Touchpaper

The Newsletter of the Royal Gunpowder Mills Friend's Association

April 2010

Contents

Editor's news

Welcome to the first issue of 2010 and the start of a new season at Waltham Abbey Royal Gunpowder Mills.

The new season runs from 24th April to 26th September. A good programme of special events have been booked which can be seen in the site leaflet accompanying this issue.

The AGM and Social Event date has been set for the 7th May and members will find a booking form for the event enclosed, together with a reminder notice for those of you who have not yet renewed your membership. Please do come to the AGM as well.

This is the first issue prepared by Michelle Moore, with me just collating the articles and passing them on to her. I am looking forward to seeing the finished issue and I am sure she will do a great job in the future.

Malcolm Bergh

Chairman's Chat...

Welcome to the Spring issue

Do remember the Social Gathering on Friday May 7th. At last year's meeting, when it was called a Reunion, significantly fewer people attended than in previous years. We would like to keep the numbers up as much as possible so do please come if at all possible.

We are calling this year's event a Social Gathering rather than a Reunion to try and encourage more people to come. You will be able to have a good natter with people you perhaps may not have seen for some time, and to look around the site at various improvements that have been made.

Replica mill

The full scale model of a gunpowder mill in L157 will be finished and available for you to operate. Also in the same bay (bay 3) of L157 there is now a model of the under floor workings, showing how power from the beam engine was transmitted to the mill.

The model was made by John Smith a volunteer who has made some excellent models including one of the 1854 hydraulic press in the main exhibition in A203, the old library building. The Land Train will also be available for a tour round the site if your legs are not quite as good as they used to be.

And now a regular plea. Volunteers are of course always welcome to assist in making new models, upgrading older exhibits, site maintenance and dusting and tidying up exhibition buildings and the site in general.

If you are interested please talk to a committee member who can give you more information.

We are hoping for a good season with lots of fine weather. Some of the event weekends will be a bit different from last year. Details are in the programme.

Looking forward to seeing some of you at least sometime during the season.

John Wright

Letters to Touchpaper

Inspired or irritated? Social or technical memories? Whatever it is, we want to hear about it, so write or email—our address is on page 1.

Waltham Abbey and Gretna

I read with interest the article by Les Tucker on the Waltham Abbey and Gretna production plants. Les was quite right about the massive opposition to the planned closure of Waltham Abbey in 1919; given that it had employed about 5000 people at the height of WW1, this would have had an enormous impact on the town and the surrounding area. But I believe that there was more to it than just local and Trade Union opposition to the proposal.

The Committee that was formed in February 1919 reported in June that year, stating that Waltham Abbey alone had not the capacity to deal with the possible war requirements and that it was wiser to over-estimate rather than under-estimate when considering the question of Cordite Factories, hence to keep Gretna rather than Waltham Abbey.

There was, however, a minority report by one of the committee members, Sir Edward Pearce. He regretted that he was unable to sign up to the report on the grounds that the then Chancellor of the Exchequer's forecast of military expenditure left no possible place for a permanent factory like Gretna, also that the Navy now possessed their own factory (Holton Heath), sufficient for all Naval requirements. He submitted that it was better to cut the loss of Gretna once and for all, since only the possibility of a future World War could justify its retention.

Well, twenty-twenty hindsight is a marvellous thing, for by 1939 the UK production capacity dwarfed the combined Waltham Abbey / Gretna production capability, and the rest, as they say, is history. I attach for interest the Summary of Conclusions of the Committee, which includes this minority report. I suspect that it was the filibuster by Sir Edward Pearce as much as anything which put the majority recommendation into the long grass.

From Geoff Hooper

FUTURE OF GRETNA AND WALTHAM ABBEY.

CONSTITUTION OF COMMITTEE.

The Ministry of Munitions appointed a Committee in February, 1919, to consider the future of Gretna and Waltham Abbey, constituted as follows :—

Sir EDWARD E. PEARSON, J.P., *Chairman.*
Brigadier-General W. ALEXANDER, D.S.O., C.M.G., C.B. } *Ministry of*
Sir PHILIP HENRIQUES, K.B.E. } *Munitions.*
Sir WILLIAM PEARCE, M.P.
Mr. E. H. MARKER, *Board of Trade.*
Colonel COBB, O.B.E., *Lands Directorate* (*representing Sir Howard Frank*).
Dr. H. E. WATTS, *Secretary.*

SUMMARY OF CONCLUSIONS.

The Committee (with the exception of one member) reached the following conclusions in June, 1919 :—

(1) There was no valid reason why *both* Gretna and Waltham Abbey should be kept as Explosives Factories.

