

'TOUCHPAPER' ©  
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# Touchpaper

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



**SEPTEMBER**  
**2000**

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PLEASE NOTE: Deadline date for submissions for  
the next issue is 15th November 2000



## EDITORIAL

The majority of members have now renewed but there are still some of you out there who have probably filed away your renewal form and forgotten. Those members will find a reminder notice enclosed. I hope you will continue to give us your support.

I also hope that as many as possible of you will attend the Annual General Meeting and/or the Annual Reunion in October. You will find details of these events in this issue.

We will be selling Christmas Cards again this year. Full details will be found towards the back. A small depiction is shown to give you an idea but the actual size will be an A5 card (that's the same size as this page).

Thankyou to all those who responded to comments in the last issue and a special thanks to contributors of articles. Please keep them coming.

**Norman Paul**



# SITE

## FORWARD PLANNING

Planning arrangements leading up to open are in full swing to meet the tight timetable to open in April next year. Among the many areas to be finalised are; cafe, shop, ticketing and cleaning.

Staffing will be a major issue as we get nearer opening but the Company are in the process of taking on two specialists, one being a Marketing Officer and the other an Education Officer. The latter is due to take up post in September and will be looking towards the involvement of schools using the Company's aim of being an educational resource.

## SITE OPENING

Detailed arrangements and preparations for the Site Opening will be the first priority of the new Marketing Officer on appointment. Meanwhile a subcommittee of the Board has been set up to look into opening arrangements and have already produced their first report to the full Board. It is suggested that there be two opening events.

The first would be a major Formal Event with public and private sector dignitaries. This would also be attended by the local and national press to give major publicity. If at all possible it is hoped that this event would be headed by the Royal Patron.

A second, Civic and Local occasion would take the form of a community festival with an initial formal ceremony followed by some special events and attractions. An initial suggestion is that the Formal Opening be on 5th April with 13th April (Good Friday) for the Public Event. At this time the Board as yet to make final decisions on these recommendations.

## SPECIAL EVENTS

In addition to normal opening there are also plans to hold special events on the Site, probably at weekends. One particular possibility is a display by a re-enactment society and discussions have already taken place with two such groups.

Robert Taylor, the Site Director, is very keen to develop a programme of special events as he knows, from past experience, that these keep up the momentum of publicity and visitors.

# NEWS

## PROJECT PROGRESS

The construction programme is well underway with work proceeding on all major buildings in the programme.

Contracts for the fit-out of the main exhibition in A200 and the H7 visitor centre have been agreed and the main artefacts to be displayed have been identified.

Overall the contractors are confident that the phase I project will be completed on time.

## NARROW GAUGE RAILWAY

As you may be aware one of the planned future projects is the reinstatement of a part of the old narrow gauge railway system on the site.



ONE OF THE ORIGINAL TRAINS

Although this is still some way in the future an unrepeatable opportunity to purchase rolling stock and engines has arisen. One of the Board members, John Bowles, has a particular interest in this project and became aware that the Bicton Gardens was about to sell off carriages and engines. A tender bid was put in, backed by the Foundation, which was successful and carriages have already been delivered with arrival of the engines in the next month. The engines are of particular relevance since they originally came from the Woolwich Arsenal railway system and are exactly the same type as those used at Waltham Abbey. Initially these will form part of a static display but as further funds become available it is hoped to develop a working system which can take visitors around a part of the Site.

## LANDMARK AWARD

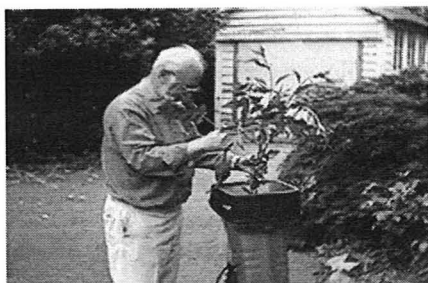
Some time last year the Site was nominated for a new Landmark Award to be awarded by the Royal Society of Chemistry. This was to be given, in this year, to 'Sites which have made an Outstanding Contribution to Chemistry'.

