

KNOWSLEY ARCHIVES PRESENTS:  
EXPERIMENTS IN PROPAGANDA:  
HISTORY & TRAGEDY OF  
KIRKBY'S ROYAL ORDNANCE  
FACTORY  
1940 - 1946



Knowsley Council

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IN KIRKBY

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# About the Exhibition

The Exhibition, '*Experiments in Propaganda: History & Tragedy of the Royal Ordnance Factory in Kirkby*' featured items from the Royal Ordnance Factory collection that have not been seen until now. The exhibition ran from Monday 14th April 2025 until Monday 26th May 2025.

The Exhibition highlighted the short timeline of the Royal Ordnance Factory, located in what is now Kirkby Industrial Estate and was located at Knowsley Archives Service at The ARK (Archive Resource for Knowsley) The Kirkby Centre.

The Royal Ordnance Factory was based on the outskirts of Liverpool in the rural area of Kirkby and was responsible for producing munitions during the Second World War. The factory was in production from September 1940 until its closure in March 1946.

# History & Tragedy of the Royal Ordnance Factory in Kirkby

The history of the ROF Kirkby begins in 1939, as Liverpool Corporation began negotiations with the Earl of Sefton to purchase land within Kirkby for industrial development, however due to the outbreak of the Second World War, these plans were abandoned. In the same year, after already approving of four filling factories, the Government decided to have an addition of two more and the sites chosen were located at Risley and Kirkby.

These factories would be responsible for placing explosives and propellants into casings. In the early 1930s, there had previously been only three of these factories within England, and due to their location around the London area, there was a danger of them being bombed. Due to this, a committee was set up to assess possible locations that were away from London and the surrounding area.

Early developments for the ROF Kirkby were done at the Royal Arsenal Woolwich in Southeast London and by 1939, a 740-acre site was purchased from the Earl of Sefton for the cost of £310,000, though this was formally completed in 1943. In today's money, this would have been priced at £17,259,967.33.

However, before the contractors could move on to the site, they were faced with unexpected challenges; located within the specified area were twelve farms. Due to having to accommodate the sheer scale of the factory, the farms were placed under a compulsory purchase order and the families were given weeks to leave. The overall price of the construction of the factory would cost the Government a sum of £8,500,500. In today's money, this would have been priced at £473,285,007.37

In the year of 1940, Lawrence Gale who had previously been working at the Royal Arsenal in Woolwich, was made Superintendent of ROF in Kirkby. Gale brought a small number of staff with him from Woolwich and by 1941 there were over 10,000 employees at ROF Kirkby. At the height of production there were over 23,000 people employed within the factory. Though there were some difficulties with recruitment, in some of the roles revolving around Medical, Transport and Training. There were also difficulties with providing canteen facilities for staff.

# Space A



Photograph of Exhibition Space A, featuring Drawers One, Two & Three

# Space A



## ***'Women At Work'***

Women Workers at the Royal Ordnance Factory

These Photographs feature women promoting working life at the ROF in Kirkby and also feature visits made by the Royal Tank Corps and Bomber Pilots, to see where their ammunition was being made.

Date: 1941

# Space A



Photographs of Workers taken by Sir Lawrence Gale part of the book, 'R.O.F. Kirkby 1940-1946: A Photographic History'



SEPTEMBER 1941  
THE ROYAL TANK CORPS  
BRING THEIR "WALTZING  
MATILDA"  
*'It's easier than driving a car'*

NOVEMBER 1941  
TWO BOMBER PILOTS  
VISIT GROUP 8.  
*'Stick to it and we'll do  
our piece of the Show'*



# Drawer One



## ***'Auntie Norris's Gas Mask'***

Towards the end of 1939, nearly everyone in the United Kingdom had been issued with their own Gas Mask and were instructed to carry them at all times in case of a sudden attack. For the adults, their mask had some resemblance to a pig-snout and the children's were known as a 'Mickey Mouse' gas mask. Rather differently, for babies and infants up to the age of two, their masks were known as a 'Baby Helmet', and they would be placed inside. Their masks would have to be pumped manually so that the babies and infants inside could breathe.

Date: **1940s**

# Drawer One

## WAR GAS

OFFICIAL INSTRUCTIONS ISSUED BY THE MINISTRY OF HOME SECURITY

### IF THE GAS RATTLES SOUND



Put on mask, holding your breath until mask is in position. Turn up collar. Put on gloves or keep hands in pockets. Take cover in nearest building quickly. Put up umbrella if you have one.

### IF YOU GET GASSED

#### by Vapour Gases

1. Keep your mask on even if you feel discomfort.
2. If discomfort continues, go to First Aid Post.

#### by Liquid or Blister Gas

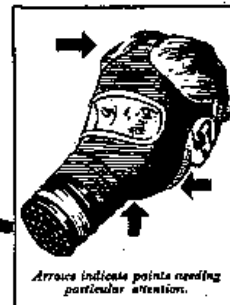
1. Dab, but *don't rub* the splash with your handkerchief. Then destroy the handkerchief.
2. Rub No. 2 Ointment well into place (buy a 6d. jar now from any chemist). In an emergency, chemists will supply Bleach Cream free.
3. If you can't get the Ointment or Cream within 5 minutes, wash the affected place with soap and warm water.
4. Take off *at once* any garment splashed with gas.

### HOW TO PUT ON YOUR MASK

1. Hold your breath.
2. Hold mask in front of face, thumbs inside straps.
3. Thrust chin well forward into mask. Pull straps as far over head as they will go.
4. Run finger round face-piece taking care head-straps are not twisted.

### MAKE SURE IT FITS

See that the rubber fits snugly at sides of jaw and under chin. The head straps should be adjusted to hold the mask firmly. To test for fit, hold a piece of paper to end of mask and breathe in. The paper should stick.

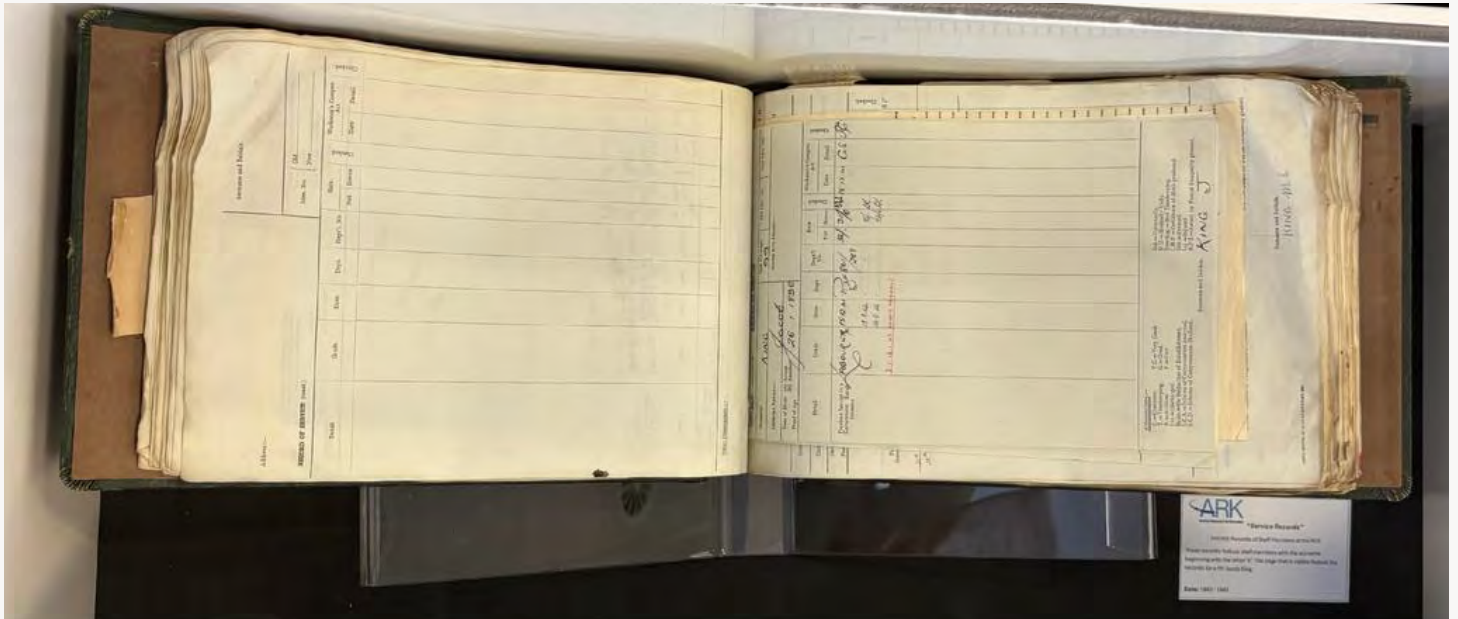


Arrows indicate points needing particular attention.