(2) Waltham Abbey alone had not the capacity to deal with the possible war requirements, and the Committee felt strongly, in view of the demands during the late war, that it was wiser to over-estimate than to under-estimate when considering the question of Cordite Factories. They also felt that the National Factories should, as far as possible, be self-contained.

(3) Gretna, being a modern and up-to-date factory, should, therefore, be kept in preference to the older factory, viz., Waltham Abbey.

(4) Gretna, in the opinion of the Committee, was in a position to manufacture cordite cheaper than it could be made at Waltham Abbey. It also had its own Oleum Plant—Glycerine Distillery—Ether Plant and Solvent Recovery Plant.

(5) The Committee recommended that the Presses for Rifle Cordite now at Waltham Abbey should be transferred to Gretna, where they could be readily installed. The cost of this transfer should not be heavy, and it was very desirable to concentrate at one factory.

(6) The Committee also recommended that the Plant at Waltham Abbey for Black Powder, and Picric Powder, should be transferred to either Gretna or some other Government Factory, so that Waltham Abbey could be entirely shut down as an explosives manufacturing centre.

(7) The Committee recommended if possible that a part of Gretna Ether Plant should be used for other purposes than the Factory requirements ; *e.g.*, the conversion of Alcohol to Ether and the treatment of the Ether Alcohol recovered.

In the opinion of the Committee it was well worth while the Government considering, in view of the many industries in the country requiring solvents, the production of a supply of cheap duty-free alcohol and ether, which would give a great incentive to all industries of this nature. Being centralised it could be worked economically, and, furthermore, would be under close Government control.

The Committee were advised that Methyl-alcohol of a high grade suitable for the dye industry could be manufactured with slight modifications to the existing plant. It was recommended, therefore, that a small grant should be at once made for the necessary alteration, so that experiments on a commercial scale could be undertaken immediately with the large stock of Methyl Alcohol in this country to Government account.

The above recommendations, if carried out, would not compete with any existing trade, but would be of the greatest assistance in helping existing industries.

(8) The Committee recommended that certain of the Government lands outside the Gretna Factory fences, which could not be utilised conveniently for industrial purposes,

(B 15967) Wt. 42218—PP417 1500 4/20 H & S

should be handed over for small holdings. It was desirable, however, that a small area of land suitable for buildings in proximity to the townships should be retained for possible future extensions.

(9) The Committee considered that the Gretna and Eastriggs Townships, which at present are Government Townships, and are controlled by the factory, should, at an early date, be completely severed from the factory, and be run by some local authority. The schools, for instance, should be handed over to the Scottish Education Authority on some agreed terms. The cost of the Townships would, in these circumstances, cease to be a direct charge against the cost of production.

(10) Except as a Government Cordite Factory the Committee saw no useful purpose to which Gretna could be put, and, considering that it was a modern up-to-date Cordite Factory, which has cost a large sum to erect and is in excellent state of maintenance, it would be criminal to scrap it.

The Committee considered, however, that every encouragement should be given to induce industries to start up in the neighbourhood. This could be done by the Government offering cheap power and water, and also facilities over the factory railways. These facilities would not, in the opinion of the Committee, in any way be detrimental to the factory work; in fact, the reverse should be the case as they should help the factory overhead costs.

(11) As some of the warehouses and stores at Gretna would not be required to the full capacity, it would be possible for certain Government stocks to be stored here, and, in view of the railway facilities and means of handling the stores, the costs should be moderate.

(12) *Waltham Abbey.*—The Committee very much regretted that they had to recommend that this factory should be shut down as an Explosives Factory. They especially regretted having to make this recommendation in view of the great service the factory had been to the Nation in the past. On the other hand, having regard to the possible future requirements, and also to the fact that Gretna was a more suitable and economic factory, they could not do otherwise. They recommended that, as far as possible, the workmen who had served for a long time at Waltham Abbey should, if they desired, be transferred to Gretna at the expense of the Government, and that the Government should be prepared to buy, at a fair valuation, the houses that the Waltham-Abbey men who leave the district may own.

Generally they saw no useful purpose to which the factory could be put. Its general lay-out is inconvenient, the land at the northern end, cut up as it is by waterways, is of little or no value either as factory sites or for agricultural purposes. The land at the southern end should have some value, and it was suggested that part of it, or some of the buildings, might be of use to Enfield Small Arms Factory for storage purposes.

MINORITY REPORT.

In a Minority Report, Sir William Pearce regretted his inability to sign the main Report, because in his opinion recent circumstances had made obsolete the terms of reference upon which it was based.

In his view, the Chancellor of the Exchequer's forecast of military expenditure in the near future left no possible place for a permanent factory like Gretna with its huge lay-out. As a result of the war, the Admiralty now possessed their own factory, sufficient for all Naval requirements. A large stock of Cordite also remained, and there was a large over-production in the United Kingdom of both Oleum and Glycerine. If, therefore, any Government factory would be required by the War Office, it was certainly only a case for a small output—Waltham Abbey rather than Gretna.

