

Introduction

In recent decades China has been aggressively asserting its ambition for global leadership its desperation to be acknowledged as the greatest is making it expansionist. In this quest for domination, Beijing has been planning its long-term military master plan and is tapping into advanced areas of research and development. China under the leadership of Xi Jinping is transitioning into an era of techno-neo-Maoism, in which the government has absolute command through strengthened resources of artificial intelligence and state of the art automation. The technological advancements across the globe have brought in a huge revolution in the art of warfare and conflict strategy. One of this new class of warfare called [Sixth Generation Warfare or Electronic Warfare](#) has been Beijing's one of the main areas of focus.

As part of this new strategy, a weapon system that the PLA is developing upon and which deserves large scale attention is the [Electromagnetic Pulse Weapon system \(EMP\)](#). An electromagnetic pulse (EMP) is an intense burst of electromagnetic (EM) energy that could cause or can be used to cause significant damage. China's EMP program stems from the idea that the future high-tech warfare under informatized conditions will not only span across multiple dimensions like the conventional land, sea, air but also the Electromagnetic spectrum.

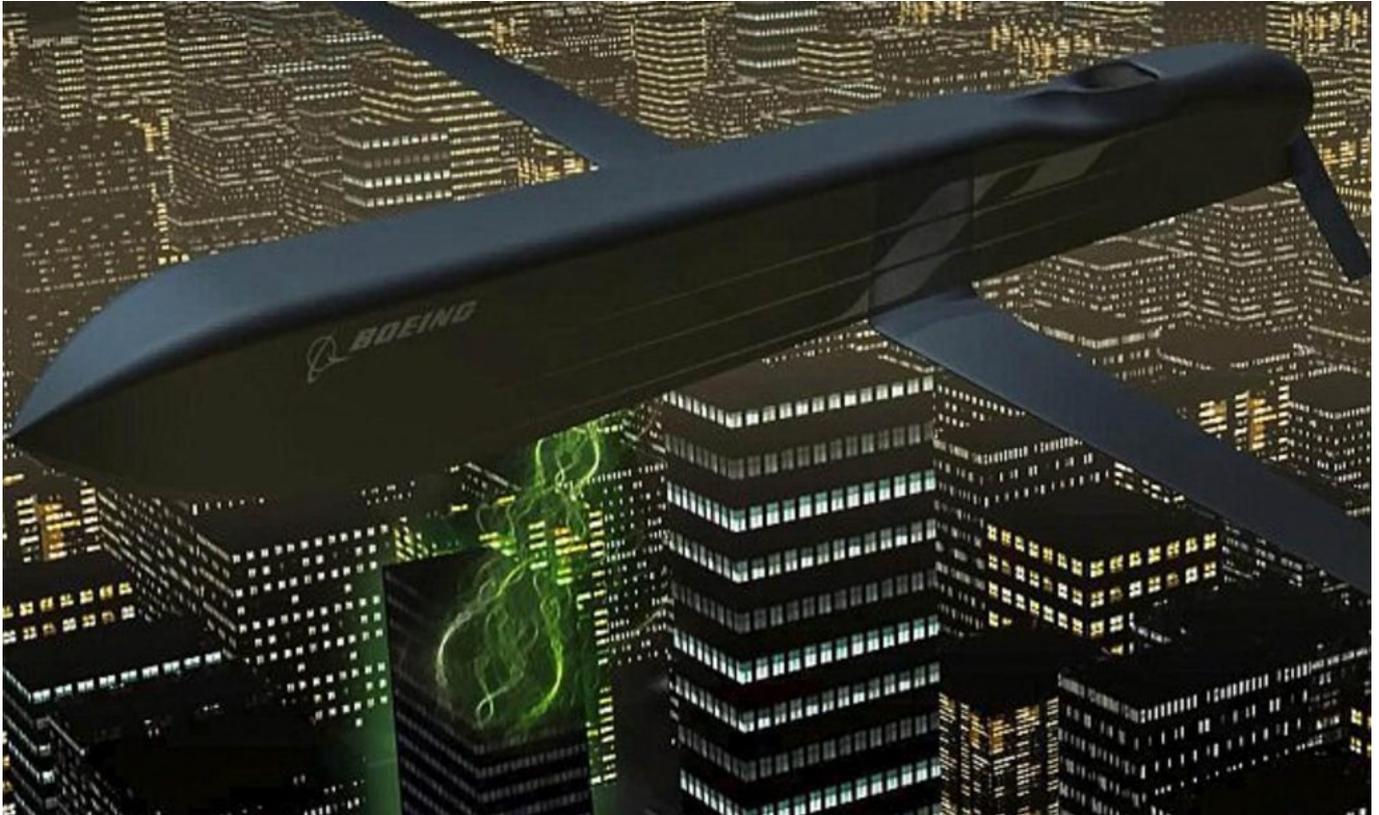


Image source: Getty

The New Doctrine

In light of the above, [EMP attack](#) is now an essential portion of the military strategy of China for an insurgent way of warfare against enemy armed forces and civilian critical infrastructures by sabotage. In recent decades information superiority has become pivotal to achieving victory in warfare. If the transmission equipment used for the instantaneous communication of battleground information was attacked and damaged by an opponent's EMP weapons, then the attacked party would face catastrophic levels of disruption in battlefield information transmission.

An electromagnetic event can develop as a result of natural causes, such as solar flares from the sun, or as a result of a nuclear weapon detonated at high altitudes. These cases result in the interaction between the Earth's magnetic field and the high-energy particles from space weather or a nuclear EMP that can lead to serious damage to unhardened electrical infrastructure across large areas of land. In addition to these a third scenario where an EMP could be generated is via portable high-power electromagnetic devices known as [High-Power Microwave \(HPM\)](#) weapons that can damage electronic systems over a long range of

distance.

Action with an Indirect Reaction

EMP can destroy electric & electronic systems directly, and people indirectly by the destruction of essential technology supply lines that run on electricity and other digital frameworks. EMP as a passive means of attack mechanism is the most efficient way of killing people, through [secondary effects](#), over the long run. The logic behind this is, people starve to death, not because of EMP, but because they live in consumerist societies dependent upon digital and electronic technologies. As a result of not causing destructive effects like nuclear weapons, weapons derived from electromagnetic pulses have attracted attention concerning their use in future wars. The peripherality of causing significant damage as well as the avoidance of human casualties serves as a motivation to transform this technology into an advanced and useful weapon in modern conflicts.