**ALWAYS HAVE  
YOUR GAS MASK  
WITH YOU - DAY AND NIGHT.  
LEARN TO PUT IT ON QUICKLY**

Instructions on what to do in a gas attack - National Archives  
Date: 1941

# Drawer Two



RECORD OF SERVICE											
SURNAME				Sick Privileges		Old Idem. No.		New Idem. No.			
KING				99							
Christian Names:—				Service with Forces:—							
Date of Birth (A) Actual (B) Assumed				26. 1. 1896							
Proof of Age											
Chr	Detail	Grade	Date	Dept.	Dept'l. No.	Rate			Workmen's Compen. Act		
						Net	Bonus	Checked	Date	Detail	Checked
Pro	Previous Service in a Government Establishment	LABOURER	15.12.41	RAF	80/268	32/	30/16	30/15.12.41	CS	30	
			19.9.42	"	"		15/	12/			
			26.9.42	"	"		12/	12/			
Pr			15.12.42. 20.12.42. 20.12.42. 20.12.42. 20.12.42. 20.12.42. 20.12.42. 20.12.42. 20.12.42. 20.12.42. 20.12.42.								
Gove											

## 'Service Records'

Service Records of Staff Members at the ROF

These records feature staff members with the surname beginning with the letter 'K'. The page that is visible feature the records for a Mr Jacob King.

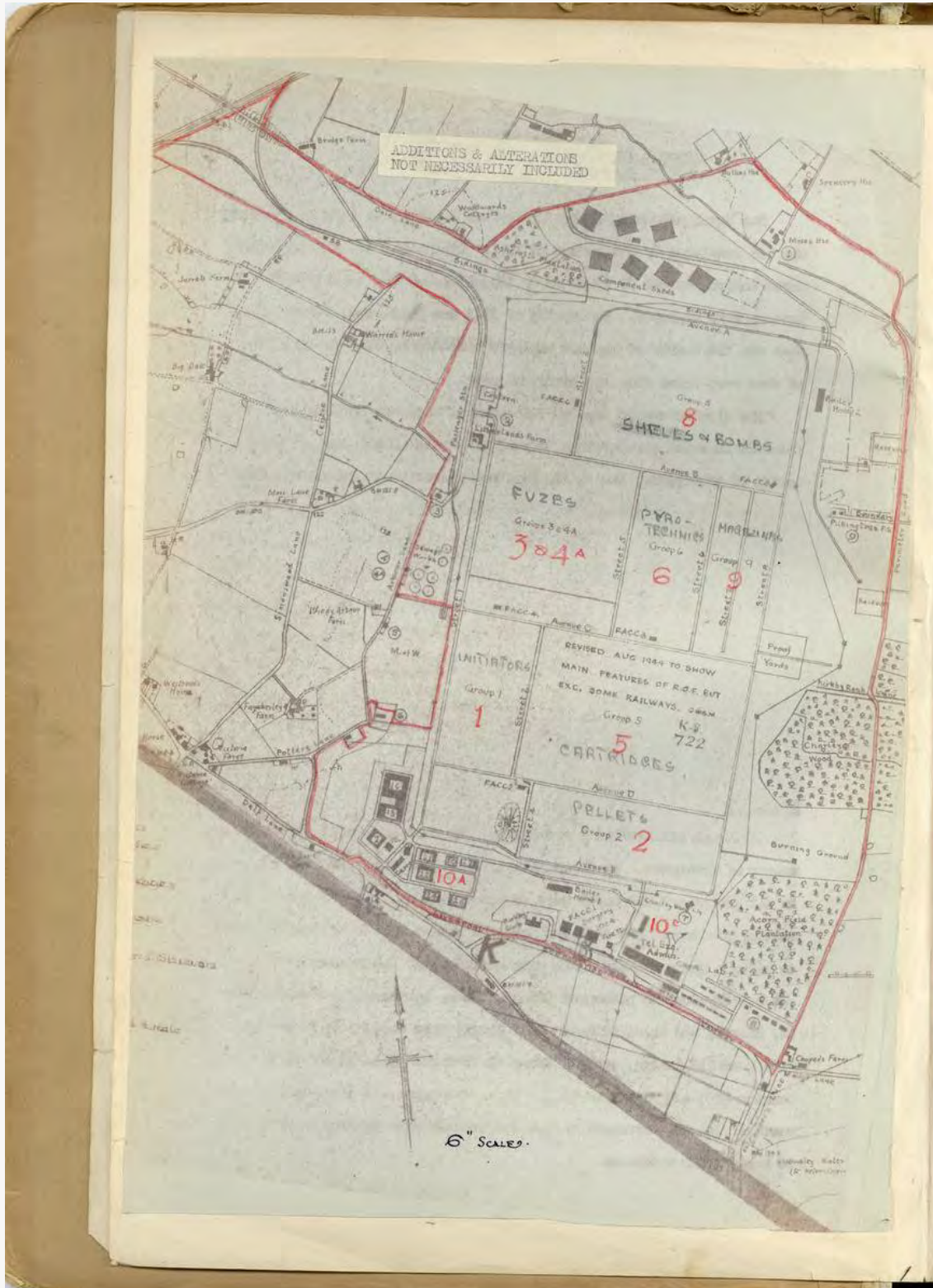
**Date:** 1940 - 1945

# Space B



Photograph of Exhibition Space B, featuring Cabinets One, Two, Three & Four

# Cabinet One



## 'Plans and Land'

Town & Country Planning of the Factory

These plans show the scale of the Royal Ordnance Factory. The plans also show areas that have been sectioned off to highlight what building would have been responsible for what part of the munitions process.

**Date:** 1939 - 1941

# Cabinet One

## PART I

### General description of the Factory as a whole and of the services and amenities available

The Royal Ordnance Factory Kirby was designed as a filling factory and was completed by the spring of 1941. Production was actually commenced before the end of 1940 and by the middle of 1941 over 10,000 persons were employed. The spring of 1942 saw production almost at its peak and the number of persons employed exceeded 20,000, the majority of whom were drawn from the Liverpool area.

The site covers an area of 728 acres of what was agricultural land, situated in rural surroundings about 8 or 9 miles North East of the centre of Liverpool. Due to the processes involved in explosives filling, the various buildings were widely spaced, and in some cases rounded to minimize the effect in the unlikely event of explosions taking place. Owing to the widely different production methods required for the filling of various types of ammunition, the factory was divided into sections or 'groups' as they are called, each of which is a self-contained factory, and this distribution is clearly shown on the plan opposite. An easy system of nomenclature was adopted throughout; streets being numbered and avenues lettered. Every building on the site is lettered and numbered and prefixed with group number, e.g. J.D.12 is building D.12 on Group J.