The main Report ignored the enormous capital cost of Gretna, approaching £150 for every ton of Cordite yet produced. He submitted, however, it was wiser to cut this loss once and for all than to continue a huge factory in a locality with inherent disadvantages, which factory only a world-war called into existence, and only the probability of a future world-war could justify its retention.

Printed under the authority of His Majesty's Stationery Office, by Harrison and Sons, Printers in Ordinary to His Majesty, St. Martin's Lane, W.C. 2.

In the months preceding the 'privatisation' of the Royal Ordnance Factories (ROFs) in the early 1980s there was a good deal of local canvassing at Waltham Abbey with a view to establishing a useful role for the site in the New Regime. The Propellant and Explosives Branches at Waltham Abbey (WA) had provided research, development and general 'trouble-shooting' support for the ROF's for many years and, because of this, those parts of the Establishment had been assigned to become part of the new Royal Ordnance.

The Lunch by Jim Burgess

In pursuance of this objective, a get-together was arranged at WA to present the relevant Directors and other luminaries associated with the ROFs with a view of WA's capabilities and to insinuate the idea into their minds that it would be in their interests for WA to become the Centre for Research in propellants and explosives for Royal Ordnance.

Because of the distances some of the visitors had to travel, the meeting was scheduled for the afternoon. A sumptuous buffet had been set up in a 'demonstration room' prior to the meeting.

However, as the meeting was to be conducted 'on site' and in an 'explosives area' there were no alcoholic beverages to be had.

There's no criticism of the ROF contingent in recognising that they felt the need of a strong libation after their long journeys – I would have felt similarly – and so, upon their arrival, they arranged to be transported to a local hostelry. An hour or so later (nearer two, actually!) they arrived back to tuck into the spread that had been prepared for them.

During their absence, imbibing the products of grain and the grape, someone inserted a plate of dog biscuits (Bonios – of an unmistakable 'bone shape' and a variety of colours) into the fare laid out on the trestles. I've always thought that it was my 2IC at the time, a fellow endowed with a very active and, on occasions, mischievous sense of humour, who was responsible but he has always strenuously denied it. On the occasions when the matter has been raised (socially) he's accused me (!) of all people of being the perpetrator. What a cheek – I didn't, honest!

The outcome was, however, most entertaining. Only one or two of the Bonios remained on the plate (my 2IC must have had some idea of how many biscuits there were on the plate to start with to remark on this….!). One has to conclude that the visitors had been so inebriated that they'd consumed the dog biscuits without noticing it……..

memories

We continue from December 2009's Touchpaper, Valerie Clifford's childhood memories of living in the Explosives Research and Development Establishment, written in collaboration with Raymond Clifford.

Hoppit Hall

Hoppit Hall was also synonymous with Mrs Game, a buxom, gentle, older woman who ran the canteen and kept the men in order I should imagine. I thought that she had been there forever and would always be there. Such was the high regard that people held her in at the Establishment that she was nominated for, and awarded, a Queen's New Year's honour.

Although we were 'locked in' this did not seem to deter local tradesmen and we were regularly visited by horse and carts belonging to the milkman, fishmonger and the rag and bone man. For several years there was an annual fair held on the field next to Hoppit Hall in aid of the Benevolent Fund which was open to all the town.

Although Mum enjoyed her new life it was the first time that she had been away from all her family and friends. In those immediate post-war days travelling by public transport between Waltham Abbey and Woolwich would have been difficult and cars had not yet become generally affordable and few had telephones. I remember taking a deep interest in the red motorbike and red uniform of the telegram boy who arrived one morning, until I realised that what Mum was reading on the doorstep was serious and unhappy, telling her of the death of her father. Mum said that the friendship of all those around helped her through those days and she made special friendships with some of the other wives.

Time to leave

Finally the day to leave the Establishment came. By then we had a motorbike and sidecar. The bike was a large 1000cc Brough Superior and whenever it needed fixing Dad always had to take the sidecar off, he then disappeared for a long time on a 'test' drive. Mum thought this was very reckless behaviour

on such a large bike and the family so small! We had had several trips up to Monkswood Avenue with me perched on top of off-cuts of vinyl and bits of furniture. As we left for the last time I saw my scooter shoved behind the dustbin.

'My scooter, you've forgotten my scooter!'
'No dear, your scooter is broken we don't need to take it with us.'
'No, Dad can fix it, it's alright, get my scooter'.
'No dear, you don't need your old scooter you are going to our new house and you are going to have your own bedroom', and we drove off.