EMP severely limits the strategic performance and battlefield endurance of informatized equipment. This is an ideal way of challenging any technologically superior country as with digitization of weapon control systems it becomes imperative that a central or sub-central grid maintaining connectivity of command and control centres become vulnerable to EMP attacks which if carried out will paralyze the offensive and defensive capabilities. China has its prowess in both the [Nuclear electromagnetic pulse \(NEMP\)](#) as well as the [Non-nuclear electromagnetic pulse \(NNEMP\)](#) weapon systems.



Image source: Nikkei

The Dragons Arsenal

While Beijing's ICBM (Inter-Continental Ballistic Missile) and IRBM (Intermediate Range Ballistic Missile) programs have enough capacity to strike any part of the globe, any planned nuclear explosion strike at sufficient altitude⁸ (about 30 km) above a targeted area can lead to the destruction of electric and electronic grids as well as any early warning systems in that region.

The EM pulse generated due to the explosion will virtually blackout the targeted area without causing any direct damage to life but will burn out energy and communication networks stopping normal operations of the area that could eventually be catastrophic.

Any response to such attacks will be negated, with civil and defence communications and power grids taken out, the attacking country will be in a dominant position with almost no retaliatory response from its adversary. On the NNEMP front China has been conducting experiments and as part of its "[Assassin's Mace](#)" programs has developed a potent High-Power Microwave weapon. This HPM system could give high EMP yield which can be crucial in destroying electronic equipment, and in an era when most combat systems from tanks to planes, radios to satellites rely on wireless networks, the weapons could change the

way wars are fought. Warships can be fitted with these HPM weapons to intercept incoming missiles to subdue them. The Chinese advancement into sixth-gen warfare systems makes it predatory in its intent to dominate regional geopolitics as well as establish a global hegemony against the west.

Countries like India, the U.S and few others opposing China's global hegemony are in the habit of using conventional military doctrines. However, China's unorthodox and unconventional strategy puts its opponents in an asymmetric framework and designing a clear line of a defensive or offensive strategy to counter it would be difficult. As Beijing's combat strategies are dependent upon its time-tested ploy of keeping adversaries off-balance through surprise.

China as part of its sixth-generation warfare doctrine is developing electromagnetic railguns, powerful lasers, and high-power microwave weapons for use as part of its futuristic battle configuration. These weapon technologies could very well be converted into [applications](#) for developing robust Anti-Satellite (ASAT) weapons for space-based attacks on satellites or incorporated with missiles to overcome enemy air defences. China's developments on high-powered microwave weapons and EMP's would undermine the efficacy of even the most advanced missiles systems.