#### TRANSPORT

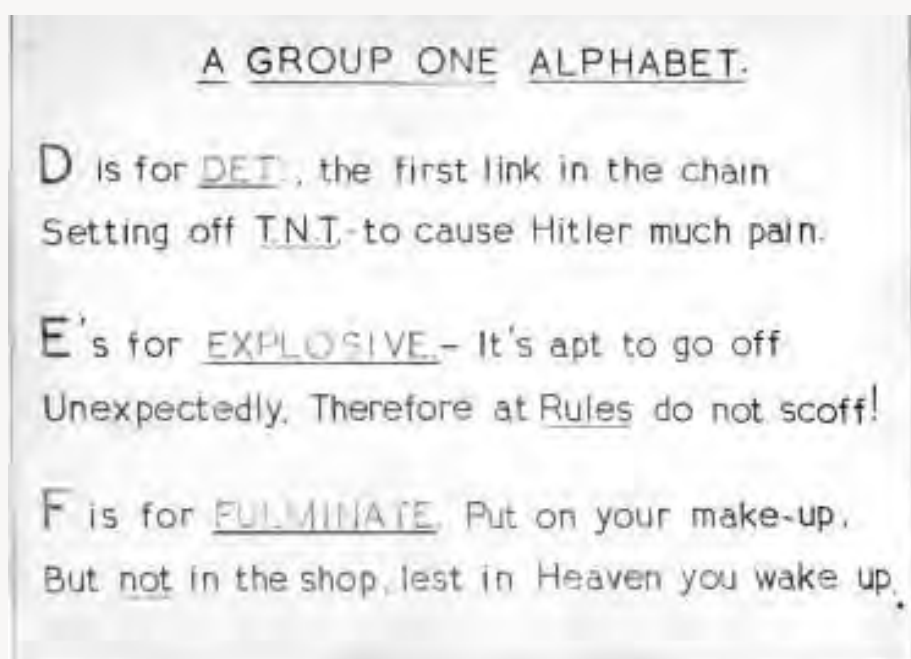
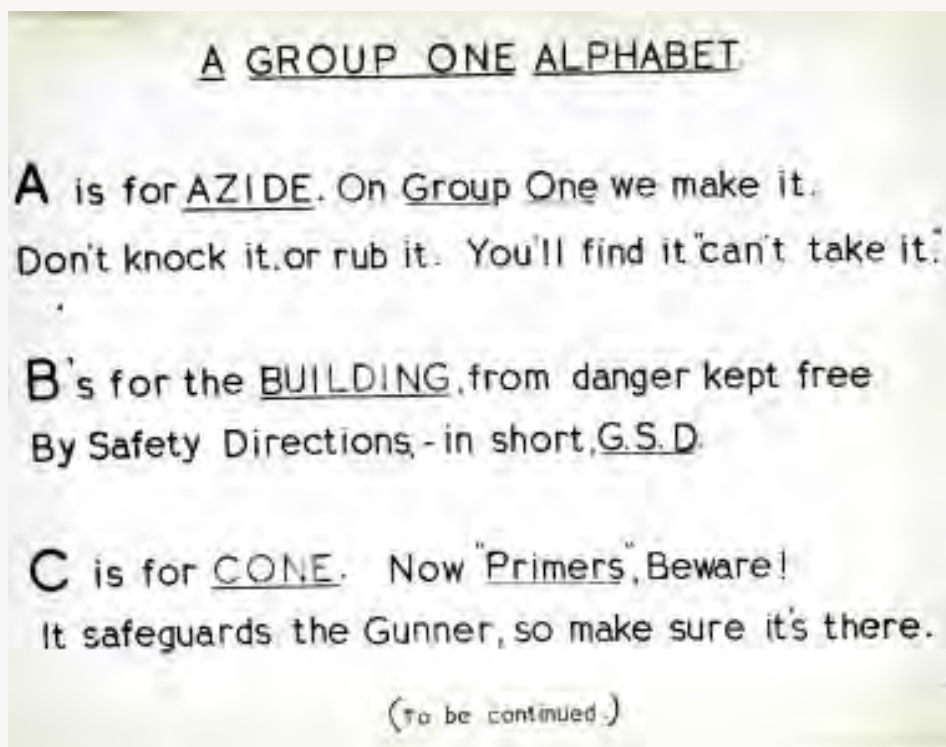
Although situated in a rural area, the factory is well served in the matter of transport. Road and Railway facilities for goods are provided to all groups and the north west entrance to the site has a passenger railway platform. The railways join the main L.M.S. line from Liverpool to Wigan. The south and south west entrances of the factory have excellent bus services to Liverpool (King's Drive, Fazakerley & Seaforth) and St. Helens, and in addition, a half hourly tram service to Liverpool Pier Head (19 route), special trams to Pier Head (13, 29 and 44 routes), Garston (25) and Wavertree (49). These entrances lie about half a mile north of the East Lancashire Road and consequently present no difficulty to heavy goods vehicles.

### **'Plans and Land'**

General description of the Factory that was included with the plans on the previous page.

**Date: 1939 - 1941**

# Cabinet Two



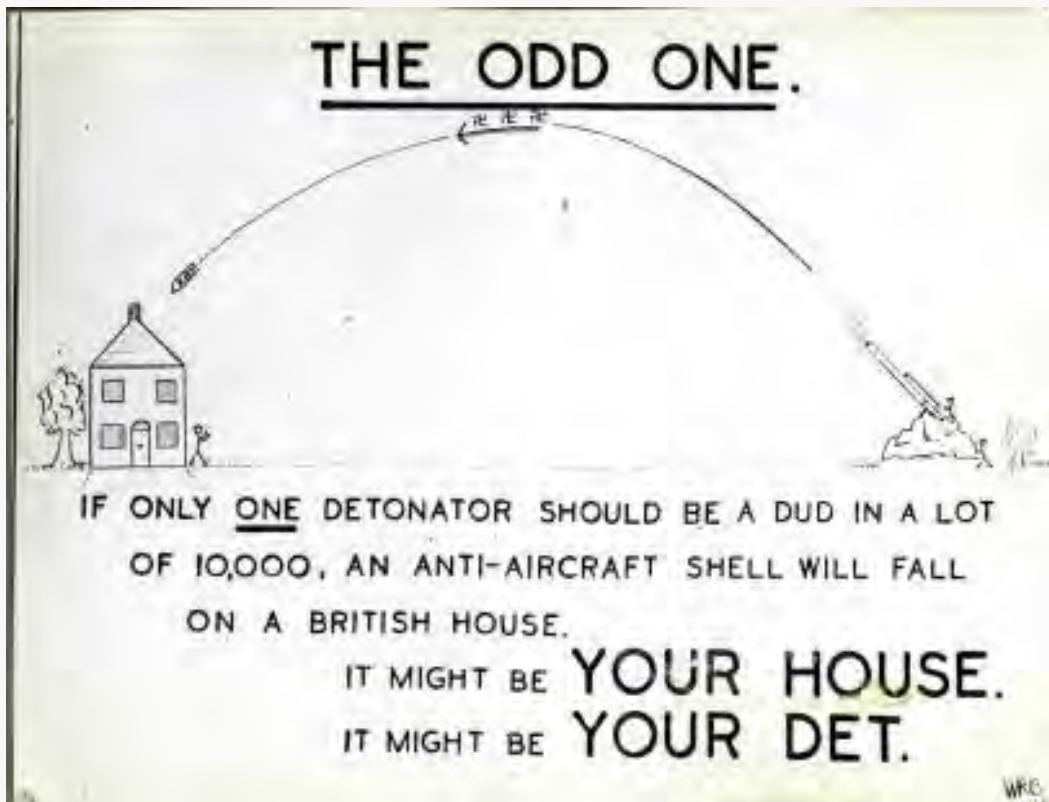
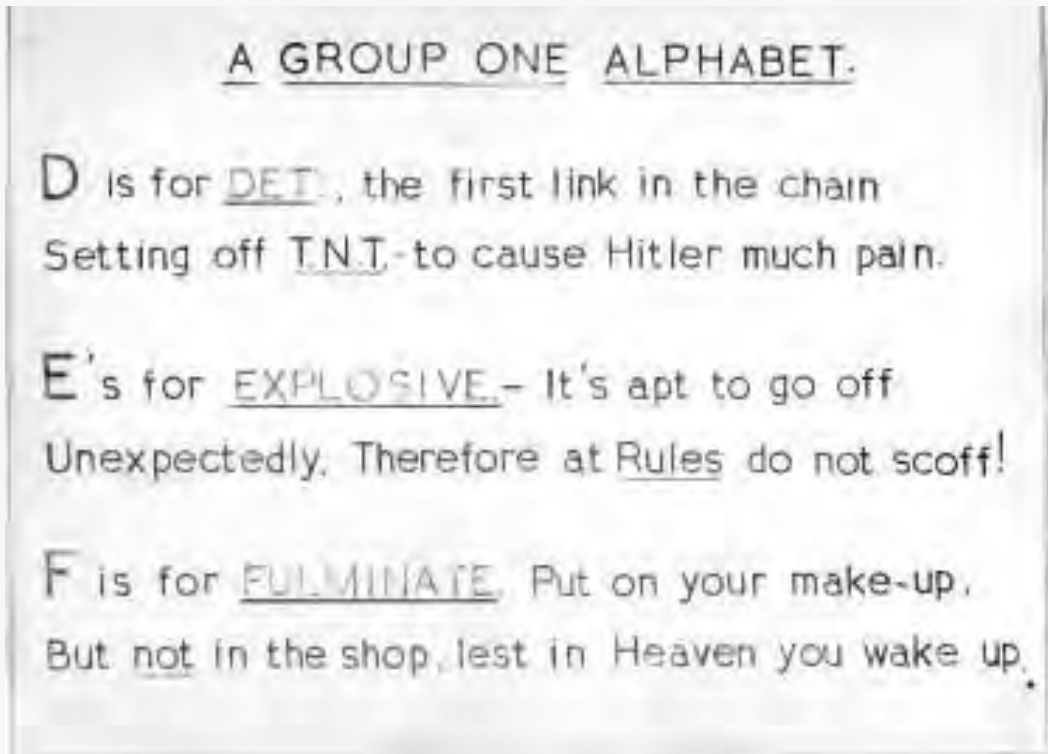
## ***'Factory Guidance'***

Factory Guidance for workers in Group One.

Safety was of the utmost importance within the Factory. These guidance signs were situated throughout certain areas of the Factory to help remind staff the importance of not only working together to help the war effort but to also keep each other and themselves safe during the process. The signs were creative enough to have a lasting impact on the workers.

**Date:** 1943

# Cabinet Two



Images of the Factory Guidance, including Group One Alphabet and 'Dud Detonators'

# Cabinet Two



Images of the Factory Guidance about the risk of 'Rejected Dets'

# Cabinet Three

Due to the nature of what was being produced within the factory, the Ministry of Supply conducted an investigation into the early effects of exposure to T.N.T. This investigation happened during the early years of the factory as there was a concern that the constant exposure could later manifest into severe poisoning. The Ministry of Supply used volunteering undergraduate students from Oxford and other universities to assist with the investigation. The students lived onsite with the workers within the Kirkby Hostels, and they spent their summer participating in working life at the factory and were treated like normal workers. To help the results be more accurate, the students were required to participate for at least four weeks.

