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Colin Farrow gets a  
parcel of the 007's,  
but he finds.....

At Wootton Abbey-  
Children as are secret  
agents should fear to  
tread.

Chelmsford and Wootton  
Mareuxy

Friday October 13 1967

## Colin Harrow gets a touch of the 007s, but he finds . . .

THERE was a distinct touch of the 007s about it, or so I liked to think. A bit of the real cloak and dagger stuff.

The instructions were simple and authoritative. "Arrive at the main gate 10.20 a.m., be issued with a pass by security, then escorted (yes, escorted, that's what the man said) to the office."

I wandered past the notices which announced that this was a "prohibited area," that there was "no entry without permission," and that "unauthorised entry is an offence against the Official Secrets Act." I got the message.

As I showed my identification to the security man at the gate, and mumbled out of the corner of my mouth the "password," "Hertfordshire Mercury," it was almost impossible to prevent myself from stealing a shifty glance over each shoulder in the best slouch-hat and turned-up raincoat collar tradition.

Most disappointing it was really to be greeted with a smile, a cheery "Good morning. We are expecting you," and instructions to "slip over to the other office, have a word with the sergeant and he'll see to you."

Oh! yes, that's more like it," I thought. So he's going to "see to me," huh!

A single light bulb blinds my eyes and burns deep into my brains as shadowy figures fire their staccato questions at my throbbing ear-drums. Are

you now or have you ever been? — "When did you last see your father?" — Will the Sun Street one-way traffic system work? — "Who killed Cock Robin???"

But no, there's another disappointment waiting for my would-be spy story when the sergeant I meet turns out to be affability itself as he issues me with a pass, rings up and announces my arrival, and asks if someone can show me the way to the office.

I then discover the first fact about the E.R.D.E., the Explosives Research and Development Establishment, that has for so long given an air of mystery to the quiet little town of Waltham Abbey.

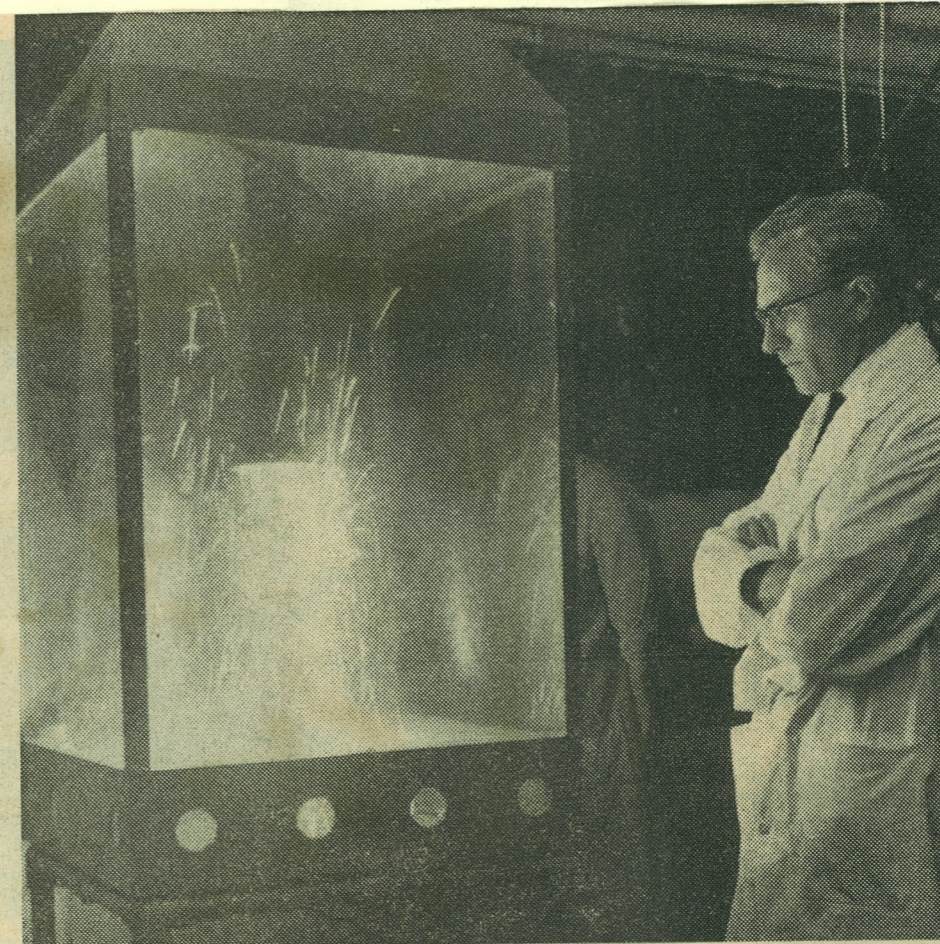
The men who guard the establishment, despite their uniforms, are not in fact Metropolitan policemen. Most of them come to the job from the Services.

