

# YOUR VIRTUAL VISIT - 41

## TO THE AUSTRALIAN ARMY MUSEUM OF WESTERN AUSTRALIA



*Throughout 2021, the Virtual Visit series will be continuing to present interesting features from the collection and their background stories.*

*From 7 February, the Australian Army Museum of Western Australia will be open four days per week, Wednesday through Friday plus Sunday . Current COVID19 protocols including the wearing of masks will apply until revoked,*

### Large Technology Objects – 5.5 inch Gun and Beyond



#### DESCRIPTION

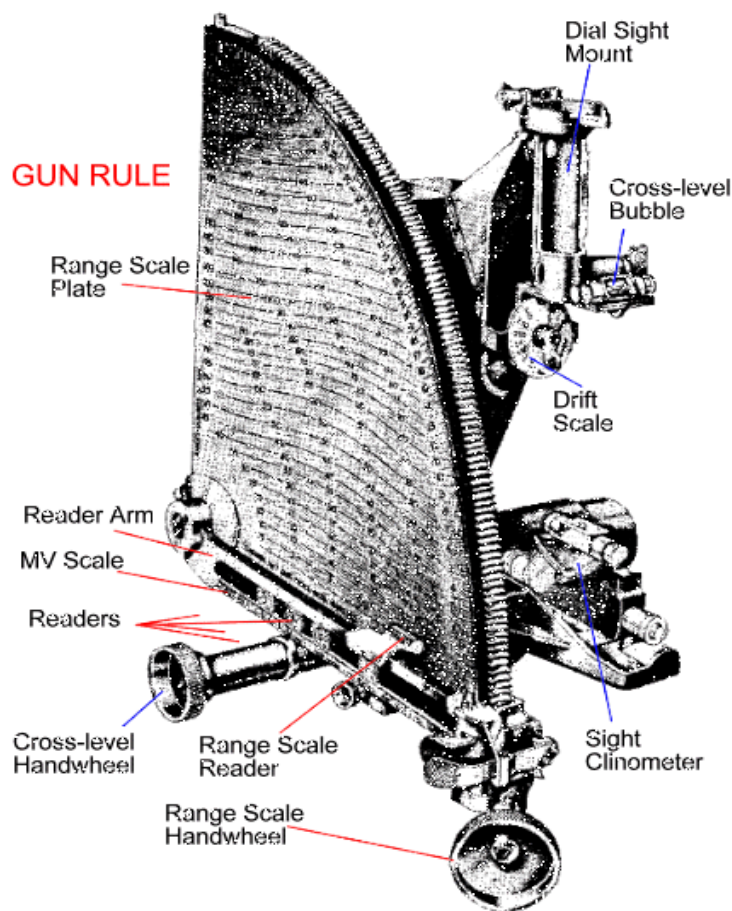
The BL 5.5-inch gun is a British designed artillery weapon system introduced during the middle of the Second World War to equip medium batteries. In January 1939 a specification was issued for a gun to replace the 6 inch 26 cwt howitzers in use with most medium batteries. The first units were equipped in UK in the summer of 1941. Subsequently, it also equipped Canadian, Australian, South African, Polish and Indian regiments, and after the war, it was also used by New Zealand. In the Second World War the normal organisation was a regiment of 16 guns organised into two batteries.

Over the production life of the weapon there were several modifications as construction was simplified. There were also two marks of carriage where the differences were greater use of welding and less of riveting.

The carriages were identical to those used with Ordnance BL 4.5 inch Mark 2 gun which fired a lighter projectile to a longer range.

No limber was ever used. The gun fired with its wheels in contact with the ground. and utilised a split trail. It used one-man laying with Probert pattern calibrating sights. The Dial Sight was initially the No 7 but was gradually replaced by the No 9. In the 1960s sights were converted from degrees, minutes and yards to mils and metres.

When guns are repeatedly fired, barrel wear occurs, reducing muzzle velocity and decreasing range. The Probert pattern sight enabled muzzle velocity corrections for each weapon to be incorporated at the gun instead of being computed in the command post. This saved time and achieved a tighter and more consistent concentration of fire



Initially, the 5.5 inch gun fired a 45 kg shell, using four charges in two cartridges to give a maximum muzzle velocity of 511 metres per second and a maximum range of 14,800 metres. In 1944 a 37 kg shell was introduced along with Charge Super giving a maximum muzzle velocity of 590 metres per second and a range of 16,600 metres. The new lighter shell contained 0.68 kg more explosive and gradually replaced the older, heavier shell. For comparison, the 25 pounder gun/howitzer had a maximum muzzle velocity of 532 metres per second, a maximum range of 13,400 metres and fired an 11.5 kg projectile.

In British post-war service the BL 5.5-inch gun also replaced the BL 4.5-inch medium field gun. When 6-gun batteries were introduced in the late 1950s, medium regiments had 18 guns and the third battery in each field regiment was equipped with 5.5 inch guns instead of 25-pounder guns. The gun remained in UK service with Territorial Army regiments until 1980 and in Australian service until replaced by M198 in 1984.

The M198 155 mm howitzer which replaced the 5.5 inch gun is a towed gun that is transported tail first. Because the M198 weighs less than 7,300 kg, it can be dropped by parachute or transported by CH-47 Chinook. When firing, the weapon is lowered onto its baseplate rather than being anchored to the ground, allowing for rapid emplacement. The breech is operated manually via a screw type mechanism that rests low in an ergonomic position. The effective range is 18,100 metres when firing standard projectiles, which increases to 30,000 metres when firing rocket-assisted projectiles and guided ammunition.



101 Battery of 8/12 Medium Regiment, Royal Australian Artillery, firing M198 howitzers.

The M198 is being replaced with the M777 Howitzer (photo below) which with a weight of 4,200 kg is 41% lighter than the M198 howitzer. Much of the weight reduction is due to the extensive use of titanium. The M777 uses a digital fire-control system similar to that found on self-propelled howitzers to provide navigation, pointing and self-location, allowing it to be put into action quickly.



#### **LINKS FOR FURTHER ENJOYMENT**

Visit the Australian Army Museum of Western Australia web site

<https://armymuseumwa.com.au/>

<https://www.empressminiatures.com/bap05-british-55-inch-gun-1540-p.asp>

<https://www.perry-miniatures.com/product/ww-45-bl-5-5inch-medium-gun/>

**PHOTOGRAPHS FROM THE MUSEUM COLLECTION**



Who says you can't sling a 5.5 inch gun? Weight 6,190 kg.



5.5 inch gun with AEC Matador Artillery Tractor

