

## Weapon Use and Development –

1914-1918 – Chlorine, phosgene, bromine, chloropicrin, mustard gas and a nerve gas from prussic acid. White phosphorous in grenades

Development of machine guns, submarines, specialised heavy bomber aircraft and bombsights along with Zeppelins, mortars, tanks, flamethrowers, first aircraft carrier, anti-tank and antipersonnel mines and anti-aircraft artillery

1918 – 1945 – Weaponry became more deadly including development of Cruise missiles from V-1 Rockets of WW1

1937 – Guernica bombed during Spanish Civil War – first punitive bombing of civilians in modern history

1938 – Sarin gas developed

1939 -1945 – WW2 – heavy bombers further developed, cluster bombs developed; anti-personnel mines first used; V 1 and V 2 Rockets developed. Zyklon B developed from a pesticide and used in gas chambers

1945 –First atomic bomb was tested

1945 – 6<sup>th</sup> and 9<sup>th</sup> of August - first Nuclear bombs dropped on Hiroshima and Nagasaki

1945 – present - Air launched Cruise Missiles (ALCMS) developed from V-1 Rockets

1950 - Hydrogen bomb developed. QR

1950 - NATO adopted sarin as a standard chemical weapon

1950 -53 – Korean War – anti-personnel mines used

1950 – Mutually Assured Destruction (MAD) - led to development of nuclear missile silos, ballistic missile submarines and nuclear bombers

QR

1957 – Inter-continental Ballistic Missiles (ICBM) developed to carry H Bombs; Medium Range Ballistic Missile (Blue Streak) developed but cancelled in 1960

1960 – Polaris – a nuclear-armed submarine-launched ballistic missile (SLBM) developed

1964 – Nuclear Ballistic Submarines (Resolution class) developed in UK to carry Polaris nuclear missiles

1961 – 1971 – Vietnam War - Agent Orange (defoliant) used during the Vietnam War and laser guided Missiles developed; cluster bombs and anti-personnel mines used

1970 – Non-Proliferation Treaty (NPT) – Under this treaty only five countries can possess nuclear

weapons: United States, Russia (former Soviet Union), United Kingdom, France and China (all members of the UN Security Council). Israel, India, Pakistan and North Korea have not signed the NPT and are thought to possess nuclear weapons.

1979 – Trident I - submarine-launched ballistic missile (SLBM) developed

1980 – Mustard gas and sarin used on Iran

1988 – Civilian population of Halabja in northern Iraq (population 70,000) was bombarded with chemical and cluster bombs, which included sarin,

1970s –onwards –Cluster bombs used in many conflicts (e.g. Iraq, Afghanistan, Kosovo); Tomahawk Cruise Missiles developed and continue to be used until the present (e.g. in Kosovo, Afghanistan, Sudan, Yugoslavia, Iraq, Yemen, Libya)

1990 – Trident II developed

1990 – 91 – First Gulf War – anti-personnel mines, laser guided missiles used; Tomahawk Cruise Missiles used

1994 –Vanguard\_class submarines (carrying Trident II nuclear missiles) replaced Resolution class submarines (which carried carrying Polaris nuclear missiles).

2001 - Military Predator Drones developed (forerunner of newer Reaper Drones)

2007 – First combat mission for Reaper Drones in Iraq and Afghanistan; Parliament votes to begin process of replacing Trident nuclear weapons.

2008 – White phosphorous used on Gaza;

2001 – present – depleted uranium used for armour piercing shells

2012 – USA, Russia and China still have stockpiles of poison gas; Reapers and Predator drones were deployed in Benghazi, Libya after the attack that killed the US ambassador

2013 – Reaper Drones first controlled from RAF Waddington, UK