"This is our kingdom here," the sergeant observed. "We

have complete authority and we don't call in the local police unless we need to."

A day-pass is rapidly made out, a procedure that is becoming more and more common to these security men, and in a few minutes I am met by my escort.

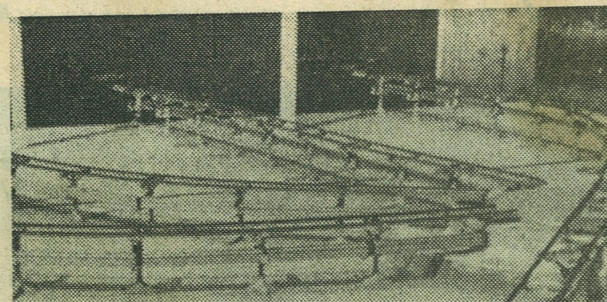
He is a young man in overalls, who drives me off to meet the man who is to show me



ALL PASSES TO BE SHOWN BEFORE ENTRY

▲ The warning is there for all to see—along with other notices that this is a "prohibited area" and that "unauthorised entry is an offence against the Official Secrets Act." Although the establishment is a much more "open" place than it used to be, an air of secrecy still prevails.  
▲ An indoor fireworks display under glass, where the properties of several of the propellants made at the establishment are demonstrated.

## At Waltham Abbey—children where secret agents should fear to tread



around. Dr. I. Dunstan, tall, slim, about 30, married with two young children, lives at Chingford, wears glasses, and looks every inch like a pleasant sort of schoolmaster.

He shatters any final illusions, and by this time there are few enough left, that the E.R.D.E. is the sort of place where spies lurk and plot to prise out secret information for the use of enemy powers.

"The name itself, Explosives Research and Development Establishment, is a bit of a misnomer really," he said.

"For although we still do work on explosives for military purposes, it is not a closed defence establishment any more and a lot of other research work goes on here.

"During peacetime, explosives work is more or less an insurance policy to make sure we keep abreast with the rest of the world."

sort of people who might enter the establishment for criminal rather than subversive purposes, he added.

And large amounts of explosives are kept on the site under very strict safety regulations. "Every building has an explosives limit," said Dr. Dunstan. And as they are further protected by mounds of earth it is made certain that should an accident occur the explosion would be contained in a very limited area.

The "open" policy at the establishment has quite a lot to do with its recent take-over by the Ministry of Technology, which is very much concerned with helping industry.

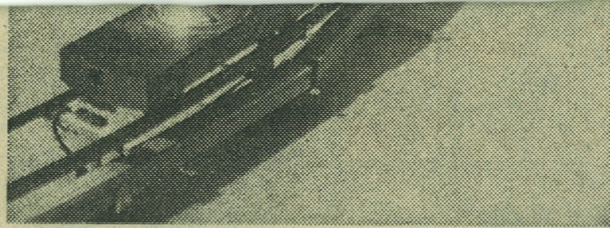
"We are now in a position to allow industry to take more advantage of our research work," said Dr. Duncan, "and in some cases military and civil research can be of mutual benefit."

be something of a misnomer, but the "bang boys" are still there carrying on a tradition that stretches back for centuries.

