

Zeitschrift: ASMZ : Sicherheit Schweiz : Allgemeine schweizerische Militärzeitschrift
Herausgeber: Schweizerische Offiziersgesellschaft
Band: 168 (2002)
Heft: 6

Artikel: The realization of the RMA : challenges and opportunities
Autor: Treddenick, John
DOI: <https://doi.org/10.5169/seals-67962>

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

Download PDF: 17.04.2026

ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>

The Realization of the RMA: Challenges and Opportunities

Der Autor argumentiert, dass, obwohl die Vereinigten Staaten sich so verhalten, als ob die Revolution in Military Affairs (RMA) bereits existiere, noch viele Fragen hinsichtlich neuer Technologien und ihrer Verwendung offen sind. Staatliche Akteure müssten sich jedoch mit Blick auf ihre eigene Sicherheitspolitik bewusst werden, was die sie betreffenden Implikationen in Zusammenhang mit RMA sind. **ag**

John Treddenick*

Perhaps the greatest challenge in realizing or implementing the RMA is simply to discover what it is. The concept of an RMA is a disputed one, clearly one that is still evolving, and the existence of which, or at least the extent of its «revolutionary» nature, is often questioned. But, at a minimum, it can probably be agreed that the current profusion of military technology, particularly in the area of information technology, makes radical and dramatic changes in how wars are fought over the early decades of this century extremely likely. The emphasis in these changes will be on power projection and the ability to bring military power to bear over extended distances with great speed, precision and lethality. Indeed, we have seen an evolution of these changes in actual combat operations in the Gulf War, in the Kosovo campaign, and most recently in the Afghanistan campaign.

Speculative notion of what RMA is

Still, much of what we think of as the RMA remains speculative. As a result, its implications are imperfectly understood. Much of the technology we associate with the RMA is immature and unproved; much of it will turn out to be too expensive for all but the largest nations to acquire; and much of it still lacks the appropriate doctrinal and organizational underpinnings to make it militarily effective. As such, the utility of the RMA as an organizing principle for shaping a nation's defense policy and its defense organization remains uncertain. Obviously, though, it remains in the security interests of all nations, large and small, to keep a watchful eye on RMA developments, wherever they might occur, and to continually search to understand how these developments will affect their own national security, how they might benefit from them and to identify what challenges will be

confronted in their eventual implementation.

Decreasing interoperability capability

The single most important fact about the RMA is that, whether it exists or not, the United States is acting as though it does exist and is pursuing its adaptation with a certain relentlessness. This has given rise to an increasing capability gap between the US and its allies, a gap which leads to decreasing interoperability within coalitions and ultimately to a tendency for the US either to act alone or, what could be worse, not to act at all in situations threatening regional stability. There would appear to be, therefore, a challenge, indeed an imperative, for any nation concerned with international and regional security to maintain the capability to operate with the military forces of other nations, and with those of the US in particular. This does not mean, of course, investment in the full range of RMA technologies, even if that were possible and affordable, but rather it implies the selective investment in interoperability in the vital areas of deployability, mobility, and logistics, and, most critically, in command, control, communications and information systems.

How can interoperability be achieved?

But even such modest aspirations can be hugely expensive. They will be funded only with great difficulty, particularly at a time when defense budgets are stagnant or even falling in many countries. At the same time, the cost of military manpower is rising. Conscription is becoming less popular, even being eliminated in countries where it has long been the major source of military manpower, and increasingly militaries are facing recruiting and retention problems as they attempt to compete with civilian labor markets for highly qualified manpower. These twin pressures can cripple military capability, as less and less budgetary room is available for training and operations and for the replacement of equipment. But it is precisely in addressing this manpower problem that RMA technologies can provide opportunity. In focu-

sing on smaller, more capital intensive forces, using technologies where speed, precision and lethality are achieved at reduced mass, there is at least the promise of increased military productivity and hence reduced manpower requirements. For armies, enhanced battlefield knowledge, command and control, and precision weapons mean that large mechanized forces, with their expensive supporting infrastructures, can be eliminated and replaced by smaller, lighter, more agile, and presumably cheaper forces. Likewise, for navies and air forces, fewer expensive platforms would be required to deliver equivalent levels of military capability.