By 1942, the factory was at peak production and had over 20,000 employees, with most of them coming from the surrounding area and different parts of Liverpool. To fully ensure that production within the factory was continuous, a three-shift pattern was introduced, this would have looked like:

7.00am to 3.00pm

3.00pm to 10.00pm

10.00pm to 7.00am

Apart from the employees who were fortunate to live close to the factory, many had to travel a good distance from places such as Birkenhead, Southport, Wigan and Warrington, before arriving to work. Due to this it was deemed necessary to provide accommodation for them. Firstly, a hostel was built to house 1,000 employees, located near Kirkby Station, named Kirkby Hostel. Also, there were over two hundred houses built on what was known as Park Estate. Further houses were built on the edge of the factory area, on Spinney Close and Spinney Road, and these were to house administrative employees.

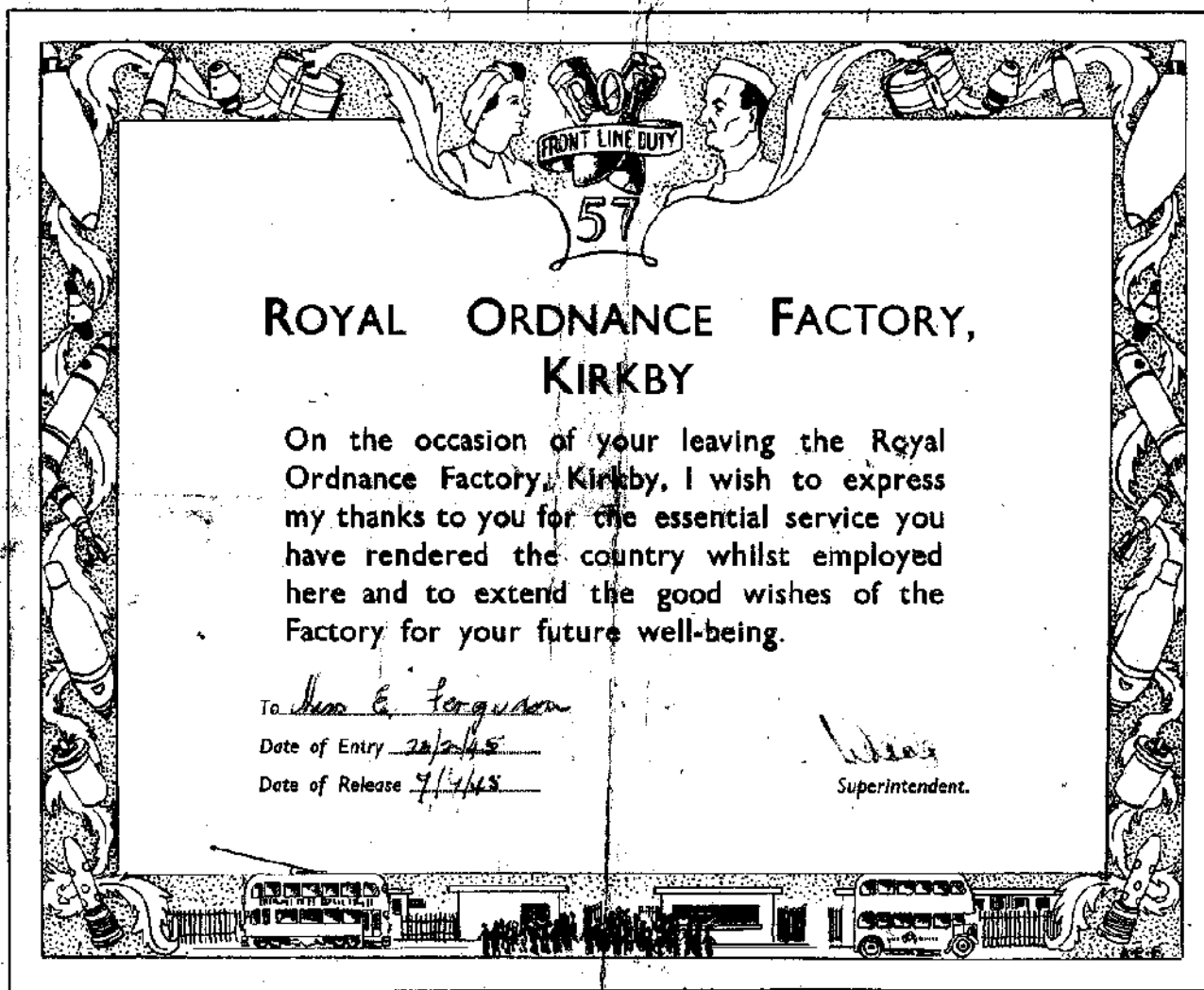
# Cabinet Three

Given the scale of land that housed the factory, reliable transport for travelling employees was required and the Liverpool Corporation extended the number 19 tram route along the East Lancashire Road and into the factory. This required a further purchase of land from the Earl of Sefton for the use of a tramway track. As well as the additional trams, the factory had its own railway station that operated three trains at the beginning and end of each shift.

Eventually, further land was granted by the Earl of Sefton, and this was an additional entrance to the factory via Hornhouse Lane. The transport system would run on a strict timetable, dropping off one shift of employees and taking home the employees who had just finished their shift. Yet, even with the trams and trains, many of the employees would still have a long walk to their designated area due to the size of land occupying the factory. To accommodate this, management introduced an internal bus service.

To help keep the community spirit up, workers were encouraged to join the Sports & Recreation Association, which catered to activities such as, Swimming, Bowls, Tennis, Cricket, and Dancing. In fact, there regular dances held at the Grafton rooms with the first Kirkby dance taking place on the 8<sup>th</sup> April 1942.

# Cabinet Three



## ***'Working Life at the Factory'***

Image of a certificate for an employee who was leaving their role within the Factory, Signed by the Superintendent.

**Date:** 1940s

# Cabinet Three



The main entrance to the Administration Building, October 1945. There were no plans drawn up before September 1939. Preliminary planning was done at Woolwich Arsenal. Sir Alex Gibson was the consultant, Holloway Brothers the contractors. It was completed in January 1941.



View from the observation post looking south west, October 1945. Lawrence Gale from Woolwich Arsenal was appointed Superintendent in July 1940, taking nine staff with him. The first shell came off the production line in September 1940. There were between 50 and 100 employees when it opened.

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An open page from the book, *'The Archive Photographs Series: Kirkby and Knowsley'* by Michael K. Griffiths

# Cabinet Three



Wages Office, Administration Building, October 1945. The factory cost over £8,500,000. By the summer of 1941, 10,000 people were employed, rising to a peak of 20,000, most of whom were women. Many staff transferred from Woolwich after that was bombed. A Y.W.C.A. hostel was built next to Kirkby Station for 1,000 women.

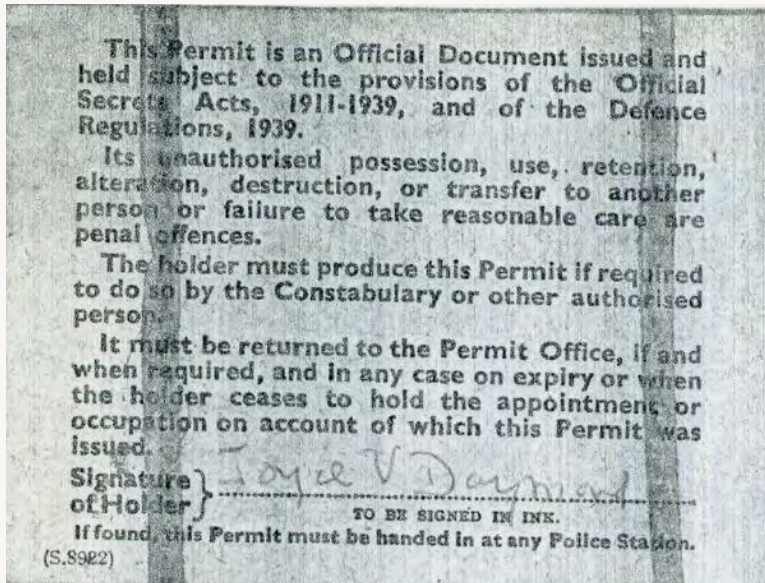


Railway line, passenger platform, north west entrance, October 1945. There were three trains from Liverpool every shift. The factory also had an internal bus service.