We are pleased to announce that the Royal Gunpowder Mills have been successful in gaining this award. A plaque will be presented to the Site at a special ceremony, some time after opening.

## ASSOCIATION

### SITE WORKING PARTIES

These last few months have seen a major input to the Lodge gardens which are now in excellent shape. A major task is keeping the lawns in trim and thanks to the absence of too much rain and the new rotary mower this hasn't been too much of a chore. Much tidying up and removal of rubbish has been done and the various storage sheds put in good order, including reroofing. Work parties have also been active inside the Lodge with installing mirrors and towel dispensers in the toilets and reorganising the storage of paper archives.



Another activity is, video-ing work progress on site, using the new digital camera that the Company has purchased, to give a record of the development as it happens. These will be edited which is just as well as Dave Sims didn't realise it also recorded sound and what he said when he stepped back into a ditch will certainly be edited out!

We could do with more volunteers as there is still plenty to be done. This will become even more important when the site opens next year. Future issues will give more details of duties that can be carried out on days when the site is open to the public.

### ARTEFACTS

Relocation of artefacts on site is soon to take place in order that the buildings they are currently in can be renovated. Members have agreed to supervise the contractors on the movement of these many valuable items.

We have also made visits to Royal Ordnance at Glascoed and Westcott to identify possible artefacts for return.

### MEMBERSHIP

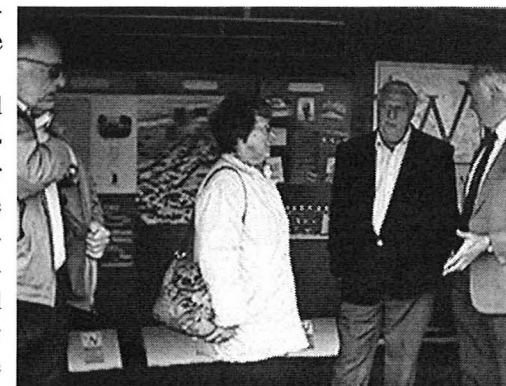
Current membership renewals number just over 300 but there are still a number who have yet to renew. Reminders to those who have not renewed will accompany this issue. This is the same situation as last year and we hope that we will soon be back to full strength.

## NEWS

### PUBLICITY

We continue to give illustrated talks to outside groups with a full planned programme right through to next year.

An exhibition stand was erected and manned by members at the **Waltham Abbey Festival** on 24th June. Despite the bad weather and a somewhat out of the way location we did manage to attract a fair number of visitors and those who did come were very enthusiastic about the project. We were pleased to see Don Spinks, one of the Company Board Members, and his wife Liz at the stand.



By the time you receive this we will have mounted a major exhibition at the **National IWA Waterways 2000 Festival** on the **August Bank Holiday weekend**. As well as the exhibition stand we also hope to exhibit some artefacts including the model of the Powder Mill made by the Lea Valley Branch of the University of the Third Age.

As part of this event we are also taking round the site a number of the officials of the IWA who have a special interest in the canals and waterways.

### ARRANGEMENTS ON SITE OPENING

The Association Committee have had discussions with Robert Taylor, the new Site Director regarding visiting arrangements when the site is open.

We have suggested that::

Association Members entering as visitors be granted a special concessionary rate on production of membership card.

Those attending for voluntary duty would have to be on an approved list and would be provided with a special 'Volunteer Card'. A log would be kept and a record of any duties carried out recorded.

Any such arrangements will, of course, have to be ratified by the Company Board but we expect that they will be sympathetic to these proposals.



# ANNUAL GENERAL MEETING

The AGM of the Association will be held on 6th October at the Waltham Abbey Royal British Legion commencing at 11.00.

The Legion Hall is in Sewardstone Street approximately 200 yards from the Market Square. Parking is somewhat limited and you are advised to use the public car parks in the town. The one behind the Town Hall is recommended as it usually has plenty of space.

