Assess The Significance of the deployment of new technology in influencing war throughout the years 1845-1991 (25 marks)

During the period 1845 to 1991 the aeroplane was the most significant deployment of technology as it led to the creation of a new division in the armed forces, such as the British RAF. Land warfare also saw notable deployments for example, more lethal weapons and the introduction of the tank in 1918. Naval warfare was dramatically changed too as ships became better equipped for battle and submarines were deployed. Aircraft carriers also came into being during the period. Finally, logistics were vastly improved by technology resulting in telegraphs, radio and by the Gulf War of 1991, GPS existed.

Aeroplanes, developed in the early twentieth century, were first significantly used in World War One. In World War One aeroplanes were mainly used for intelligence replacing the use of hot air balloons seen in the American Civil War, 1861 and the more common cavalry reconnaissance. Reconnaissance provided detailed information from behind enemy lines allowing for more effective offensives to be planned. However, aeroplanes could be used for little more with a mere top speed of 130 kilometres per hour \(^1\) and regular engine failure. The aeroplane’s potential for fighting was increased by Fokker’s E11. The E11 had a machine gun fixed to the front of the aircraft which wouldn’t fire when the propeller passed in front making shooting accurate. The growing importance of aircraft led to the creation of the RAF in 1918. However, decisive air battles were not seen until the Second World War. The Battle of Britain, 1940, is the first example of a victory decided by airpower alone. The Luftwaffe heavily outnumbered the RAF but, British Hurricanes and Spitfires were better deployed, securing a British victory. A British home advantage, since the pilots could rest at bases nearby, also ensured the RAF’s success. RADAR helped in the victory as it warned of approaching German planes. Without air superiority Hitler could not invade Britain as German ground troops would be vulnerable to overhead fire. The Battle of Britain shows the impact of technology on warfare since the need for air superiority had not previously existed.

Air warfare also resulted in strategic bombing. Early bombing was carried out by Zeppelins in World War One. Zeppelins were filled with hydrogen and were highly explosive, making their use unsuccessful. World War Two saw increased bombing raids on with attacks on German and British cities. Bombing was used to lower morale, reduce industrial output and destroy economic infrastructure. However, the Blitz, London 1941, did not succeed as only ten per cent of bombs hit targets. Furthermore, not all bombs exploded and morale increased. British raids on Hamburg proved more successful as aluminium chaff was used to cloud RADAR, allowing bombers to fly undetected. Later, The Gulf War used strategic bombing to limit Iraqi intelligence on American positions. Guided missiles were also employed. Laser guided missiles were extremely precise, ensuring targets were hit and minimal civilians died. Tomahawk missiles even had cameras installed for steering, ensuring

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\(^1\) Wilmore, HP, ‘Ultimate Book of World War One’, 2010, DK Limited, Great Britain.