95

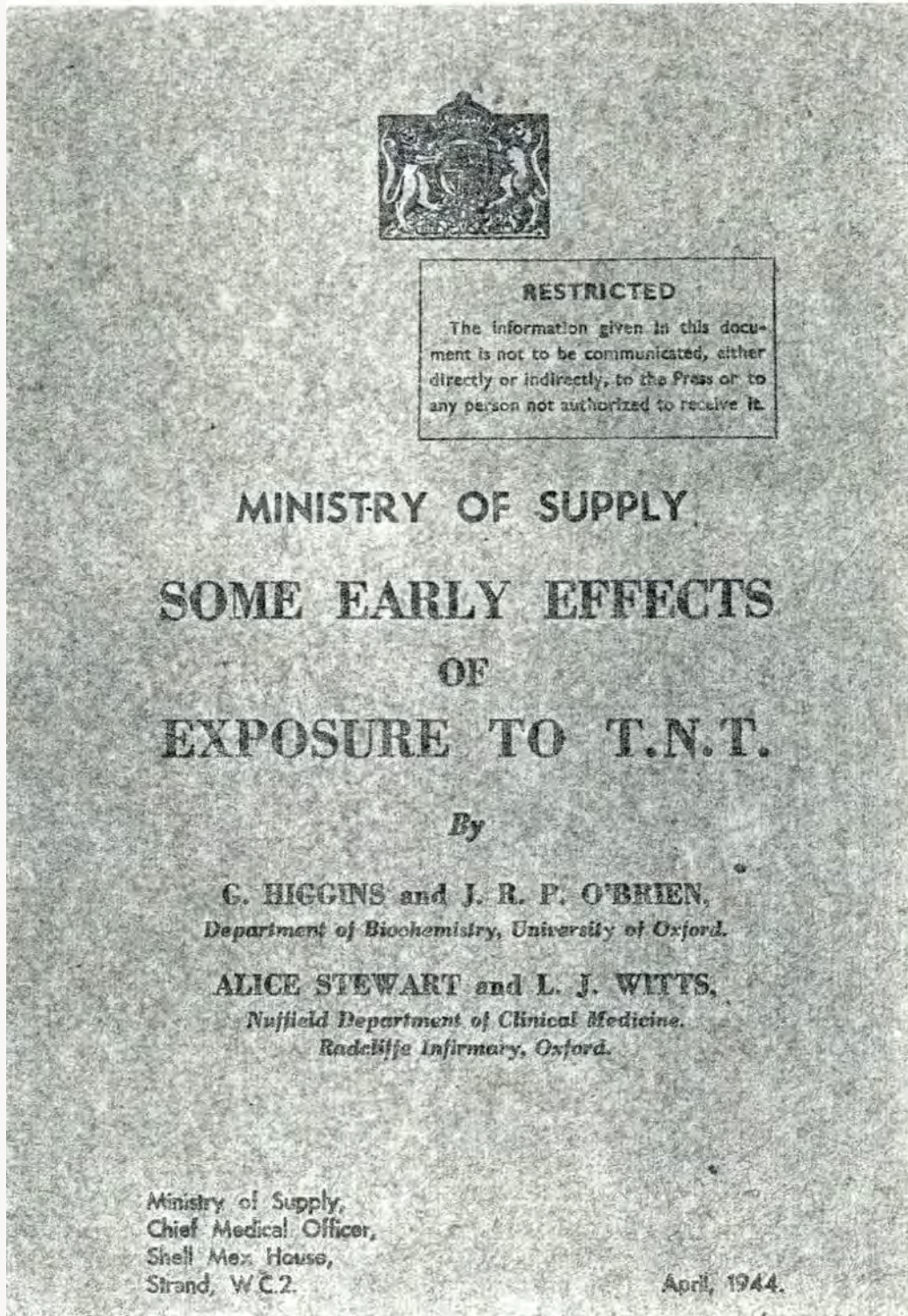
An open page from the book, *'The Archive Photographs Series: Kirkby and Knowsley'*  
by Michael K. Griffiths

# Cabinet Three



Images of permits and passes belonging to various employees at the Factory

# Cabinet Three



## ***Exposure to T.N.T.'***

Exploring the Early Effects of Exposure to T.N.T.

**Date:** 1944

# Cabinet Three

## SOME EARLY EFFECTS OF EXPOSURE TO T.N.T.

It was felt that if we could determine the early effects of exposure to T.N.T., the later manifestations of severe poisoning, which occur in only a small percentage of people, might be better understood. In order to overcome the difficulties inherent in a large scale survey of factory workers, we decided to use volunteers, who would be willing to work for a period in a filling factory and co-operate in a series of tests in Oxford before and immediately after the period of exposure. In this way we could try out an extensive series of tests and select those which would be most useful and practicable in subsequent investigations of the ordinary factory worker. Permission was obtained from the Ministry of Supply, and an appeal was made to the undergraduates of Oxford and several other Universities to spend part of the summer vacation doing their work. The number of volunteers easily exceeded the number that could be dealt with in the laboratory or conveniently handled at the factory. In the end 62 students were chosen. Physical examination and laboratory tests showed that all of them were healthy.\* They went to the same Royal Ordnance Factory and were housed in one of the government hostels for factory workers. They had no special privileges and were treated as ordinary workers, receiving the same rates of pay and obeying the same rules and regulations. They were asked to stay a minimum period of four weeks and many stayed longer.

### DESCRIPTION OF FACTORY WORK AND GROUPING OF STUDENTS.

Contact work for 42 of the students was done in the filling shops. In addition ten male students spent part of their time in the melt houses. An analysis of the concentrations of air-borne T.N.T. in the shops where the students were working was made for us by C. G. Warner † and the figures obtained are given in Table I.

TABLE I.  
Concentration of air-borne T.N.T. in the filling shops and melt houses.

Contact Work.		Av. Conc. of T.N.T. in mg. per cu. metre.	
		Day.	Night.
Filling Shops	.. ..	0.3	0.6
Melt Houses	Floor .. ..	0.3	0.3
	Platform, ..	1.2	1.3

If the students were taken off contact for any reason, usually because of dermatitis, they worked on trucking, fusing trench mortars, or in the stores. Figure 1 shows the length of time spent by each individual in the different shops. There were two day shifts, each of which lasted

\* One of the female students had had catarrhal jaundice 3 years before. There were no signs of hepatic impairment at the initial examination and she experienced no ill effects from working at the factory except a slight anaemia, the haemoglobin falling from 89 to 80 per cent.

† Method described at the Medical Research Council Conference on T.N.T., 1912.

Opening pages to the report which explored the early effects of exposure to T.N.T

# Cabinet Four

K  
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Photographs taken by Sir Lawrence Gale part of the book, '*R.O.F. Kirkby 1940-1946: A Photographic History*'

## **'Social Life'**

Onsite accommodation, sport clubs & dancing

**Date:** 1940s

# Cabinet Four



AMMUNITION DISPLAY  
TRAINING CENTRE

Shifting House Attendants  
Course.  
Training Centre.



3164  
THE KIRKBY (R.O.F) SPORTS CLUB.  
MEMBERSHIP CARD.  
THIS IS TO CERTIFY THAT  
Miss J. V. Summers.  
IS A MEMBER OF THE KIRKBY R.O.F  
SPORTS CLUB.  
Masters. HON SEC

Photographs taken by Sir Lawrence Gale part of the book, 'R.O.F. Kirkby 1940-1946: A Photographic History'

Membership Card for a Miss J. R Summers for the Kirkby (R.O.F) Sports Club

# Cabinet Four

FIRST KIRKBY DANCE AT GRAFTON ROOMS - APRIL 8th 1942



A TYPICAL PROPAGANDA & SPORTS NOTICE BOARD (Taken in Canteen 3d7 April 1943)

Photographs taken by Sir Lawrence Gale part of the book, '*R.O.F. Kirkby 1940-1946: A Photographic History*'

# Cabinet Four



REPRESENTING GROUP 1. (Note B.E.M. ribbon on centre girl)



GROUP 3. TABLEAU & SOME OF THE PERSONNEL

Photographs taken by Sir Lawrence Gale part of the book, '*R.O.F. Kirkby 1940-1946: A Photographic History*'

## ***"Training"***

### Onsite Training at the Factory

A selection of photographs showing the classes that would be held at the dedicated onsite training centre and lecture rooms. Alongside training, workers would also assist with demonstrations.

**Date:** 1940s

# Cabinet Four

DEMONSTRATION OF  
6 PDR. GUN, GROUPS 5 & 6.  
· JUNE 3rd 1943 ·



A.T. MINE TRAINING  
SHOP GROUP 8.  
March 1942



LECTURE ROOM  
GROUP 8 . March



Photographs taken by Sir Lawrence Gale part of the book, 'R.O.F. Kirkby 1940-1946: A Photographic History'

# Space C



Photograph of Exhibition Space C, featuring Cabinets Five, Six, Seven & Eight

# Cabinet Five

Whilst the Factory was only operating for six years, it was shaken with two separate explosions that took the lives of sixteen workers and left many injured. The first fatal explosion took place on the morning of 22nd February 1944, in one of the buildings where 19 operators were filling fuses with charges. At 8.30 a.m. that morning, one fuse exploded, immediately detonating the whole tray. The young woman working on that tray was killed instantly and although the two women standing behind her were partly shielded from the blast, both were seriously injured, one fatally. The building was badly damaged, with the roof was blown off, electric fittings were hanging in the air, and the walls were swaying in the breeze on the verge of collapse.