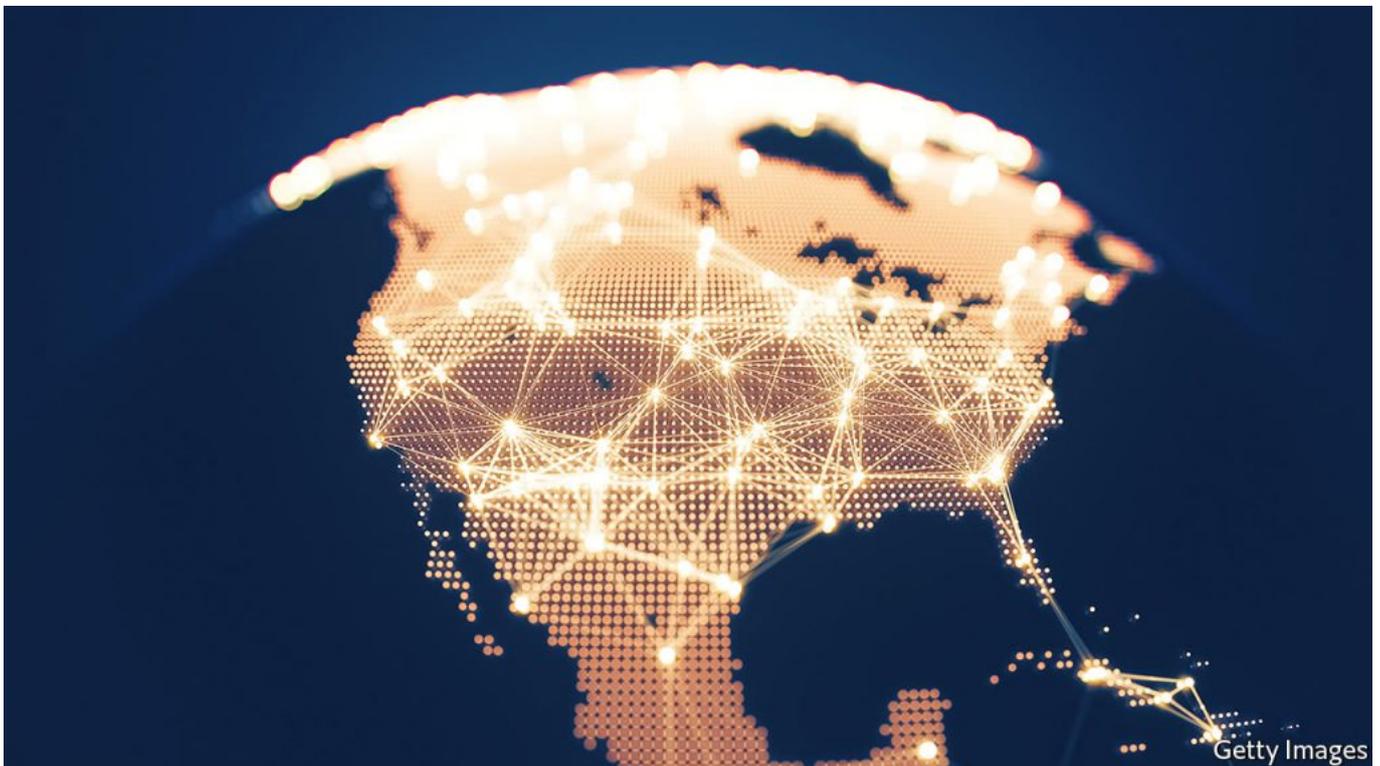


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Conclusion

While a full-blown war is an exaggeration, China's hawkish foreign and military policy off late is an alarm to the existing world order. In the case of any military skirmish, Beijing's advanced sixth-generation weapons have reached an optimal capability to allow its low technology forces to prevail over high technology backed adversaries. The world should be very concerned about a scenario where China uses nuclear space weapons, like ICBMs with specialized warheads or EMP weapon systems to quickly sweep the skies of various satellites, even at the risk of losing its own satellites, which could then be replaced with a surge of satellites launched by it to capture the high frontier thereby crippling its opponent's capabilities.

With large-scale preparations by the Chinese Military and at the backdrop of the COVID19 pandemic induced [vulnerabilities](#) across the world, Xi Jinping's China is relinquishing all pretensions and acting in a [truculent](#) manner. The recent military standoff between the Indian Army and the PLA and also not to forget its infringing of maritime sovereignty of ASEAN countries in the South China sea speak volumes of its intentions. Chinese force has to be met with proportionate counterforce on a variety of dimensions, especially where it is planning to gain superiority. Else the world will only be left with the option of quelling China's predatory resolve.

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