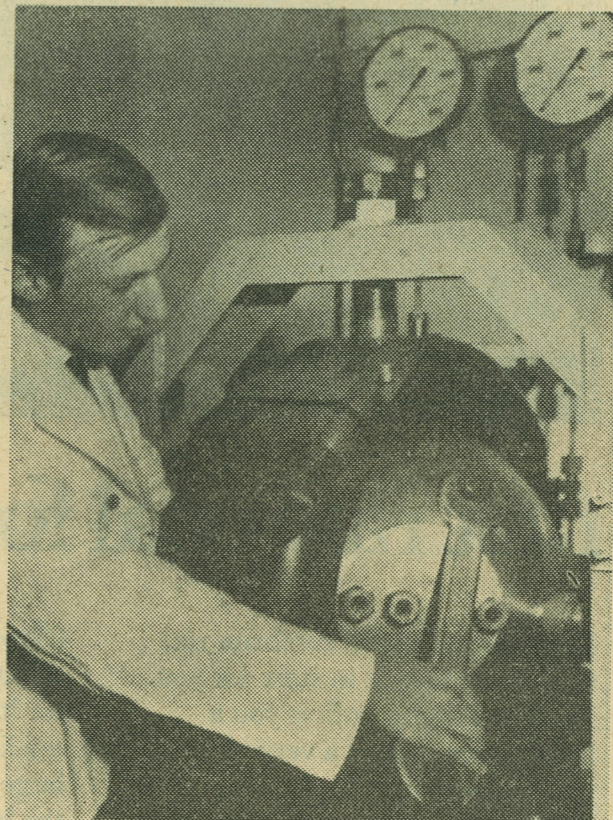
### Gunpowder

For the site that the establishment occupies is that of the oldest gunpowder factory in Britain, boasting 400 years of continuous operation. The gunpowder mills were bought by the government in 1787 and continued manufacturing until the winter of 1940-41. By that time other parts of the factory were engaged in making cordite and high explosives and they continued to do so until they were handed over for their present research purposes in 1945.

Since then a great deal of conversion work has been carried out at the establishment, roads and services have been provided, buildings altered and



Although much of the equipment used at the E.R.D.E. for research deals with microscopic values and minute fractions of an inch, you can't beat a heavy spanner, welded here by scientific assistant Mr. B. Pratley, for certain adjustments.



### Stronger

An asbestos-reinforced plastic has also been developed which, weight for weight, is stronger and stiffer than light metal alloys.

But as well as developing techniques which enable certain operations to be carried out, the E.R.D.E. also has a chemical engineering department, whose job it is to turn the processes used in small laboratory experiments into means and equipment for processing chemicals on a production scale.

"We," as the head of the department put it to me, "are more interested in the processes than the end product. Whether the work is to do with explosives or materials it is our job to find out whether it can be done on a large scale."

Another section of the E.R.D.E. is the heat transfer laboratories, which are in the charge of Mr. H. Zeibland. This group does a great deal of research into the means of cooling rocket engines.

So the E.R.D.E. is not all explosives, and as Mr. Dunstan said, the name would seem to

surface, then solidified and used to run vehicles on," he explained.

Its use for military purposes, where communications have to be quickly established over difficult terrain, or airfields have to be laid down rapidly, is obvious, but why not a similar method for civilian road building?

Another recent development to come from this department is rubber that goes completely against all the rules and, instead of insulating, conducts electricity. This was found to be necessary for use on tank tracks to eliminate radio interference.

ingredients that make up the explosives is controlled from a master panel behind 18 inches of reinforced wall.

The bays in which the explosives are moved and mixed are built to withstand explosions of up to 15 lbs. of T.N.T. Mr. E. G. Whitbread, of the explosives branch, said: "This is enough to demolish a normal house."

To move the explosives materials from place to place, a special five-inch gauge railway, again remote controlled, has been built.

### 'A cake'

Making the explosives is very much like "baking a cake," said Mr. Whitbread. "The ingredients ("and what exactly are the ingredients," says I, as casually as if I was asking for the recipe for lemon soufflé. "I'm afraid I can't tell you that," says he, smiling sweetly and knowingly) are first weighed and dispensed, then mixed, and the resulting 'goo' is put into moulds.

"It is then heated in an oven where it solidifies, and it can then be taken to the firing bays for testing."

But what about the bangs that do result from such testing? Do they get many complaints at the establishment?

"Well we do get complaints," confessed Mr. Whitbread, "but we would never do anything down here that we know would cause a nuisance in the neighbourhood."

"Weather conditions play a large part when we test. For instance, low cloud reflects the noise and makes it worse," he explained. "Today is jolly good banging weather," he laughed, as he looked up at the clear blue sky.

