figuring in one of the displays at last year's exhibition on the Victorians at the V&A:

The three great elements of modern civilisation - gunpowder, printing and the Protestant religion

Les Tucker

Picture ...This was, I believe, taken after the ceremonial planting of the tree outside the new A28 lab at Fort Halstead to commemorate the move from Waltham Abbey.

Eamon Colclough



The tree is a *Fraxinus Betula Pendula*
(Weeping Purple Birch)

DON'T FORGET
DEADLINE FOR THE June 2005 ISSUE:
15th May 2005

With reference to the last Touchpaper (the note about people who served in the RGPF during WWs I and II) I thought I'd record my father's service although I can only quote from general family talk. My dad was born July 1887 and died in April 1975. He left school at 14 on a Friday and applied for a job at the Mills together with 5 of his mates. He was accepted and started night work that same day. He used to say he was a 'HILLMAN' whatever that job was. The day before his 18th birthday all 6 were thrown out because, at 18, they could have claimed men's wages.

He did general labouring jobs, like nursery work and even said he worked on the Epping New Road, walking to and from work each day carrying his tools.

At the outbreak of WWI he was recalled to the Mills and worked for some time before having a row with his foreman - told him what he could do with his job and joined the army in the Sussex Regiment. He served in France (I've a large collection of colourful silk postcards he sent) together with later ones from Egypt, Suez and Palestine.

When he was demobbed he carried on doing nursery and labouring work, then in 1935 he again joined the Mills and served throughout WWII. He had various jobs including: lighting and making up fires in Government House and all the offices, postman and finally, a plumber's mate. He retired on medical grounds in the mid 1950s, suffering badly at times with malaria.

George Savill

Thanks for the Booklets ...I enjoyed reading them. Two points come to mind. I knew of the Weizmann process for acetone from chestnuts and remember the erroneous BBC production of the biography of George V's son John when they said he and others collected them for 'eating'!

The mention of Elderberries in the Woodland booklet reminded me of some elderberries near the Burning Ground that had ripe 'White' berries, not 'Red' Very unusual but true.

Alan Owen

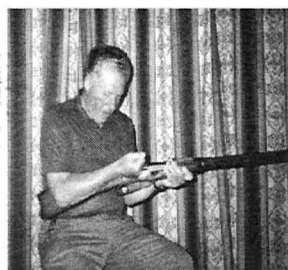
Moving On ... Greetings and Best Wishes for 2005. Enid and I have decided to move and expect to leave by the end of January. Solicitors are pushing paper and asking silly questions! It will all get sorted before too long, we hope. We are moving to Ross-on-Wye where we have family and friends so will not be jumping in at the deep end.

John and Enid Williams

Sad to report the loss of **Charles (Charlie) Goodacre** at the end of January. He was not an employee of 'Waltham Abbey Sites' but was a former employee of RSAF Enfield and held a life-long fascination and interest in all THREE sites. Although a member of the Friends Association of RGMWA, due to failing health and lack of self-confidence working in such illustrious company, he had never taken an active part in the work of renovation or restoration. After the opening of the site to 'visitors' he was a regular visitor on nearly every Saturday and was well known to the 'military re-enactment' members, to whom he donated several items of WW1 equipment etc. He was well known to Dr. David Sims who gave both of us personally conducted tours of the site, shortly before it opened to visitors. He had his own collection of photographs and memorabilia of the Waltham Abbey site and was in the process of 'doing his own history of the WARGM'. However, as much of this would probably contravene 'copy write laws' it would be rather pointless donating it to 'The Museum' but it might be of interest to some individual or other. As he left me all his books and militaria artefacts it may be possible to arrange something to our mutual benefit & interest.

Although we differed greatly in age, education and family background he was a great friend and 'mentor' on all things 'military' and he will be greatly missed.

Frederick (Derek) W HEANEY



Charlie died in Princess Alexandra Hospital, Harlow, on Monday 31st, Jan. 2005 of a brain haemorrhage, following a short illness. An 'Enfield' boy he attended Lavender Road School and afterwards trained as an engineering apprentice at the Royal Small Arms, Enfield. Amongst his great memories there was to act as 'gofer' for women RUSSIAN SNIPERS who came to the 'Small Arms' during the war to test various rifles. At the outbreak of the war he also joined the (23rd? Btn. Middx). LDV/Home Guard and at 15 years of age, was one of its youngest members. In 1944

with his apprenticeship at an end and the 'Country's' needs to the fore he joined the ASC and spent much of his time as a L/C looking after German POWs. On 'demob' he joined London Transport and spent the next 30 years or so working from Ponders End garage, mainly on the 279 from Waltham Cross to Smithfield. His dad had been in the RGA in WW1 and he always had a passion for 'The First World War' with a particular interest in anything to do with 'ordnance' in which he was a bit of a self-taught expert. He first visited the Battlefields of The Western Front in the early 1950's, crossing from Dover to Calais in a paddle-steamer and then train to Amiens and Albert and later to Verdun. Although he spoke no French he always seemed to make himself understood, sometimes with a few hilarious 'translations' adding to the situation. After retirement he spent much of his time compiling his own guide books of The Western Front using many of his own photographs and made several visits a year to France & Belgium with a small group of friends. He also began to attend many local Militaria Fairs where he helped out on a stall and was always ready to offer information on a wide range of military subjects. He always had a cheery greeting for everyone and was very approachable.

He was a great friend to those he knew and he will be greatly missed

60th Anniversary of VE DAY

A celebration at the

Royal Gunpowder Mills

7th and 8th May

from 11.00am - 5.00pm

(last entry at 3.30pm)

WWII EQUIPMENT AND
VEHICLES ON DISPLAY

COSTUMED
RE-ENACTMENTS
British, US, German, Russian

BATTLE SCENARIO

SINGERS
songs from the era

CHILDRENS
ACTIVITIES

Adults £5.50
(concessions £4.70)

Children £3
(under 5's free)

PARTICIPANTS:

WWII Display Group GB

'Tommy Atkins' GB

American Army US

Intelligence Corps GB

Second Battle Group Ger

German Signals Unit Ger
(based at Bletchley Park)

British Airborne GB

'Strength from Above' US

and more

Family £17
(2 Adults and up
to 3 children)

**FREE ADMISSION TO MEMBERS
IF HELPING ON EITHER OF BOTH DAYS!**