It never did seem a fair trade-off to me! However, a whole new world of adventures was to open up to us with the adjacent derelict nurseries becoming our new playground. Unfortunately broken glass and tree climbing do not mix well and Sister Bell at the Cottage Hospital had to deal with a number of casualties and our legs still bear the scars.

Our return and learning to sail

Ten years later we were back. My Dad and his friends decided that they wanted to learn to sail so in true pioneer style they bought three kitset Heron dinghies and we spent a winter in Nurse Salt and Pepper's surgery gluing, sandpapering, painting and varnishing. In the spring we proudly launched our small flotilla on the canal and paddled our way around to the River Lee where we housed the boats on an island opposite Dunlop's and shared the river with the anglers. The anglers were far from amused by our presence at first, even throwing stones at us for disturbing their fish. However, I never saw much evidence of them catching anything and rather than being serious anglers I thought they were rather seeking some quiet space away from home. Anglers and sailors eventually settled down into some sort of quiet truce and they laughed at our inability to sail forwards or to turn the boat around, paddling ignominiously back to base camp! Eventually we learnt how to make the boats move forward and then migrated to bigger boats and more water down at Fishers Green and then to cruising on the East Coast.

Always looking for a new challenge, I came home from college one weekend to be taken down to the Establishment to see the large, black, steel hull of a canal barge that the fellas were now fitting out! They worked hard and made a beautiful job of Elmyra but unfortunately after a few seasons the hires did not come in and she had to be sold. The story does not stop there as the new owner fitted a gas fridge and a gas leak led to an explosion which destroyed all their hard work and distorted the hull, which had to be cut and welded to give her a new life.

I recently returned to the ERDE after over 30 years overseas and was stunned to see that Sandhurst flats, the surgery and Hoppit Hall are no more. I had not thought about time also moving on here while I was away. I was particularly sad not to be able to revisit Hoppit Hall and see what it really looked like. But to me Hoppit Hall had been the end of my domain, never being party to the boys' adventures, and I was curious to see what had lain behind it all those years. Imagine my surprise to travel through woods and fields, past many buildings, some that had been blown up for safety reasons, others derelict, some being restored, where my Dad and brother had worked all those years. While the main area is now being restored by volunteer enthusiasts as part of our industrial archaeology history, the area in front of Hoppit Hall has been sold and redeveloped as a series of new walled, locked, gated estates. I wonder at the need for such security but also feel there is some irony in the situation!

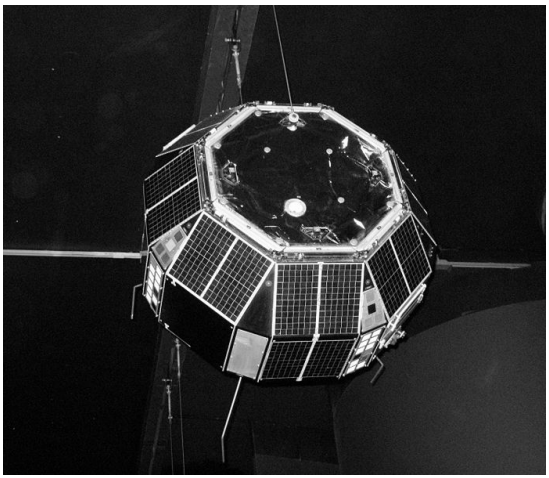
My father Victor Clifford worked at the ERDE from 1948 to 1981
My brother Raymond Clifford worked there 1964 to 1966

Prospero

I can testify that Prospero is still up there in orbit. I saw it a few years ago.

If you go to the website http://heavens-above.com you can get information on the location of most satellites and maps showing you where in the sky to look. Its best to start first with something nice and easy like the ISS (International Space Station), which being pretty big now and is so bright it nearly casts a shadow! It's odd watching something sail 300km overhead with 6 people on board. Don't forget to wave.

Then when you have done that, work your way toward fainter things like Prospero. On some passes the UK's only self lofted satellite is very easy to see with binoculars, but its at best only just visible to the naked eye from a good dark site. Intriguingly, I noticed that the Waxwing 3rd stage is also still in orbit and may well be brighter than the satellite itself. I've not tried for that yet.



It's reckoned they will stay up there for another 400 years or so and in the meantime they are keeping company with lots of other bits of space history. The Sputniks long ago fell to Earth, but some early US systems like Telstar are silently rotating round the Earth and, Prospero - proof that once the UK really did know how to do things - will be up there silently cycling long after we are all gone.

Grant Privett

get to the Eureka and back again. With the Rebecca range switch on its lowest setting the tiebase length represented about five miles and at touchdown the blips were an inch from the bottom of the tube.

