**Strand 6 – Technology with Military Applications**

**1900 – 1910**

1903 - Orville and Wilbur Wright demonstrated the first heavier than air powered flight at Kitty Hawk, North Carolina. <http://www.centennialofflight.gov/essay/Wright_Bros/First_Powered_Flight/WR6.html>

1904 - Christian Huelsmeyer received a patent in Germany for his invention called the 'telemobilescope', which was the precursor for the modern radar. <http://www.radarworld.org/huelsmeyer.html>

**1911 – 1920**

1912 - Australian inventor Lancelot Eldin De La Mole patented plans for the first armored, self propelled tank. <http://en.allexperts.com/q/Military-History-669/Tank-inventor.htm>

1914 – Garret Morgan invented the first gas mask as a defense against mustard gas and other chemical agents. <http://inventors.about.com/od/mstartinventors/a/Garrett_Morgan.htm>

1915 - Paul Langévin, using the piezoelectric properties of quartz, developed the first sonar device, calling it an "echo location to detect submarines". <http://inventors.about.com/od/sstartinventions/a/sonar_history.htm>

1915 –Machine guns of the German Fokker warplane are synchronized with the propeller, thus making them accessible to the pilot during flight and more accurate by using traditional mounted sights. <http://www.centennialofflight.gov/essay/Air_Power/Fokker/AP7.htm>

**1921 - 1930**

1921 – John Thompson invented the first “Tommy” gun. <http://inventors.about.com/od/militaryhistoryinventions/a/firearms.htm>

1921 – The “Lie Detector” (polygraph machine) was developed by John Larson. <http://inventors.about.com/od/fstartinventions/a/forensic_2.htm>

1926 – Robert Goddard invented the first successful liquid-fueled rockets. <http://inventors.about.com/od/gstartinventors/a/Robert_Goddard.htm>

1930 – The jet engine was invented by Frank Whittle and Hans von Ohain. <http://inventors.about.com/library/inventors/bljetengine.htm>

**1931 – 1940**

1935 – Radar was patented by Robert Watson-Watt. <http://inventors.about.com/library/inventors/blradar.htm>

1937 – The first working model of a jet engine was successfully built and operated. <http://inventors.about.com/library/inventors/bljetengine.htm>

1938 – The first working turboprop engine was invented. <http://inventors.about.com/od/jstartinventions/ss/jet_engine_2.htm>

1939 – The first helicopter was successfully developed by Igor Sikorshy. <http://inventors.about.com/od/hstartinventions/a/helicopter.htm>

**1941 – 1950**

1943 – Jacques Cousteau and Emile Gagnan invented the aqualung. <http://inventors.about.com/od/cstartinventors/a/Scuba.htm>

1945 – The atomic bomb was invented and used to bring an end to World War II. <http://inventors.about.com/od/astartinventions/a/atomic_bomb.htm>

**1951 – 1960**

1953 - The black box (flight recorder) was perfected by David Warren. <http://inventors.about.com/library/inventors/blblackbox.htm>

1958 – The laser was invented by Gordon Gould. <http://inventors.about.com/od/lstartinventions/a/laser.htm>

**1961 – 1970**

1962 – The first computer video game, Spacewar, was invented by Steve Russell. <http://inventors.about.com/library/weekly/aa090198.htm>

1965 – Stephanie Kwolek invented Kevlar, the material used in bullet-proof vests. <http://inventors.about.com/library/inventors/blkevlar.htm>

**1971 – 1980**

1977 – Raymond Damadian invented MRI (Magnetic Resonance Imaging). <http://inventors.about.com/od/mstartinventions/a/MRI.htm>

1979 – Cell phones were invented and revolutionized communications. <http://inventors.about.com/library/weekly/aa070899.htm>

**1981 - 1990**

1986 – Gregory Gallico invented synthetic skin. <http://www.liebertonline.com/doi/abs/10.1089/ten.1995.1.231?journalCode=ten>

1988 – Chritian Andreas invented Doppler radar. <http://inventors.about.com/library/inventors/blradar.htm>

**1991 - 2000**

1992 - The Smart Pill, medication that can time –control its own delivery, was patented by Jerome Schentag and David D’Andrea. <http://inventors.about.com/od/sstartinventions/a/smart_pill.htm>

1997 - The gas powered fuel cell was used in the first automobile by Daimler-Benz and Toyota. <http://inventors.about.com/od/fstartinventions/a/Fuel_Cells.htm>

**2001 - 2010**

2003 – Susumu Tachi, Masahiko Inami, and Naoki Kawakami invent the optical camouflage system. The system actually bends light around an object to partially conceal it from observers. <http://inventors.about.com/gi/o.htm?zi=1/XJ&zTi=1&sdn=inventors&cdn=money&tm=93&gps=203_86_1012_167&f=11&tt=2&bt=1&bts=0&zu=http%3A//www.time.com/time/2003/inventions/invinvisible.html>

2003 - Adam Whiton and Yolita Nugent invented the No-Contact Jacket. The jacket delivers an electrical charge to anyone who touches it, other than the wearer. it.<http://inventors.about.com/gi/o.htm?zi=1/XJ&zTi=1&sdn=inventors&cdn=money&tm=184&gps=360_37_1012_167&f=11&tt=2&bt=1&bts=0&zu=http%3A//www.no-contact.com/>