Superintendent Lawrence Gale soon arrived on the scene with Arthur Bywater, and it was realised that it was likely that the fuses damaged in the explosion could now be faulty and feasibly cause another explosion. Bywater cleared the building of workers so that the maintenance crew could temporarily strengthen the damaged walls. Bywater then volunteered to take on the dangerous task of removing all the fuses to a place of safety where they could be dealt with out of harm's way. Other willing volunteers joined in, and they worked for three days moving fuses to a position close to the exit and then transporting them to another site further away where they were later destroyed. When they were finally finished, they had successfully removed 12,724 fuses from the damaged building.

Taking charge of the situation, Bywater gave instructions that he was to be given any fuses that looked defective, and so twenty-three defected fuses were passed to him. On each occasion for these defective fuses, Bywater encouraged his colleagues to take cover at a safe distance whilst he removed each fuse, placing them on a tray and then onto a flat trolley. One of his colleagues would walk fifty yards ahead of him carrying a red flag, another colleague fifty yards behind him also carrying a red flag. Bywater would walk in the middle of his two colleagues, slowly pushing the trolley towards the destroying grounds.

# Cabinet Five

Once he arrived at the grounds, he personally laid each of the fuses in the specially prepared pits and placed sandbags on each of the pits and connected the electrical detonator and gun cotton primer. However, one particular fuse that Bywater judged to be in such a sensitive condition, was too dangerous to be carried to the destruction sight. Instead, he cleared his colleagues out of the immediate danger area, carefully picked up the fuse and cautiously walked with it to a makeshift destruction site and successfully detonated it once everyone had moved out of range.

In the investigation that followed, it was discovered that the explosion had been accidental, caused by a defective striker. A faulty design in the stamping machine which marked the fuse heads with the lot numbers and dates of filling had damaged the striker stems. Arthur Bywater was invested with the George Cross by King George VI at Buckingham Palace on the 24th of October 1944.

# Cabinet Five



Photographs from the accidental bomb damage taken from the investigation report

# Cabinet Five



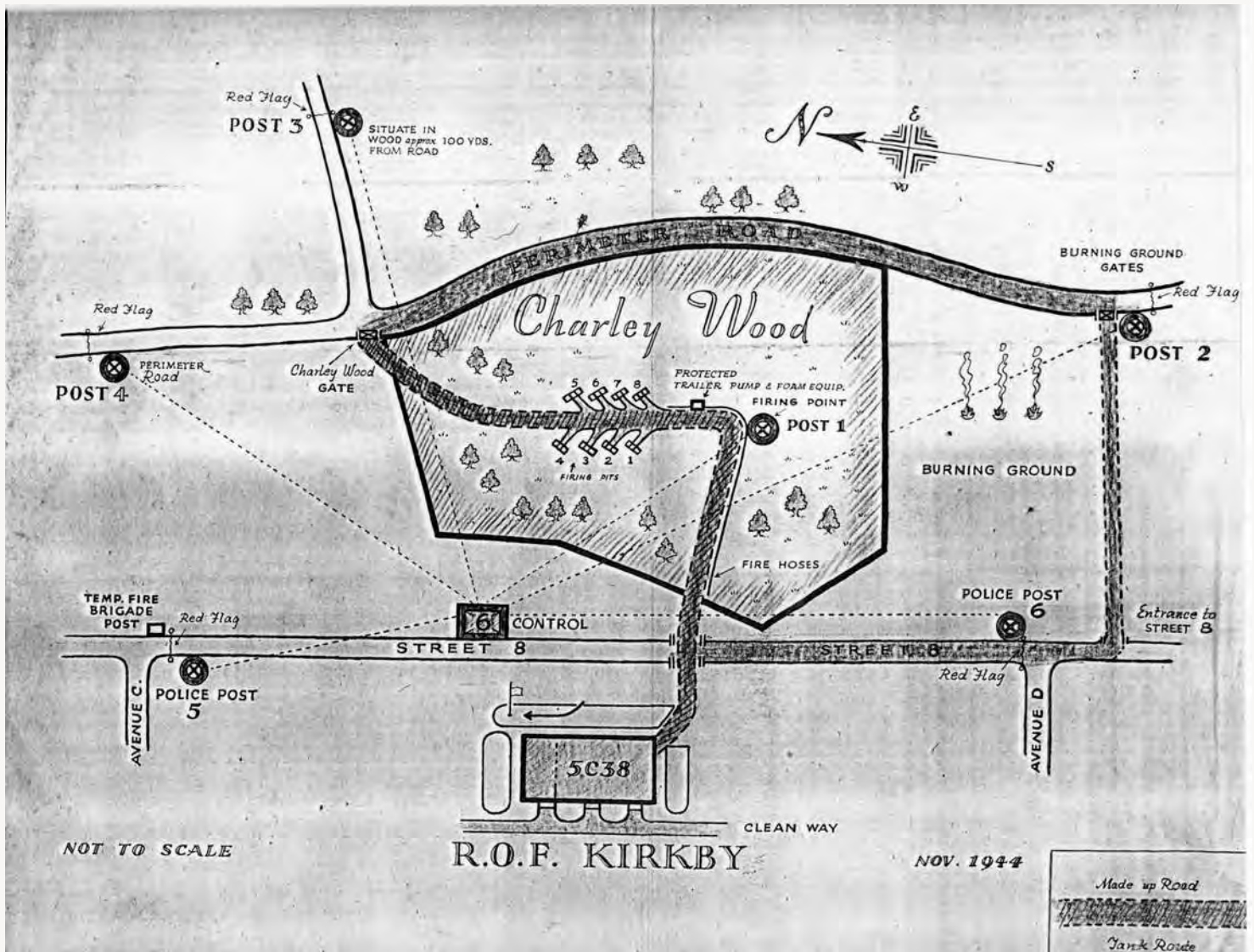
⑤ *West side showing entrance from clearway.*



⑥ *Further view from S.W. showing exit blocked.*

Photographs from the accidental bomb damage taken from the investigation report

# Cabinet Five



The map of Charley Wood shows that special pits were dug near the wrecked building and required a tank to scoop up bombs from the debris and dropped them into the pits where they were detonated.

# Cabinet Six

Just months later, tragedy would strike again at the factory. Unlike the previous explosion that happened in the morning, this explosion happened at night-time. In a quote from the London Gazette published on the 18th of September 1945, the events are described as:

*'The night was exceptionally dark, there was no moon, and it was raining heavily. The major explosion was followed by others. Almost all lights were extinguished and soon the only illumination in and around the shattered bomb strewn building was given by the fires which broke out'.*

Superintendent of the Factory, Lawrence Gale spoke to the Liverpool Daily Post, dated Wednesday 7th November 1945:

*"At four in the morning on September 15 there was a shattering explosion in one of the filling sheds and within a few seconds fires were blazing in the midst of the bombs. There were about twenty-four operatives in the shed at the time, and eight of them were killed outright by the blast. The tragic scene was aggravated by a heavy downpour of rain and the fact that under the fallen masonry of the roof, the floor was littered with explosive powder and bombs which could detonate at any moment."*

By the time it was morning and daylight, most of the fires had been extinguished and after working tirelessly through the night the salvage work was finished. The next gruelling task was to help clear the wrecked building, Bywater volunteered to lead the team alongside three other colleagues

However, unlike the previous explosion, the ammunition which had caused the accident consisted of anti-personnel, anti-disturbance and time-delay bombs which were scattered through and beneath the debris and were in danger of detonating without warning.

# Cabinet Six

In his account of the events, Bywater recollects the gruelling task whilst maintaining his sense of humour:

*“We did have some hilarious moments even in most gruesome circumstances during the initial clean-up operation. In those first few days we were trying to clear an entrance way into the building, treading warily but not meeting much in the explosives field. After a day or two the smell became pretty intolerable, James Murdoch and Bill Panton seeming to be affected. James asked for a mask which did not satisfy him so I suggested a little drop of Dettol in cotton wool inserted in the mask might help. I thought he should understand that it should be diluted. Not only did he use it neat but obviously soaked the cotton wool in it. Result, a ruddy blistered face ... I think we chose to laugh at anything no matter how serious it might be”*

Due to the scale of the task in hand, it took over three months to be completed and posed a constant hazard. The slightest carelessness caused by any member of the team could have easily jeopardized the lives of others. However, thankfully the clearance task was successful and was completed without any casualties.