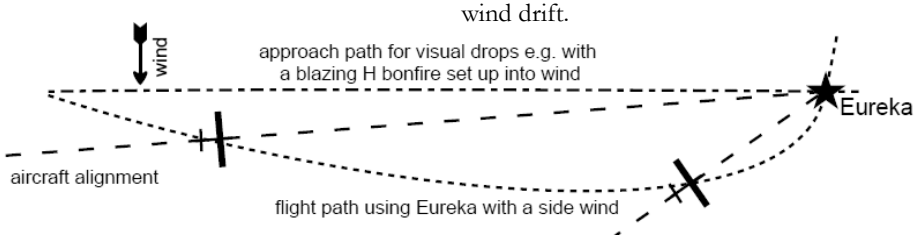
The Eureka unit George Evans refers to was a miniaturised version made by the Americans. It was about 75*50 mm about 200mm long. It was also used by the Paras and the OSS (the Americans SOE) for the re-supply missions. It had a major advantage over the blazing H or torch plan in that is was not detectable by the Germans. It enabled the aircraft to drop in darkness

Captain James Bell ARIC MC

The concluding chapter of Jim Bell's biography by G E Evans

Eureka

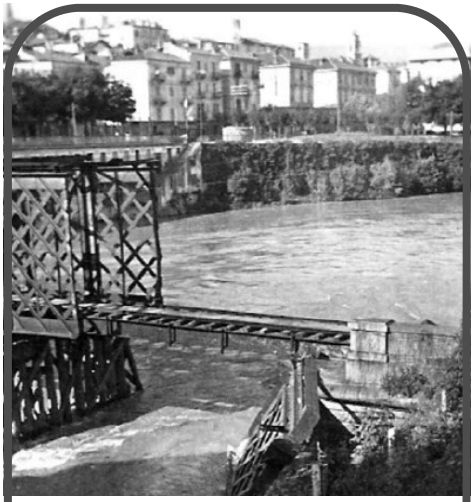
This is a UHF radio responder beacon, the ground part of the Rebecca/Eureka system develop as an approach aid for landing RAF bombers. A Eureka responder was on a lorry positioned at the far end of the landing runway. On receipt of a pulsed signal from the Rebecca in the aircraft, Eureka sent a pulse back in return. There were two Yagi aerials on the nose of the aircraft one on either side. The returned signals were presented on a Cathode Ray Tube with a vertical timebase in the centre. The pulses from Eureka received by the two aerials were displayed as blips on opposite sides of the timebase. When the blips were the same size the aircraft was pointing directly at the responder. The distance of the blips from the bottom was a measure of the time taken for the pulses to (depending on the nearness of high ground) which avoided the need for a full moon when planning drops. It was the practice to layout H or torch patterns on the DZ directly into the wind so the aircraft followed the ideal approach path shown below. With just a single point of aim provide by the Eureka the pilot received no information about the wind direction it could be a bit hairy if the run in was not directly into the wind. As the aircraft was always pointed at the Eureka it had to crab sideways into the wind. The approach pattern was curved (I think it was cardioid but I've forgotten the geometry to prove it) with the aircraft banking into the wind as it passed over the beacon. As it was already flying as slow as possible with flaps down at an altitude of only 500ft, a very high standard of airman-ship was needed. For clarity the diagram below exaggerates the wind drift.



Eureka

This is a UHF radio responder beacon, the ground part of the Rebecca/Eureka system develop as an approach aid for landing RAF bombers. A Eureka responder was on a lorry positioned at the far end of the landing runway. On receipt of a pulsed signal from the Rebecca in the aircraft Eureka sent a pulse back in return. There were two Yagi aerials on the nose of the aircraft one on either side. The returned signals were presented on a Cathode Ray Tube with a vertical timebase in the centre. The pulses from Eureka received by the two aerials were displayed as blips on opposite sides of the timebase. When the blips were the same size the aircraft was pointing directly at the responder. The distance of the blips from the bottom was a measure of the time taken for the pulses to get to the Eureka and back again. With the Rebecca range switch on its lowest setting the timebase length represented about five miles and at touchdown the blips were an inch from the bottom of the tube.

The Eureka unit George Evans refers to was a miniaturised version made by the Americans. It was about 75*50 mm about 200mm long. It was also used by the Paras and the OSS (the Americans SOE) for the re-supply missions. It had a major advantage over the blazing H or torch plan in that is was not detectable by the Germans. It enabled the aircraft to drop in darkness (depending on the nearness of high ground) which avoided the need for a full moon when planning drops. It was the practice to layout H or torch patterns on the DZ directly into the wind so the aircraft followed the ideal approach path shown below. With just a single point of aim provide by the Eureka the pilot received no information about the wind direction it could be a bit



THE IVREA RAILWAY BRIDGE

There are photos of the modern bridges at Ivrea and Montestrutto on Google Earth. They are of similar design to that of the Ivrea bridge shown in George's May 1945 photograph.