## PRELIMINARY AGENDA

1. Apologies for Absence
2. Minutes of 1999 AGM
3. Matters Arising
4. Chairman's Annual Report
5. Treasurer's Report and Financial Statement
6. Election of Officeholders and Committee

*Please note: the existing officeholders and Committee are standing for re-election. Any member wishing to stand should forward their name, proposed and seconded by other members, to the Secretary by 1st October.*

7. Selection of Auditors
8. Amendments to the Constitution.

*No amendments have been proposed*

9. Any Other Business

## FOLLOWING THE AGM WE WILL BE HOLDING OUR :-

## ANNUAL REUNION

For those attending the AGM, you just have to move from the meeting room into the main hall and those coming only for the Reunion should arrive from midday.

The cost of the Reunion is still only £6 per head including buffet lunch.

If you wish to attend the Reunion but have not already booked, please send remittance to the Editor as soon as possible. Cheques should be made payable to the WARGM Friends Association. Please indicate full names of those attending,

## A SLIDE RULE SAGA

The story of the problems imposed by the Admin. over purchase of log tables described by Jim Jeacocke in the last issue reminds of a similar saga.

When I joined the research Department at Woolwich in 1951, I was posted to the Calorific Value Section and given the job of measuring the calorific value of the cordite samples produced by the Woolwich Cordite factory. As results were required to two places of decimals I was issued with a Fuller Circular Slide Rule. This was equivalent to a conventional slide rule 32 ft long and avoided the chore of working with log tables. It was a magnificent piece of kit, housed in a mahogany box with a brass spike at one end which fitted the handle so that it was readily at hand. All this of course was long before the development of electronic calculators. There were mechanical calculators but these were reserved for senior staff and you had to be a qualified mathematician to be allowed to use one of the very rare electrically driven calculating machines.

Incidentally, Neville Shute in his autobiography 'Slide Rule', refers to a team of girls equipped with Fuller Slide Rules spending six months completing the stress calculations for the Airship R100, then starting all over again to make sure that they had achieved the right answer.

Slide rules were classified in those days as 'desirable items' together with soldering irons, platinum crucibles and precious metals and were closely inspected on our regular stocktake. When I transferred to Fort Halstead in 1960 I, naturally, took my Fuller with me and likewise when I joined Waltham Abbey in 1971. Not long after leaving Fort Halstead I received a note from Admin. pointing out that I had taken an item of their property with them and that it should be sent back to Fort Halstead. I promptly requested that it be transferred to my inventory at Waltham. Their response was that 'as Fort Halstead was then a War Office Establishment and Waltham was Ministry of Aviation Supply, no transfer of inventoried items was possible'. My reply was that a Slide Rule was now an obsolete piece of equipment and in any event I doubted if there was anyone at Fort Halstead who would know how to use it.

After a long pause I received a note saying that someone had been found at Fort Halstead who did know how to use a Fuller Slide Rule and that it must be returned.

By this time one of the regular reorganisations had taken place and the War Office and Ministry of Aviation Supply had been amalgamated to form the Ministry of Defence and my response was that, therefore I could see no obstacle to the transfer of equipment within one Ministry. At that point they gave up the battle. My much loved Fuller Slide Rule did not accompany me when I moved to Aldermaston in 1980 and I wonder what was its final fate. Perhaps it did finally end up at Fort Halstead after all.

Cyril Beck

*I remember using a 'Fuller' at Waltham Abbey but long before Cyril joined. I don't know what happened to that one either. Has anyone got one 'squirrelled away' somewhere? Ed.*

## TROUBLE WITH STOCKTAKERS 1

Walter Batty and I ordered a new semi-micro balance. After due negotiations it was delivered and duly set up in our balance room. The next day a stock-taker turned up and announced his intention of marking the balance with an appropriate WA number. Before we could stop him he took out a set of punches and started to impress them on the base. Unfortunately the base was made of black glass and shattered at the first blow.