Just months after the second explosion, Bywater, alongside eleven others, was awarded then the George Medal, receiving his decoration once again from King George VI at Buckingham Palace on the 6th of November 1945.

# Cabinet Six

Richard Arthur Samuel Bywater was born in Birmingham on the 3rd of November 1913. In 1936, the same year as graduating, Bywater was appointed chief chemist at Boxfoldia, where he remained until 1939 when he became a technical assistant at the Royal Filling Factory at the Woolwich Arsenal.

After the outbreak of the Second World War, Bywater attempted to join the Royal Air Force but was refused entry on the grounds that he was in a reserved occupation. He returned to Woolwich and was placed in charge of the Experimental Department. In 1940 when the Royal Arsenal was bombed, the fuse factory was destroyed. The filling factory and light gun factory were also badly damaged.

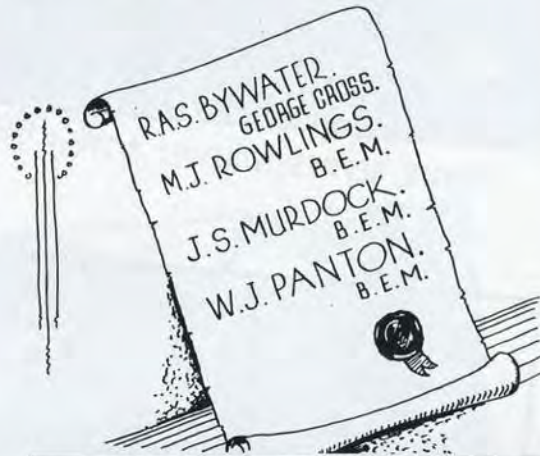
Consequently, all work relating to the production of munitions was moved to the ROF in Kirkby. Bywater also moved and became a Factory Development Officer.

Bywater and his wife, Patricia, emigrated to Australia in 1954. There he helped set up an ordnance factory in New South Wales and became an Australian citizen. On retirement in 1976, he and Patricia farmed s on the Murray River. Bywater died in 2005, aged 91.

# Cabinet Six



Mr. BYWATER BEING PRESENTED WITH LETTER OF CONGRATULATION FROM Director General, by McGALE, SUPERINTENDENT.



FOR COURAGE &  
DEVOTION TO DUTY  
FOLLOWING AN  
EXPLOSION ON  
GROUP 3.  
FEBRUARY 1944



Left to Right. Mr. M. J. ROWLINGS. B.E.M., Mr. J. S. MURDOCK. B.E.M., Mr. W. J. PANTON. B.E.M. and Mr. R. A. S. BYWATER. George Cross.

Photographs taken by Sir Lawrence Gale part of the book, 'R.O.F. Kirkby 1940-1946: A Photographic History'

# Cabinet Six



## ***'Honour for Kirkby Workers'***

Arthur Bywater pictured receiving the congratulations from Group Three workers.

**Date:** February 1944



## ***'George Cross and George Medal'***

Photograph of Medals awarded to Arthur Bywater .

**Date:** 1944 & 1945

# Cabinet Six



The scale of damage from the explosion in the filling sheds which left many workers dead or seriously injured.

# Cabinet Seven

After being designated as a War Duration Only factory, the ROF Kirkby closed its doors in March of 1946 after the end of the Second World War. There was a change over from war work to peace work, and this involved finding jobs for the 10,000 employees. To accommodate this, an Employment Exchange was set up. The site of the factory, which was still suffering damage from the accidental bombing incidents, had gained interest from the Liverpool Corporation who were interested in the site for use of an Industrial Estate.

For production, the factories had a Five Stage of Progress, which looked like:

1. 1940 – Pioneering State – Post Dunkirk, Anti-Aircraft material and the Blitz
2. 1941 – Organizing – Desert War, Anti-Tank Ammunition and mines.
3. 1942 – Re-Organising – Mass Bombing of Germany, Filling Bombs and flares.
4. 1943 – Preparing for D-Day
5. 1944 – VE Day– Running down period (Closure)

Production at ROF Kirkby was responsible for 10% of ammunition used during the Second World War.

As discussed previously, the land that was used for the ROF Kirkby, had originally been part of a negotiation with the Earl of Sefton, to instead be for either an industrial estate or even a housing estate. This was because of the subsequent decline in shipping during the 1920s and 1930s, and it was realised that the city needed to be less dependent on the port. At that time, Liverpool Corporation were able to obtain special powers through an Act of Parliament, and through its sponsorship of industrial estates it could attract new industries to the area.

This also covered with assisting with the expansion of already established industrial estates located within Speke and Aintree. However, even though it had previously been successful, the port was excluded as it already existed in the city. The first industrial estate was established at Speke and due to how successful it was, Liverpool Corporation expanded the original location of the estate and added a second estate at Aintree.

# Cabinet Seven

In 1946, Liverpool Corporation acquired a 99-year lease on the land and property from the Ministry of Supply and immediately began developing the site into a modern trading estate. Existing buildings and parts of the site were let or sold on lease to industrialists who altered and extended them to meet their requirements, or else built entirely new factories.

The premises varied from a small room, which was let at a rate of 10 Shillings per week, to large factories which were sold for thousands of pounds.

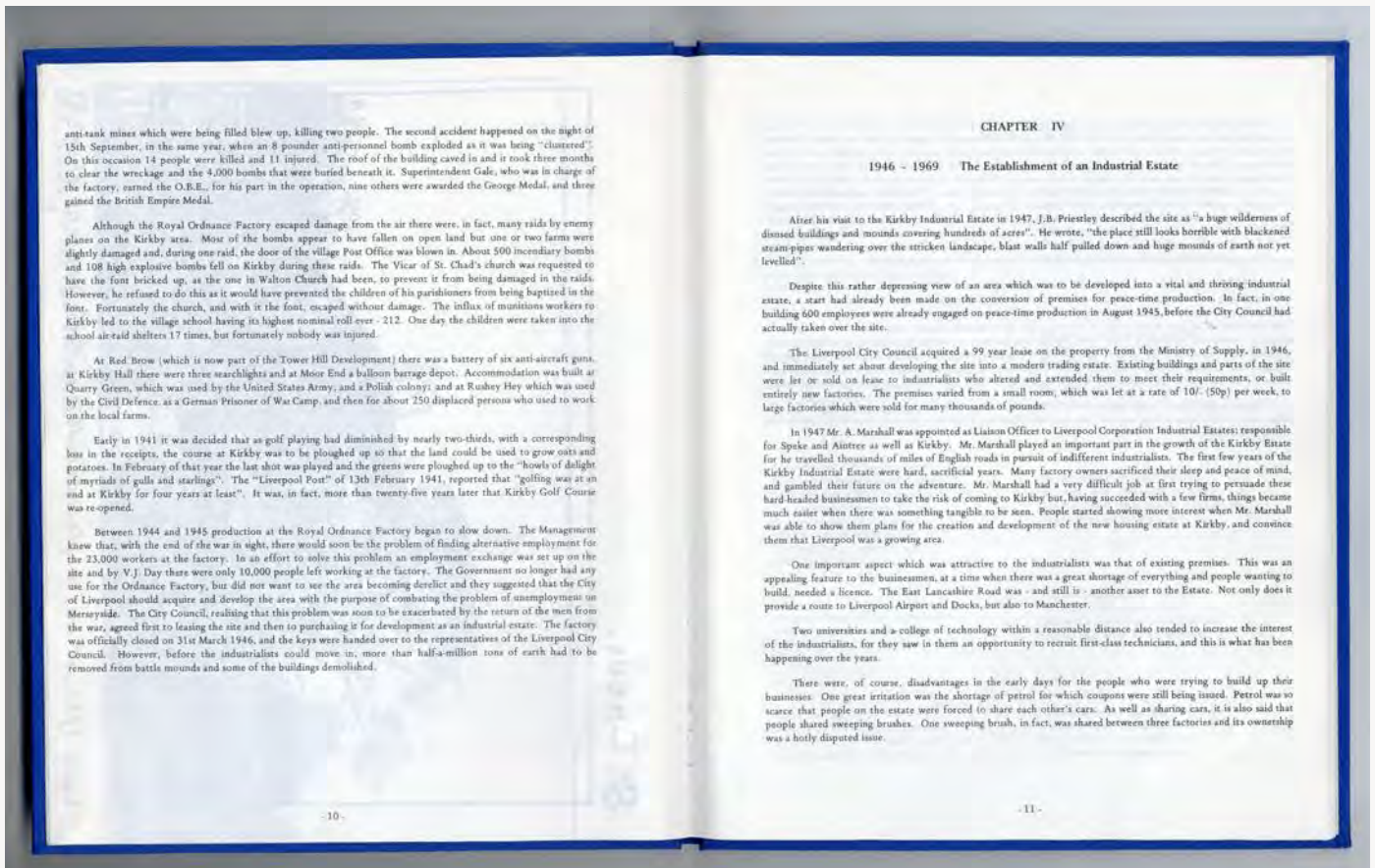
In 1947, after a visit to the area, novelist and playwright, J. B. Priestley described Kirkby Industrial Estate, as *“a huge wilderness of disused buildings and mounds covering hundreds of acres”*. He also wrote that, *“the place still looks horrible with blackened steam-pipes wandering over the stricken landscape, blast walls half pulled down and huge mounds of earth not yet levelled”*.