Jim's report

Since writing this, Mrs Horn has found and sent me a copy of Jim's original operational report. It covers most of the topics in George's report but also gives an insight into the quantities of 808n used. For the attach on the Ivrea bridge the two men used (and had to carry) "only" 75 kilos of 808!

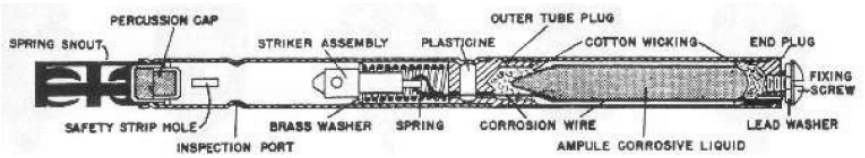
When Jim led the same men to attack the Montestrutto he used 400 lbs of explosives. He had been given a plan of the 100 yard three span bridge and was able to make up charges to fit. It took two hours to put the charges in place and connect up the fuses. Throughout this time the German guards were only a few hundred yards away.

Whilst most readers will be familiar with many of these abbreviations some may not know their meaning.	
ARIC	Associate of the Royal Institute of Chemistry
MC	Military Cross, awarded for bravery in the face of the enemy
SOE	Special Operations Executive, set up by Winston Churchill to 'set Europe ablaze'
EO	Experimental Officer, a Civil Servant scientist grade
SEO	Senior Experimental Officer
CEO	Chief Experimental Officer
ERDE	Explosives Research and Development Establishment of the ministry of Supply, Later Ministry of technology and Ministry of Defence. Based at the Royal Gu8npowder Mills, Waltham Abbey.
PERME	Propellants, Explosives and Rocket Motors Establishment, the change of name of ERDE when it was amalgamated with RPE (Rocket Motor Establishment).
OSS	Office of strategic Services, the American version of SOE
DZ	Dropping zone
CE	Composition Exploding (tetryl, 2-4-6-trinitrophenyl-N-methylnitramine) used as a booster for increased reliability
NC	Nitrocellulose
NG	Nitro-glycerine
Cordtex	A detonating cord containing PETN (pentaerythritol tetranitrate)
Schermuly's	A pyrotechnic firm near Dorking. Their main claim to fame was the Schermuly's Pistol Rocket Apparatus. It was the standard line throwing equipment on ships. They also made Very signal cartridges, rockets and flares.
Brock's	A firework company based at Hemel Hempstead who always gave us a good lunch
ROF	Royal Ordnance factory.

Time pencils & fog signals

A time pencil consists of a thin copper tube containing an ampoule of cupric chloride solution and a steel wire fixed to a striker and tensioned by a spring. The strength of the solution determines the time to corrode the wire. When the ampoule is crushed the steel wire is etched until it breaks and allows the striker to hit a percussion cap. In normal use a detonator would have been inserted into the spring snout and the Cordtex taped to it.

The fog signals used were standard railway fog signals modified with a spring snout to take a detonator. They were filled with a potassium chlorate, sulphur and sand mixture with a little binder and stabiliser (one reference claims they were filled with black powder).



MATHEMATICAL POSERS
From Malcolm Bergh

An Arab sheikh was dying and decided to leave his Arabian Stallions to his 3 sons. He told the eldest son that he could have half the horses , the middle son that he could have one third and the youngest son one ninth. When the sons went to the stables , they found 17 magnificent stallions. They thought about their father's wishes , but could find no way of splitting up the horses without cutting some of them up. So they asked their father's old servant if he could help. He agreed to help and then brought out his own broken down old nag from the stable and added it to the line of stallions. The eldest son then chose 9 of the stallions, the middle son 6 of the stallions and the youngest son 2. The servant then put his old nag back in the stables. Simple really !

The concept of infinity is something which I am sure everybody is familiar with, but is also something which most mathematicians dislike because it leads to all sorts of problems.

Consider the following...
The series 1,2,3,4,5,6,7 .... goes on forever and is termed an infinite series and has infinite numbers in it.

The series 1,4,9,16,25,36,49 ..... is the square of the numbers in the first series, it is also an infinite series and has infinite numbers in it.

The problem is that all the numbers in the second series occur in the first series , but there are some numbers in the first series which are not found in the second series.

Does this mean that the infinity of numbers in the first series is a bigger infinity than the infinity of numbers in the second second series ? See the next issue of Touchpaper for an answer.

The snooker ball problem. Mike Harper , whom I worked with at PERME back in 1972 , told me this one and it took me about 6 months to work out an answer.

You have 12 snooker balls and one of them is faulty , it is either lighter or heavier than the others. You have a balance where you can put up to 6 balls on either side. How can you , in 3 weighings , find out which ball is faulty , and also establish in which way it is faulty. I have one answer which I will give in the next issue , but there are probably quite a few ways of doing this.