Several months later a replacement balance was delivered and, sure enough, on the next day a stock-taker turned up to impress the WA number. He assured us that he had learned his lesson and would not attack the glass base. We watched in amazement and then, unbelievable horror, as he proceeded to try and punch the number on the delicate gold foil cross beam - too late!

Several months later a second replacement arrived (Heaven knows how the books were balanced!) followed in due course by the stock-taker. This time he had learned his lesson and proposed to stick a plastic tape with the number on the base. Having done so he departed but Walter immediately took the label off and cleaned the base with lab chloroform. I punched out a duplicate number on the lab punch and it was duly kept in a safe place against the annual stock inspection - honour all round.

Bob Simkins

## TROUBLE WITH STOCKTAKERS 2

I too had my troubles with stock-takers. The first time was over platinum crucibles which, being very valuable, were checked every year. It wasn't just to see that none were missing but that no one had 'trimmed' any metal off and so they were weighed. I showed the man how to use an automatic balance and he recorded all the weights. The next year he repeated the exercise and complained that there was a weight difference on virtually all the crucibles. I had to explain that he had weighed them to four decimal places and that a loss of up to 0.0005gram was hardly significant, bearing in mind that these were constantly in use, being heated up to red hot temperatures and requiring some cleaning on each occasion. The difference amounted to about 0.001% loss on a 60 gram crucible. I don't think he was ever really satisfied with the explanation.

Some years later when I was running the Mass Spectrometer I returned to my lab to find the stocktaker rummaging around in cupboards. On challenging him he said "I'm looking for missing items." I said "Well you won't find any there and you really should ask before coming in." He had pulled out some very delicate and expensive equipment in the process which he could well have damaged. After complaining about him I received an apology and he was very careful to ask permission on future visits.

Norman Paul

Of course they were a fine body of chaps and only doing there job -BUT sometimes with excess zeal and often without appreciation of their actions.

## A TALE IN THREE PARTS

### PART 1

I won't say that there was a black (or even grey) market in waltham Abbey but George Smith, one of the seniors in the main Lab, who also had a confectionery and tobacco shop at 1 Farm Hill, could obtain things that were otherwise difficult. After VE Day when things were getting marginally easier I thought that I would like a goose for Christmas and, talking to others, I found someone of like mind. Early in the year I approached George to see if one of his farmer friends would run a couple of goslings for me. "Right-Oh boy" (everyone under 30 was a boy to George) and there the matter rested until just before Christmas Eve. "I'll be bringing your geese in tomorrow" was the message from George and I made appropriate arrangements. The next morning duly arrived but, instead of 2 nicely plucked and prepared geese for the oven they were just as they had been 'on the hoof' earlier that morning, except that they were now very dead.

### PART 2

It had been decided to augment the bi-propellant proof stand by the addition of a mono-propellant facility. These, by their nature, are potential explosives and an explosion in a motor might transmit to the header tank. A 'detonation trap' was required for the fuel line and I was given the job. Up at the top end of the North Site there was a large black wooden hut adjacent to a brick splinter proof shelter. The one ideal as a workshop and the other suitable for a bomb proof. These the Sensitiveness Group commandeered. I had working with me a lab worker who was a butcher by trade and to whom I explained my problem with the geese. "That's easy, we'll go to the black hut at lunchtime and I'll see to them". Thus, armed with a sharp knife and ball of string (and the geese) we hied off to the top end. My advice to anyone contemplating plucking a goose is the same as Mr Punch's on marriage - don't ! The butcher worked with amazing speed and very soon, the geese looking very presentable, we set about cleaning up.

Unfortunately the only places we could not reach were the roof trusses and for ever after that - certainly until I left the Group - whenever we put on a demonstration for important people, goose down would float down from the roof. When questioned I would point to the ventilation louvres and blame the pigeons. No-one spotted the difference between goose down and pigeon feathers.

### PART 3

And the detonation trap? A few weeks after it had been installed I was transferred to work with P D Verschoyle - to run the momopropellant proof stand.

