



Can China Produce Micro Precision Strike Weapons?

OE Watch Commentary: China has been making important strides in future technologies, such as artificial intelligence and quantum communications, endeavoring to be a world leader in these and other areas. The accompanying excerpted article from *Jiefangjun Bao* stresses that these and other advanced technologies will support future trends of micro-military operations, which represents yet another new direction. For example, intelligent micro-perception systems under micro-combat conditions could provide battlefield intelligence and information that is otherwise difficult to obtain with traditional sensing equipment. Micro-bionic technology can be used to develop new materials, new equipment, and new methods of warfare.

The article goes on to describe how micro-operations will influence military operations in the future, arguing that rather than the scale of wars expanding, they will be reduced through disruptive technologies. For example, mechanical equipment will be replaced by “state-of-the-art information technology,” which is minimally sized and lighter, uses minimal energy, is extremely high in speed offensively and defensively, and is extremely effective in operational performance. Micro-operations could also be disruptive to the organizational structure of military forces and the number of combat personnel could be reduced. Lastly, the article highlights examples of research and development of various military-based micro-systems being conducted in other countries and goes on to urge China to push forward, leaning on initiatives, such as civil-military integration, to become the leader in micro-operations technologies. This could shape up to be another race to achieve the leading edge. **End OE Watch**

Commentary (Hurst)



An etched silicon wafer.

Source: NASA, Public Domain, <https://commons.wikimedia.org/wiki/File:Etchedwafer.jpg>.

“We should fully understand the importance of micro operations, lead the developmental trend of micro operations, and seize the dominance of micro operations.”

Source: Pei Fei, Zhang Dapeng, Li Jinggang, “微作战—异军突起的战争新锐 (Micro Operations Emerge as a New Cutting-Edge Type of Warfare),” *Jiefangjun Bao*, 30 August 2018. http://www.81.cn/jfjbmap/content/2018-08/30/content_214671.htm

The appearance and use of miniature operational equipment and mini-sized combat forces has increasingly changed our cognition of military operations in the future. Maybe, a mosquito in the future will be turned into a weapon for precision strikes.

...We should fully understand the importance of micro-operations, lead the developmental trend of micro operations, and seize the dominance of micro-operations...

The requirements of intelligent warfare in the future drive the development of micro-operations. The development of intelligent capabilities in military operations has disrupted conventional wisdom. The intelligent capabilities of battlefield sensing, automatic decision-making, and smart attacks will undoubtedly become the key to winning victories in war. Micro-operations precisely come into line with the development of such intelligent capabilities in military operations, and represent a new direction in the high-speed development driven by the requirements of intelligent warfare. Intelligent warfare requires intelligent means of sensing and perception. Intelligent micro-perception systems under micro-combat conditions can provide battlefield intelligence and information that is difficult to obtain with traditional sensing equipment.

The technologies of micro-systems, micro-bionics, and micro-unmanned equipment support the development of micro-operations.

...Micro-warfare with the implementation of nanotechnology and miniature equipment as its basic characteristics will make a disruptive impact on conventional operations.

Today, with military development going on swiftly, we should fully realize the importance of micro-operations, step up its research before such operations actually take place, drive deployment and planning through major technological innovation and self-reliant innovation, act as a lead runner in the race of micro-operations.