In the 1920's Management at the Mills decided that some refurbishment was necessary. Every emphasis was placed in giving office staff as salubrious a working environment as possible

New Main Office

Management were keenly aware of the historical importance of the site. The Archive was housed in an impressive new office housing the latest in document storage technology, permitting efficient and speedy document retrieval. In the photograph a researcher is seen effecting a typical archive retrieval.

The Needles Batteries

Further to the article on the Isle of Wight High Down rocket test site at the Needles National Trust historic military site (Touchpaper September 2009), Hannah Griffiths, custodian of the site, has kindly sent the following commentary on the 1860's Old and New Batteries - the original defence installations.

In a post Napoleonic Britain a time of relative peace supplied perfect conditions for an arms race. France launched the first Iron Clad warship La Glorie in 1860. As a result of the Royal Commission of 1858 into the protection of the naval base of Portsmouth a fortification was planned for the Needles Point Isle of Wight. Designed by Major James Edwards (Royal Engineers) and costing £6,985 building began in 1861 with completion of The Needles Battery in June 1863.

The site included Barracks accommodation for 21 men and 4 Officers. A Magazine – with cartridge store, shell store, laboratory and guardroom made up the main rooms. Six 7" Armstrong Breech loaders were installed in 1863.

It is understood that gunpowder for the Battery came from the Waltham Abbey Powder mill via Priddy's Hard.

By 1873 the Breech loaders were scrapped due to issues with the sealing of the breech which had serious consequences for the gunners operating the weapons. Six 9" Armstrong Rifled Muzzle loaders were installed to continue protection of Portsmouth.

In 1885 a submarine mining cell was set up on site at the end of a tunnel above the Needles Rocks

During 1888 and 1889 the Battery conducted trials of the new electric defence lights and quick fire guns. This technology was devised to attack the new high speed torpedo boats.

By the turn of the century the New Needles Battery had been built on the Highdown above the Old Battery. The Old Battery Parade ground was too small for the new mark IX guns. Erosion

The Needles Old Battery


Test Firing of Black Knight Rocket

had also started to encroach on the site as the concussion from the guns was causing the soft chalk to erode. The Old Battery became the Fire Command Post for the guns at New Needles.

In 1913 the first Anti Aircraft gun in Britain was tested at the Needles Old Battery. A box kite was tied to a destroyer which sailed up and down the Solent as the soldiers tried to hit the kite!

Both The Old and New Needles Batteries were manned throughout the First and Second World wars. Along with much of the Coastal Artillery both sites were decommissioned in 1954.

Saunders Roe leased the site and developed the Highdown test site used between 1957 and 1972. The National Trust bought the site in 1975 and opened the Old Battery to the public in 1982 and the New Battery in 2004.

The Needles Battery is a visitor attraction. The best website for information is

www.theneedlesbattery.org.uk

Models of the Black Knight and Black Arrow rockets and of Prospero, the satellite successfully launched from Woomera in 1971, can be seen there.

Photographs reproduced by kind permission of the National Trust.

The Darwin's are out!

Yes, it's that magical time of year again when the Darwin Awards are bestowed, honouring the least evolved among us. Here is the glorious winner.

When his 38 calibre revolver failed to fire at his intended victim during a hold-up in Long Beach , California , would-be robber James Elliot did something that can only inspire wonder. He peered down the barrel and tried the trigger again. This time it worked.

And now, the honourable mentions:
The chef at a hotel in Switzerland lost a finger in a meat cutting machine and after a little shopping around, submitted a claim to his insurance company. The company expecting negligence sent out one of its men to have a look for himself. He tried the machine and he also lost a finger. The chef's claim was approved.

A man who shovelled snow for an hour to clear a space for his car during a blizzard in Chicago returned with his vehicle to find a woman had taken the space. Understandably, he shot her.

After stopping for drinks at an illegal bar, a Zimbabwean bus driver found that the 20 mental patients he was supposed to be transporting from Harare to Bulawayo had escaped. Not wanting to admit his incompetence, the driver went to a nearby bus stop and offered everyone waiting there a free ride. He then delivered the passengers to the mental hospital, telling the staff that the patients were very excitable and prone to bizarre fantasies.. The deception wasn't discovered for 3 days.

The Ann Arbor News crime column reported that a man walked into a Burger King in Ypsilanti , Michigan at 5am, flashed a gun, and demanded cash. The clerk turned him down because he said he couldn't open the cash register without a food order. When the man ordered onion rings, the clerk said they weren't available for breakfast... The man, frustrated, walked away. [*A 5-STAR STUPIDITY AWARD WINNER]
An American teenager was in the hospital recovering from serious head wounds received from an oncoming train. When asked how he received the injuries, the lad told police that he was simply trying to see how close he could get his head to a moving train before he was hit.

