William Harry Millward

A Wartime Working Experience

My name is William Harry Millward, born on the 17th September 1914, at Leederville in Western Australia. I attended Leederville State School, Junior Technical School, and Perth Technical College, and continued studying at the latter after starting work and obtained an Associateship in Mechanical Engineering.

My first job on leaving school was as a petrol station attendant at Colonel Mergolin's Service Station in Nedlands, while I waited for an apprenticeship as a fitter at Midland Junction Railway Workshops where I started on the 7th April 1930. I completed a five year apprenticeship and was employed as a fitter until 1938 when I applied for and got a job as a Diesel Mechanic with the PMG's Department at Broadcast Station 6WA at Minding.

Initially I was refused leave to enlist as I was in a reserved occupation at Broadcast Station 6WA. However, when I learned that staff were required for the new munition factory, I applied and was successful, and was appointed as a Shift Foreman.

In company with an engineer, I was sent to the munition factory at Hendon in South Australia for training and familiarisation with the machines in use. There were no passenger trains and we were reluctantly given approval to travel in a cattle truck on a troop train. The officers made it plain we were not welcome but the privates and the NCO's made sure we got food and drink on route.

We arrived in South Australia when the first American troops arrived and they were very popular with many of the factory girls. On return to Western Australia we found Welshpool was manned and in production around the clock on eight hour shifts.

The Welshpool S.A.A.F contributed significantly to the war effort with the manufacture of .303 munitions. It was a custom built factory located within a short walking distance of Welshpool Railway Station and the Victoria Park Tram service was extended to the factory gates.

Again, I tried to enlist and was commissioned in the Australian Mechanical and Electrical Engineers, but the munitions administration summoned me to a meeting of the Scientific Manpower Advisory Committee who directed me to return to munitions and I served out the remainder of the War at Welshpool.

Practically all machine operators were female and the machine setters and labourers were largely invalided soldiers or sailors. The female operators were very largely wives and girl friends of men in the Services who wanted to do their bit for the war effort and to bring their men home quicker. Perth was unlike other cities in that there was no pool of girls with factory experience and many of them had no requirement to work and considered their employment a patriotic duty.

One girl on my shift had the palm of her hand perforated by a punch and despite the pain she walked all the way to the casualty room with my assistance. When we arrived, I need medical treatment for the shock.

We were told that the Welshpool factory output was of a high standard and was preferred for use by our troops. The factory ceased production when it became obvious that the War was in its final stages and the majority of the staff was put off. A small group of us prepared the machines for sale before I returned to the PMG's Department.

I was then a Senior Technician on Long Line Installation working around the State until, in 1949, I saw an advertisement for a Foreman Mechanic with the Department of Civil Aviation in Broome.

I was successful in my application and a year later was promoted to Works Supervisor in Wyndham, then Engineer for the North West area and in 1956 returned to Perth. After three years I was promoted to a higher grade in Adelaide, and in 1969 was selected for secondment to Foreign Affairs in the Australian overseas aid program based in Melbourne.

I was eventually put in charge of all aviation based aid programs until my retirement in 1979. I then opened a consultancy business, which took me overseas and with considerable United Nations work.

I eventually retired in 1989 and remained resident in Melbourne, as all of our five children had settled on this side of the country.

First moves in 1941 towards establishing a munition factory in W.A. encountered what appeared to be insurmountable obstacles, but by November, 1942, munitions had been submitted for Army inspection.

Then in less than three years the plant produced 260,000,000 rounds of smallarms ammunition and component parts for 432,000 Bofors shells.

These munitions came from the factory at Welshpool, a section of which is pictured above. It was the main W.A. project for smallarms ammunition production and the manufacture of portion of the Bofors shell.

This was revealed today by State Munitions Controller J. D. O'Shea who spoke of the successful chain of events since the factory site was chosen.

"With the ending of the war, the management and employees of the factory can look back with a great deal of pride on their achievement," he said. "Their contribution to the national effort has been considerable."

In less than three years, 260,000,000 rounds of small arms ammunition were produced. They were used by our troops and exported to other parts of the world.

MACHINERY PROBLEM

Procuring machinery proved to be an enormous difficulty. Because of heavy demands throughout Australia, machinery manufacturers were overloaded with orders and their employees were working shifts of 12 hours daily.

Allied forces in 1942 after the start of the Pacific War, were arriving in Australia and their demands had to be met, and this increased the difficulties of obtaining stores and materials for the W.A. project.

Transport was limited and the demand for all types of material in W.A. exceeded stocks.

All sorts of arrangements had to be made to obtain supplies from sorely pressed manufacturers in other States.

Equipment, where possible, was obtained from local sources, and priority was given by local industry to all requirements.

Perhaps the greatest problem met by the management was the training of personnel. Engineers and office staff lacked experience in Government wartime factory procedure and had to be educated in the organisation of such an undertaking. Object of establishing munition factories throughout Australia was to decentralise, and to tap local labour as the manpower shortage was acute.

2400 EMPLOYEES

Employees at the factory reached a total of 2400, when three shifts were worked during the most critical period of the war.

With so many new employees introduced into a district which had few facilities, amenities such as cafeterias, kitchens, canteens, rest rooms and casualty rooms, had to be established.

Factory buildings are now spread over half of a 140-acre property.

At times problems were encountered in the factory, but these were mainly metallurgical, due to the varying standards of metal, brought about by the difficulties of supply during war.

Gilding metal had to be used instead of cupro-nickel for the bullet envelope; magnesite instead of aluminium for bullet tips.

Problem of varying standards of copper and tool steels had to be met by the technical officers.

One of the greatest difficulties was the supply of tools. A toolroom was built by the W.A.G.R. at Midland Junction, but the output was insufficient to meet the demands of the factory.

West Australian tools were of a very high standard, notwithstanding the fact that work of this nature had never previously been undertaken.

The toolroom was worked to capacity, but tools had to be imported from the Eastern States because the supply was insufficient.

Considerable care was necessary to maintain the standard of production with tools coming from a number of manufacturers.

Toolmaking requires the highest standard of trade work, and there were only a limited number of skilled personnel in this State.

Despite all these difficulties, the employees and the suppliers of stores and materials adapted themselves rapidly to the conditions.

BOFORS SECTION

In the Bofors section, or fuse factory, as it was called, production, too, was of high quality. Component parts for 432,000 shells were produced.

It was intended to introduce female labour into this section, but discharged men from the forces were mainly used.

Although many were physically not very strong, they proved their proficiency, were quick in adapting themselves to the need for accuracy and high production.

Cost of production compared very favourably with production in the other States, despite the heavy cost of transporting raw materials such long distances.

Heading Reads

WA MUNITION FACTORY HAD HUGE OUTPUT