In the same year, a Liaison Officer for Liverpool Corporation Industrial Estates, Mr A Marshall, who was responsible for not only Kirkby, but also Speke and Aintree, played an important role in the development of the Kirkby estate. The first early years of the Kirkby Industrial Estate were difficult, as many businesses needed convincing to take the risk of coming to Kirkby.

In his job role, Marshall would travel miles across the country in pursuit approaching of industrialists and ‘hard-headed businessmen’. Once he succeeded with a few firms, more and more began starting to show interest. Especially when Marshall was able to show them plans for the creation and development of the area, successfully convincing them that Liverpool was a growing area.

In her book of Kirkby: Past and Present, Joan Roberts of Kirkby Local History Society, recalls of some of the disadvantages of the early days of people who were trying to grow their business. In a direct quote from her book, Roberts mentions that, *‘the great irritation was the shortage of petrol for which coupons were still being issued...Petrol was so scarce that people on the estate were forced to share each other’s cars...as well as sharing cars, it is also said that people shared sweeping brushes...one sweeping brush, in fact, was shared between three factories and its ownership was hotly disputed’*.

# Cabinet Seven



An open page of the book, Kirkby: Past and Present, discussing the beginning of the Industrial Estate



# Cabinet Eight



AN AERIAL VIEW OF A SMALL PART OF KIRKBY INDUSTRIAL ESTATE, showing in the centre of the photograph the New Premises of FISHER LUDLOW LIMITED, DOMESTIC APPLIANCE MANUFACTURERS

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## THE INDUSTRIES OF KIRKBY

Diversification of industry is the keynote to present-day community well being and national prosperity. For centuries Merseyside had relied almost entirely upon ships and shipping for local employment; but the postwar years have brought a vigorous transformation in the industrial life of the whole area.

An outstanding example of this great change is at Kirkby where the site of the Royal Ordnance factory was taken over by the Liverpool Corporation and has been developed as a new industrial estate which is prospering on the rising tide of trade expansion.

It is, therefore, true to say that the town of Kirkby was created from an industrial beginning; and equally true that its entire future depends upon the successful continuance of its local industries; and this seems assured.

In this thriving industrial zone of Kirkby there are now some 140 firms employing about 20,540 men and women in both skilled and unskilled work. Only perhaps when viewed from the air can the vast productivity of this now important industrial area be fully appreciated. In fact, it is one of the largest estates of its kind in the whole country.

Kirkby being designated as a Development District enables industrialists coming here to obtain a 25% grant of the cost of their new or reconditioned buildings, a grant of 10% of the cost of plant and equipment, and 100% tax relief on the expenditure on new machinery, also loans up to about 50% of the purchase price of a factory which are repayable over 10 or more years. In addition, the Government purchasing departments normally give preference to tenders from firms located in Development Districts.

Just as it is intended to protect Kirkby from the continued spread of Liverpool into what remains of the adjoining countryside by the provision of a Green Belt, so the industrial parts of the Urban District are kept from intruding into the residential areas by a belt of open land about 100 acres in extent. This has been developed as playing fields and recreation grounds by the Urban District Council.

But this does not mean that there is intended to be two separate and contrasting parts of Kirkby. On the contrary, both parts are essential to each other. Already there is ample evidence of complete co-operation and reciprocity. The Industrialists are taking a very

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An open page from the book, *'Kirkby Urban District Council: Official Guide and Industrial Review'*.


# Cabinet Eight



An enlarged image of the photograph taken from *'Kirkby Urban District Council: Official Guide and Industrial Review'*, on the previous page. The photograph shows how the land that had previously housed the Royal Ordnance Factory, is now part of a major industrial estate that is continuing to thrive.

# Cabinet Eight

"I want a ticket."  
"Where to, Sir?"




**"To Kirkby . . . where else?"**

*"Yes Sir, Kirkby near Denby Dale, Kirkby cum Osgodby, Kirkby and Pinxton, Kirkby East, Kirkby Fleetham, Kirkby Folly, Kirkby Green, Kirkby Hall, Kirkby Hill, Kirkby-in-Ashfield, Kirkby Bentinck, Kirkby Old Hall, Kirkby-in-Furness, Kirkby-in-Malham Dale, Kirkby Ireleth, Kirkby-la-Thorpe, Kirkby Lonsdale, Kirkby Malham, Kirkby Mallory, Kirkby Malzeard, Kirkby Moorside, Kirkby-on-Bain, Kirkby Overblow, Kirkby Ravensworth, Kirkby South, Kirkby Stephen, Kirkby Thore, Kirkby Underwood, Kirkby Wharfe or Kirkby Woodhouse?"*

"I want the one where Birds Eye's steaklets, chicken pies, brussels sprouts, spinach and peas come from."

*"Certainly Sir, why didn't you say so in the first place?"*



BIRDS EYE FOODS LIMITED · KIRKBY INDUSTRIAL ESTATE · LIVERPOOL  
BYG 310-4028

## 'Memorable business in the 1950s'

Advertisements for some of the bigger brands that occupied the Industrial Estate from the 1950s and onwards.

**Date:** 1950s & Onwards

Birds Eye established a factory on the industrial estate, which employed thousands of workers over the span of thirty years

**Date:** 1950s & Onwards

## The Mersey Treat that's hard to beat!

Pendleton's known for its ice-creams and lollies, ran by the three sons of William Pendleton, on Newstet Road within the estate until 1979

**Date:** 1950s & Onwards



WILLIAM PENDLETON & SONS LIMITED  
SIMONSWOOD 2626

# Cabinet Eight



## HYGENA

### the kitchen made for living

A Hygena kitchen helps to make life more pleasant. You cannot fail to appreciate the solidity of construction of the units, the doors and drawer fronts finished in high gloss Polyester, and the flush interiors smoothly finished in white, so easy to keep clean. Adjustable shelves, a special feature of all Hygena units can be fitted in any of five positions, and are designed to make the storage areas more flexible and efficient. The working surface, possibly the most important part of the kitchen, is in durable Formica.

**HYGENA LIMITED, KIRKBY, LIVERPOOL**

Hygena became involved with the design and manufacture of kitchens for post-war houses, with their headquarters being located within the industrial estate.

# Cabinet Eight

## ONE OF THE MOST MODERN FOOD FACTORIES IN BRITAIN

*is putting Kraft even further ahead*

Forty-one years ago, Britain's first Kraft office opened in Liverpool with a staff of just two people. Six years ago Kraft Foods Limited returned to Liverpool, to one of the most up-to-date food factories in Britain, employing a staff of over fifteen hundred people!

Here at Kirkby they are continuing to make the range of fine foods which have made Kraft one of the biggest names on the nation's shopping list.

**Cheese is**  **KRAFT**

KRAFT FOODS LIMITED, MOORGATE ROAD, KIRKBY, LIVERPOOL  
AND REGINA HOUSE, MARYLEBONE ROAD, LONDON N.W.1.



Kraft Factory processed large quantities of cheese for the government during the Second World War, production was located to the industrial estate in 1957, employing over 1,500 workers.



*No rind goes into Kraft cheese products. Here rindless Samsøe cheeses pass along the production line.*



*With a full-time nursing staff to supervise their health and an excellent staff canteen, Kraft looks after its people well.*



*The margarine wrapping machines, which are so designed that no margarine made by Kraft is ever touched by hand.*

# Credits

**Exhibition Space** - Knowsley Archives Service at The ARK (Archive Resource for Knowsley)The Kirkby Centre – First Floor, Norwich Way, Kirkby, L32 8XY

**Curated by** - The team at Knowsley Archives Services

Knowsley Archives Service, based in The ARK: Archive Resource for Knowsley, is home to a wide range of resources that describe the heritage of the people and communities that make up the Borough of Knowsley.

Our Mission Statement is:

- To collect, preserve and organise archive materials relating to the people and places of Knowsley, creating a collective memory for the borough that is accessible for research and consultation, either physically or online through digital content and finding aids
- To encourage learning through engagement, offering support to individuals and groups as they explore the collections, enabling our communities to develop a sense of pride and place
- To promote Knowsley's rich heritage, sharing an understanding of the history of the communities that make up the borough of Knowsley

Knowsley Archives Service was awarded Accredited Archive Status by The National Archives in November 2017 and was retained in 2024