A man walked into a Louisiana Circle-K, put a $20 bill on the counter, and asked for change. When the clerk opened the cash drawer, the man pulled a gun and asked for all the cash in the register, which the clerk promptly provided. The man took the cash from the clerk and fled, leaving the $20 bill on the counter. The total amount of cash he got from the drawer... $15. [If someone points a gun at you and gives you money, is a crime committed?]

Seems an Arkansas guy wanted some beer pretty badly.. He decided that he'd just throw a cinder block through a liquor store window, grab some booze, and run. So he lifted the cinder block and heaved it over his head at the window. The cinder block bounced back and hit the would-be thief on the head, knocking him unconscious. The liquor store window was made of Plexiglas. The whole event was caught on videotape.

As a female shopper exited a New York convenience store, a man grabbed her purse and ran. The clerk called 911 immediately, and the woman was able to give them a detailed description of the snatcher. Within minutes, the police apprehended the snatcher. They put him in the car and drove back to the store. The thief was then taken out of the car and told to stand there for a positive ID. To which he replied, "Yes, officer, that's her. That's the lady I stole the purse from."

When a man attempted to siphon gasoline from a motor home parked on a Seattle street, he got much more than he bargained for.. Police arrived at the scene to find a very sick man curled up next to a motor home near spilled sewage. A police spokesman said that the man admitted to trying to steal gasoline, but he plugged his siphon hose into the motor home's sewage tank by mistake.. The owner of the vehicle declined to press charges saying that it was the best laugh he'd ever had.

In the interest of bettering mankind, please share these with friends and family. *** Remember.... They walk among us!!!***

Obituaries

Pamela Garrod

6 Jan 1025 to 17 Nov 2009

Pam Garrod sadly passed away on Tuesday 17th November 2009 after suffering a heart attack. It seemed she would recover and be able to go home, but unfortunately, complications arose and nothing further could be done – she slipped away early in the morning.

Pam was a lovely lady, kind, generous in spirit and deed, loved to laugh and have fun. She was always there in time of need, to listen and suggest ways round problems. She was a loving Mum, Grandmother and Great-grandmother and a great support to her family in times of troubles.

Art was a great passion and gave Mum such pleasure. She never thought she was very good, but she turned out some very good pieces. Her garden and the birds that visited the garden gave her a big buzz, but due to her aches and pains she was unable to do as much in the garden as she would have liked.

Jazz, her dog, was a great companion and he misses her a lot, he lives with us now and hopefully we are making up for his Mum not being there.

Mum always spoke highly of her "Chaps" and how happy she was working in Waltham Abbey – I believe it was one of the happiest times of her life.

Always a glass half full gal, life always held a promise of good things to come, and her zest for life was very infectious, taking you along for the ride.

Her family was everything to her. We miss her terribly each day that passes, but our lives are so much richer for having her as a Mum, Nan, Great-grandmother, friend and confidant.

Julie Garrod

Margaret Meek

Margaret Meek died recently , aged 91. Her first husband was Dr. Gregory, one of the establishment doctors. Dr Gregory, who spent some years looking after concentration camp victims after the war, sadly died when he was only 40.

So Margaret needed a job, and at the suggestion of Colin Meek, Head of ISRG, joined ERDE to work in Stores Accounting. She soon became PA to Dr Harold Young. She was very bright and had no difficulty in keeping up with Harold. (Perhaps it was the other way round). She later trained as a solicitor, married Colin Meek and retired to Cornwall.

But her real career was just beginning. As MRD Meek she started writing mystery novels, and the Times put her on a par with PD James and Ruth Rendell. There were 15 novels involving her detective Lennox Kemp. The earlier novels were set in a place very reminiscent of Waltham Abbey.

Her novels were popular in the USA, and her publisher sent her advances, so she got paid even before she started writing.

I can recommend any of her who-done-its, even if there's no mention of rockets or gunpowder.

John Vernon

Officers of the Friend's Association

Chairman

John Wright
1 Albury Ride
Cheshunt
Herts EN8 8XE
Tel 01992 624210

Secretary

Richard Penfold
10 Thaxted Way
Waltham Abbey
Essex EN9 1LQ
Tel 01992 712623

Treasurer

Daphne Clements
56 Park Road
Enfield
Middx EN3 6SR
Tel 01992 717816

All enquiries relating to this newsletter should be addressed to

Malcolm Bergh
Touchpaper Editor
14 Lea View
Waltham Abbey
Essex EN9 1BJ
Tel 01992 765393
E-mail: malcolmbergh@hotmail.com

PLEASE NOTE: Deadline date for submissions to the next issue is 15th May 2010