Jim Jeacocke

(PS The goose was lovely)

I started work at Woolwich Royal Arsenal in October 1929 and was very soon given jobs relating to the Royal Gunpowder Factory at Waltham Abbey. One of my jobs was mixing RDX and TNT and a small chap called 'Dodger' Green was the only person who could get in the small hole at the top of the mixing vessel. Unfortunately all the RCDF staff were given 'no overtime and were sent home - no overtime for RGPF staff so it could be done only by RM staff. The next morning 'Dodger' was transferred over to RGPF, put in the fairly large mixing vessel and given something compatible to make up the RDX/TNT on site. I was also involved in NC and experimental NC for which I was working at Woolwich on behalf of RGPF projects. Although, subsequently I was based at Waltham Abbey I continued to carry out work at Woolwich and had a long and happy association with the staff there.

George Taylor

#### Apprentices at RSAF...

As to the question (June issue) about the 'missing' girl apprentice, Susan Junnor, the last I heard was when someone told me she was working in the duty-free shop at Stansted Airport - whether she is still there I don't know.

It is nice to receive Touchpaper to read about all the different stories of the old establishment. One last point about regarding mistakes not picked up in proof reading. If someone points out a mistake in the CSMA North East London Group Newsletter, they are threatened with taking over as the Editor! It's amazing the effect this has because nobody wants to do it at the moment and the Committee have to take it in turn each month.

Cliff Blunt

*What a good idea! Ed.*

## TOUCH

#### More About Apprentices.....

Regarding little Sue Junnor. Sue was a big personality in a small package. She was intensely jealous of Bonny Langford as Sue had all her talent but none of her shape. She was a fitness fanatic, dancer, singer and had a general good showbiz personality. Her rendition of "Good Ship Lollypop" was marvellous to behold. Unfortunately showbiz likes skinny girls with long legs and that's where she went wrong. The reason she got into engineering was, her boyfriend was an apprentice at the RSAF and she hoped to join him there.

There was another girl apprentice on South Site, one Stephanie Game. Steff had all the right shape for showbiz but, alas, none of the talent. She was the youngest of five sisters and was very competitive. She's probably an executive in some firm by now. She came from the RSAF with three boys, Bob, Pete and 'Millsie'. For some reason Sid Hewitson was unable to let them loose on the machinery for insurance purposes, so he hid them in the machine shop sub-store until things got sorted out and I got the job as warder - they were a pest!

Dick Evans

#### Mike Healey OBE

We are pleased to hear that Mike Healey, was awarded the OBE in the Queen's Birthday Honours List.. Mike worked at Waltham Abbey from 1966 to 1986 and is currently working at the Ministry of Defence Main Building in London although due to retire as we go to press.

## BYTES

#### A Correction ...

Thanks for including the "Pythagoras" article in the June issue. I appreciate your editing and tidying up but, unfortunately, your checking programme did not detect the transpositions at line 24 which should read:-

'If  $c-b=1$  then  $a^2=c+b=2b+1$ '

We can then say:-

Choose an odd number (a), Square it, Subtract 1 and Divide by 2. This gives b. Add 1 to obtain c (hypotenuse). Check  $c^2=a^2+b^2$

Thanks for your efforts,

"ARTURO" (Dennis Eldridge)

**and Again ...** I'm sure many learned mathematicians will have approached you by now on the Pythagoras item. I just wondered, in view of your editorial, whether you should get a maths checker as well! Joking aside I do enjoy Touchpaper which must be the envy of other Establishments. Les Dingle (Chemical Engineer)

#### and on Spellcheckers .....

Regarding your editorial I can assure you that we find each edition interesting as I'm sure most other members do. Best of luck with your spell checker. I find mine is a boon but it provides the occasional bloomer. I wrote to my local MP last year whose name is Sir Peter Tapsell. This was rejected and sir Peter Topsoil suggested. I don't think he would have been amused.

Dick Dedman

Latest edition received and read with interest, especially the remarks about spell checkers! Perhaps you ought to put my name in memory bank as you spelt it a different way in each of the two articles you printed!