The information technologies that underpin much of the RMA have originated for the most part in civilian industry and they continue to evolve with dramatically increased capabilities and at dramatically reduced prices. Almost all countries will therefore have access to sophisticated off-the-shelf technology, at least for communications and command and control purposes, and at reasonable cost. The major expense is in the other components that complete an RMA capability, including the sensor systems, the precision weapons and the platforms that carry them. These systems, and the infrastructures that support them, are costly and will place heavy demands on defense budgets. More importantly, they will, in times of constrained budgets, have to compete fiercely for funding with more conventional, more established and more politically supportable weapons systems.

RMA as antithetical to existing military and bureaucratic cultures

But realizing the RMA raises the prospect of more than difficult budgetary battles. Indeed, it raises huge challenges of military reform and transformation. Almost by definition, RMAs are threatening and antithetical to existing military and bureaucratic cultures. Military bureaucracies, often with justification, are instinctively conservative and resistant to radical change. Implementation of the RMA can therefore be expected to be slow and to meet with considerable resistance from service cultures tied to specific weapons platforms and to traditional force structures. Such resistance can be expected to be even more intensive when it is considered that the RMA will demand a jointness in operational concepts that goes well beyond mere notions of coordinating air force, naval and ground forces. Indeed, the RMA would appear to challenge the very foundations of service distinctions, rendering them not only unnecessary, but even counter productive.

*John Treddenick ist Professor für Wirtschaft am College of International and Security Studies of the George C. Marshall European Center for Security Studies in Garmisch, Deutschland. Professor Treddenicks Forschungsanstrengungen konzentrieren sich vor allem auf die Analyse von Verteidigungsbudgets.

As the focus of national security debate shifts to issues of advanced and expensive new technology, new doctrines and unfamiliar organizational structures, further resistance to RMA realization can be expected at higher political levels. Apart from issues of cost, serious issues of civil-military relations may dampen political support for RMA implementation as the «expertise gap» between political authorities and an increasingly professional and technically proficient military becomes ever wider.

Exploiting the inexpensive source of military enhancement

The expense of the RMA is of course in the research and development and the acquisition of high technology equipment and weapons systems. But the other two pillars of the RMA, doctrinal innovation and organizational adjustment, are the less expensive fruit of intellectual inquiry and experimentation. And history is replete with examples of how creative thinking by individuals has transformed technological potential into effective military capability. The German blitzkrieg is a widely recognized case in point. There are many others, and they underline the point that bu-

reaucracies do not initiate revolutions in military affairs. Nor have such revolutions ever been realized simply by throwing money after new technologies. Rather their midwives have more typically been clever officers whose imaginations have been fired to explore and to experiment with new applications of both old and new technologies in the search for battle winning innovations in doctrine, tactics and organization. Exploiting this remarkably inexpensive source of military enhancement therefore challenges military organizations to devise environments and personnel systems that bring innovative, even revolutionary officers to the fore, allowing them opportunities for doctrinal research and organizational experimentation.

Difficult questions arise about the employment of new technologies

No country with an interest in its place in the world, can afford to ignore the implications that the changing technology of warfare has for international stability or, more directly, for the opportunities that it suggests for enhancing its own security. Yet, a rush to acquire new technologies without careful consideration of how they suit a

country's own strategic situation, its tactical needs, its technological capability and the technological sophistication of its citizenry would be folly. Technologies may not work, they may be entirely inappropriate to its military situation and they may indeed turn out to be easily countered. Thus caution must be one watchword if RMA capabilities are to be successfully realized. Moreover, no country, including the US, is ever likely to be financially able, or at least willing, to implement the full panoply of RMA capabilities that technology continues to make possible. Thus the second watchword must be careful and creative, even inspired choice. Such a choice would be financially bearable, culturally realistic and militarily effective. As such, it will undoubtedly involve a phased blending of both existing and emerging technologies, organizational structures appropriate to those technologies, well-defined operational concepts, and clearly understood strategic goals. In all of this, the technologies would appear to be the easy part. How these technologies are to be used, by whom, where, and for what purposes are the difficult questions. Evidently, then, the greatest challenge in realizing the RMA is the challenge of intellectual clarity. ■

Der neue DURO 6x6 P schützt wertvolles Leben. Im Einsatz erprobt.

Balistischer Schutzgrad nach EN B6,
sowie Schutz gegen Splitter- und Personenminen.
Transportkapazität als Mannschaftsfahrzeug 2+14

O'GARA-HESS & EISENHARDT
Labbe SA
22404 Lamballe Cedex
France

BUCHER-GUYER AG, Vehicules
CH-8166 Niederweningen,
Schweiz
Tel. +41-1-857 2211
Fax +41-1-857 2249
www.bucherguyer.ch/vehicules