Finally I was shown around the propellants section, the place in which research is carried out into ways in which explosives can be used to move things rather than mangle them.

### Ejector seats

Things like rockets, aircraft ejector seats, or mortar shells. And it was here that I was treated to a fireworks display under glass as the properties of several of the propellants, taped together in a multi-coloured sausage, were demonstrated.

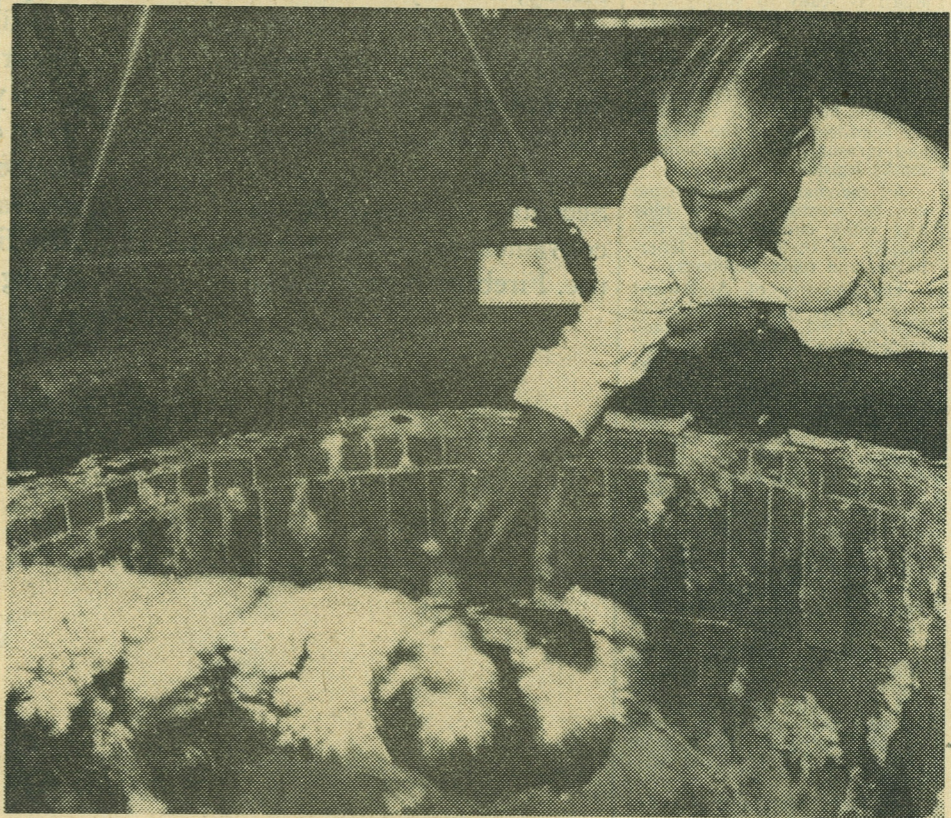
So that was the end of the day at the E.R.D.E. As I handed in my little pink pass to the security man on the gate, and bid farewell to my host and guide, Dr. Dunstan, I couldn't help feeling a little disappointed.

Sliding my regulation issue notebook back into its shoulder holster, and slowly deactivating my Mercury ball-point by replacing the plastic safety cap, I must admit I felt a bit cheated.

A visit to what I had fondly imagined to be a "top secret" military base, where each tree hid a little man with furry hat and snow on his boots, or a television camera concealed in a plate of chop suey, had turned out to be more like a tour of a Christmas cracker factory.

On some Saturday mornings parties of local schoolchildren even visit the establishment to hear lectures in the E.R.D.E.'s recently-built hall.

Children—where secret agents should fear to tread. Is nothing sacred?



Fibres, used for reinforcing other materials, are "grown" in furnaces like the one pictured here.

with of central heating, the  
thies still choose to retain  
the appearance and efficiency  
right in tune with modern  
m of heating has, so far,  
deal of the traditional glow-  
n or flickering cosily behind  
g fire" will certainly be a  
community for years to come.  
Appliance list, published  
on, there is today a vast  
glass-fronted room heaters,  
style of living room and  
capable for burning smoke-  
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