Jim Jeacocke (aka Jeacock)

*mea culpa - Neither me nor my spell checker are infallible and when it comes to maths - well, least said! Editor.*

I bring to your attention a cutting from the Deaths column of the Daily Telegraph for 28th June 2000.

**Wheeler.**-William Henry, PhD., CMG., died peacefully on Friday June 23rd aged 93. A true gentleman, he will be greatly missed by his friends and relations.

Following the transfer of Mr A Brewin, Acting Chief Superintendent ERDE, to London, Dr Wheeler came to Waltham Abbey on 1st June 1959 from Australia where he had been the Head of the UK Ministry of Supply Staff. His post in Australia was at Chief Scientific Officer level, a grade which he brought to Waltham Abbey for the first time and, as such, became the first Director; all previous heads had been DCSOs and were entitled Chief Superintendents.

His term of office was short, a mere five and a half months and, although he had the reputation of spending more time to-ing and fro-ing between his office and headquarters than visiting staff in the Establishment, it was during this time that the then important but ill-fated Blue water project was undertaken.

He left ERDE on 12th November 1959 to take up posts in private industry becoming chairman of Mark Laboratories Limited and Managing Director of Urquhart Engineering Company. He was succeeded as D/ERDE by Dr CH Johnson who returned for a second time as head of the Establishment.

Malcolm McLaren

#### REMEMBER

**DEADLINE FOR THE  
DECEMBER ISSUE:  
15th November 2000**

## FRIENDS CHRISTMAS CARD

The picture on this year's card is from an old engraving dated 1861 and will be printed in a sepia tone. The inside also gives a short message on the site and its future.



These will be on sale at the AGM and Reunion at a cost of 40p each.

Those unable to attend either event can order cards by post in multiples of 10 cards costing £4.61p including postage.

It will not be cost effective to send less than 10 cards by post

### To Order by Post:

Please apply to the Editor at the address shown on the inside front cover and please remember to make your cheques payable to the 'WARGM Friends Association'.

We are having 750 cards printed which we hope will be enough for everybody. A print re-run of less than 500 would put the price up so unless we receive extra orders approaching this we are unlikely to re-order.

Seasons Greetings

Produced by and sold in aid of the  
Waltham Abbey Royal Gunpowder Mills  
Friends Association



## FRAMED PHOTOGRAPHS

We are looking at the possibility of raising funds by the sale of a series of framed pictures relating to the Site.

A large number of you liked the coloured picture of the 'Lady of the Lea' sailing barge which was the frontispiece of last year's Christmas card. Our Secretary, Richard Penfold, has been looking in to the a reprint of the picture and setting in frames for sale.

He has produced a few framed pictures and the Friends Committee have asked him to go ahead with this a fund raising project.

The cost has yet to be decided but, depending on the cost of frames, will not exceed £10 each. Richard hopes to have samples ready for the AGM and Reunion in October.

Funds will be raised to support the development of the Site but, in principle, it has been decided that they will be used to provide some concrete addition rather than as cash donations. An example would be the provision of bench seating for the Queens Mead picnic area with an inscription showing that the Friends had provided it. Other uses would be for any special restoration project that the Friends would be involved in.

## JUNE ISSUE QUIZ ANSWERS:

- |           |           |             |
|-----------|-----------|-------------|
| 1. Clubs  | 9. Rocket | 17. Ball    |
| 2. Major  | 10. Pound | 18. Rake    |
| 3. Berlin | 11. Pants | 19. Mule    |
| 4. Mole   | 12. Jib   | 20. Duck    |
| 5. Polo   | 13. Pump  | 21. Char    |
| 6. Bridge | 14. Punch | 22. Steer   |
| 7. March  | 15. Neat  | 23. Rail    |
| 8. Bun    | 16. Pike  | 24. Coaster |

NO QUIZ OR PUZZLE IN THIS ISSUE BUT:  
SPECIAL SEASONAL QUIZ IN OUR DECEMBER ISSUE