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## **THE REVOLUTION IN MILITARY AFFAIRS**

**Introduction.** In recent years, weapons technology has leapt forward. Weapons can be delivered with unprecedented precision; surveillance and reconnaissance systems can provide remarkably detailed information about hostile force structures and locations; and a combination of data analysis and distribution systems can allow this information to be rapidly exploited. Most military analysts now agree that advances in military technology require a fundamental reappraisal and revision of operational concepts to ensure that full advantage is taken of them. This combination of technological advances and revisions in operational concepts represents a revolution in military affairs [1].

So, **the purpose of this paper is** to clarify and explain meaning of RMA, recall past RMA, their key elements and repercussions for military affairs, and point out tendencies and assets of current RMA.

According to Andrew Marshall, former director of the Office of Net Assessments in the Office of the Secretary of Defense: «A Revolution in Military Affairs (RMA) is a major change in the nature of warfare brought about by the innovative application of new technologies which, combined with dramatic changes in military doctrine and operational and organisational concepts, fundamentally alters the character and conduct of military operations.» [2].

Creation of the modern and effective nation state based on organised military power in the 17 century, the French revolution and the industrial revolution (beginning at the same time during the period 1789-1815) and First World War are cited as epochal events that brought in their wake such systemic changes in the political, social and cultural arenas as to be largely uncontrollable, unpredictable and above all, unforeseeable. Throughout history nations have always pursued innovation in increase relative military effectiveness. It is the acceleration of evolutionary technological change combined with associated operational and organisational transformation that altered the character of war over the last two hundred years. Some of these developments which progressively shaped the eventual technological metamorphosis are:

- Railways, telegraph, steam - powered naval ironclad and rifle.
- Change over from wooden sailing ships to steam powered armoured hulls.
- Machine gun, aircraft, submarine, main battle tank and armoured fighting vehicles.
- Internal combustion engines, improved aircraft, radio and radar.
- Nuclear weapons, ballistic missiles.
- Information technology and micro-chip advances, laser, satellite applications.

Beginning from 1340 AD, when a more sophisticated bow was developed, in 1420, artillery revolutionised old siege warfare. In 1600, ship-borne artillery, better fortress construction methods and muskets brought a three-way revolution. After the advent of the modern Army built around a staff system (1800), steam turbines, submarines and the torpedo (1800-1850), the arrival of the railways, telegraph and the rifle (1860) tanks and aircraft carriers (1920), the last revolution was in 1945, the nuclear bomb. The recent (present) revolution (1991) is the microchip.

Such revolutions have occurred many times in history for a variety of reasons. The most obvious cause is technological "push". The invention of gunpowder, the steam engine, the submarine, the internal combustion engine, the aeroplane, the aircraft carrier, and the atom bomb are some of the most obvious innovations which led to fundamental changes in the conduct of warfare. Some of these technological changes had origins in the civilian world while other revolutions in military affairs were brought about by "social-military revolutions" such as the development of railways, which enabled military forces to be moved and supplied over great distances.

There is a debate about what exactly constitutes a «revolution in military affairs». Some analysts maintain that there have been only three and that these have been linked to the nature of the societies: agrarian, industrial, and information. Others have identified as many as fourteen. There is agreement, however, that technology alone is insufficient to bring about a true revolution in military affairs. For example, almost five centuries elapsed between the invention of gunpowder and its large-scale employment on the battlefield; and in the early stages of the Second World War, Germany's innovative operational concept that using communications technologies to integrate land and air forces enabled it to defeat French and British forces equipped with very similar technology. In other words, an appropriate operational concept is just as important as technological invention in bringing about a revolution in military affairs [4].

Current trends in military technology can be categorised in a variety of ways but all present a broadly similar assessment. The following categories were developed by General Gordon Sullivan, former Chief of Staff of the United States Army and co-author Lt.Col. James M. Dubik:

Greater lethality

- Increased volume and precision of fire
- Better integrative technology leading to increased efficiency and effectiveness
- Increasing ability of smaller units to create decisive results
- Greater invisibility and increased detectability.

These need little elaboration. Essentially, the trend is towards smaller, more lethal forces, able to deliver a high volume of precise fire through the integration of delivery systems with effective sensor and information distribution systems. At the same time, forces are becoming better able to conceal themselves while their ability to detect hostile forces is increasing. [5]

As with trends in technology, different categorisations have been developed and all suffer from some degree of overlap. One particularly useful formulation was

produced by a team from Science Applications International Corporation (SAIC). The team identified four potential new warfare areas – long-range precision strike, information warfare, dominating manoeuvre, and space warfare [2].

**Conclusion.** Rapid spread and development of technologies changes modern warfare dramatically. It enhances capabilities of supreme and senior military commanders and officers to deal with their tasks and military/combat objectives in more fast and effective way with minimal losses and collateral damage. Moreover, technological advances can create new types of attacks, engagements, which requires new kinds of defense systems and countermeasures, along with new battlefields and warfare areas. Now, we definitely can spectate new stage of RMA with its current trends and repercussions to both military and global affairs around the world.

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## THE PROBLEM OF REFUGEES IN THE CONTEXT OF GLOBALIZATION

**Introduction.** One of the significant challenges to stability and progress in the modern world is the problem of refugees. It is a complex, multi-dimensional and