

## BOOK REVIEW

### *DEADLY ARSENALS: NUCLEAR, BIOLOGICAL, AND CHEMICAL THREATS*

BY J. CIRINCIONE, J. B. WOLFSTHAL AND M. RAJKUMAR

(Washington, Carnegie Endowment for International Peace, 2<sup>nd</sup> edition, 2005), ix-490 p. (ISBN-13 : 978-0-87003-216-5)

#### Review by Pierre-Emmanuel Dupont\*

The second edition of *Deadly Arsenals*, published under the auspices of the Washington-based *Carnegie Endowment for International Peace*, is to be compared with the well-known Stockholm International Peace Research Institute's *Yearbook*<sup>1</sup>.

The two works are largely complementary. While the SIPRI *Yearbook* focuses mainly and in a comprehensive way, in each of its chapters, on developments during the previous year in a vast range of issues that are of relevance to international security and arms control, and provides a large number of bibliographical references on these events, it is often necessary to go back to previous issues in order to acquire a global understanding of a particular topic. In contrast, *Deadly Arsenals* gives a general and more readable snapshot of nuclear and CBW proliferation issues.

In its first part, the book reviews current “global trends”, gives an overview of international disarmament regimes, provides useful technical background, *inter alia*, on nuclear activities in the world (pp. 45-55), biological and chemical weapons (with useful tables of the main existing biological warfare agents, pp. 69-76, and examples of chemical warfare agents, pp. 77-80), and missile technology (with special emphasis on the burning issue of antimissile systems, pp. 97-101).

It is interesting to note that the authors, who document extensively the use by U.S. and other Western officials prior to the 2003 invasion of Iraq of unverified and often misleading information about the supposed Iraqi WMD arsenal (pp. 333-337), have decided as a consequence to avoid the term “WMD” from now on. They give the following reasons:

*“One significant change in the new edition is that it no longer employs the term “weapons of mass destruction”. Though used widely by officials and the media, this phrase conflates very different threats from weapons that differ greatly in lethality, consequence of use, and the availability of measures that can protect against them. [...] A failure to differentiate these*

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\* *Pierre-Emmanuel Dupont* got his LLM from Nantes Law University (France). He works as an independent researcher in International Law and International Relations, focusing on disarmament issues.

<sup>1</sup> The latest edition was published in May 2007: SIPRI Yearbook 2007: Armaments, Disarmament and International Security, Oxford University Press, Oxford, 2007.

*[chemical, biological, and nuclear] threats can lead to seriously flawed policy. For example, the repeated use of the term “weapons of mass destruction” to describe the potential threat from Iraq before the 2003 war merged the danger that it still had anthrax-filled shells, which was possible, and the danger that it had nuclear weapons, which was highly unlikely. Similarly, saying that Syria has weapons of mass destruction merges the danger that it has chemical weapons, which is almost certainly true, with the danger that it has a nuclear bomb, which is certainly not true” (p. 3).*

The second part of the work is devoted to detailed analysis of the nuclear, BW and CW arsenals of each of the Nuclear-declared states (Russia, China, France, United Kingdom and the United States), with a review of the current strategic context in which they are involved. The third part deals in the same way with non-NPT nuclear states (India, Pakistan and Israel), the fourth with “two hard cases” (North Korea and Iran), while the fifth and last deals with what are regarded by the authors as “non-proliferation successes” (the cases of Libya, Iraq, the three non-Russian successor states of Belarus, Kazakhstan and Ukraine, Argentina, Brazil, and South Africa).

Given the richness of the book, we will limit ourselves to the three cases of the U.S., Israel and Iran.

The nuclear and chemical arsenal of the United States still raises concerns, not only because of its weight, which is, according to the authors, not known officially with precision<sup>2</sup>, but also because of the uncertainties created by the new U.S. strategic doctrine, following the *Nuclear Posture Review* (NPR) released by the Department of Defence in January 2002, which emphasizes the enduring value and central importance of nuclear forces for the U.S. defence policy, despite of the end of the Cold War. The NPR outlined plans, among others, to accelerate efforts to develop antimissile systems, and to begin the development of new, low-yield nuclear weapons (p. 204). As the authors point out:

*“Though the NPR’s commitment to deep cuts in the nuclear arsenal was significant, it was basically a slower and less verifiable version of earlier U.S. plans, developed in the 1990s in START II and discussions for START III” (pp. 204-205).*

As a consequence of these trends, under the provisions of the *Strategic Offensive Reductions Treaty* (SORT) signed by George W. Bush and Russian president Putin in June 2002, which replaces START, Russia and the U.S. will maintain “more weapons in the field than was envisioned in the arms reduction process pursued throughout the 1990s” (p. 205). Without contest, “with the signing of SORT, the irreversibility of nuclear cuts is no longer a U.S. goal” (Ibid.).

What is most disturbing is that the NPR also “called for steps that make the use of nuclear weapons by the United States more likely, even in response to non-nuclear threats or attacks” (p. 207). The authors rightly remark in this respect that: “within the new nuclear use policy formulation, there are few if any military contingencies that would explicitly rule out a possible nuclear response by the United States”. Given this position, it is not surprising that

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<sup>2</sup> Regarding nuclear weapons, the authors write that “no estimates have been released on the size of the total U.S. arsenal”; however, “reliable estimates put the stockpile at more than 10,300 weapons” (p. 209). Otherwise, “no official inventory is available on the total stockpile of highly enriched uranium (HEU) produced by the United States” (Ibid.).

president Bush refused in 2006 to rule out the use of nuclear weapons in the event of a strike on Iran<sup>3</sup>.

Apart from the nuclear issue, it is also mentioned that, while the U.S. entirely destroyed its impressive stockpile of biological weapons during 1971-73, it has not met the destruction deadlines of its chemical arsenal under the *Chemical Weapons Convention* (CWC).

In light of these developments, the reader is in a position to identify the U.S. as the main party responsible for the current crisis of the international arms control regime (see p. 211).

The nuclear and CBW posture of Israel is also well documented. It is more disturbing than even that of its powerful U.S. ally. As is common knowledge, Israel, which owns, according to the authors, between 100 and 170 nuclear weapons, is not a member of the nuclear *Non-Proliferation Treaty* (NPT), and has never acknowledged officially that it possesses nuclear weapons<sup>4</sup>. It possesses “advanced chemical and biological weapons capabilities, although it is not known what type or how many offensive agents it currently has” (p. 261); regarding these capabilities, the work under review relies mainly on the authoritative works of Avner Cohen<sup>5</sup>. The authors highlight the “nuclear opacity” (p. 268) or “nuclear ambiguity” (p. 269) of Israel, which signed the *Comprehensive Test Ban Treaty* (CTBT) in 1996, being the only one of the three non-NPT nuclear weapon states to do so, but opposed the 1991 US proposal for a ban on production of fissile material.

Lastly, regarding the Islamic Republic of Iran, the book under review contains substantial developments on the nuclear programme and the missile capabilities of the country, but one will regret that the authors rely mainly, if not exclusively, on sources and references which are likely to reflect the viewpoint of the U.S. administration, or close to it<sup>6</sup>. Unfortunately, because of that, the presentation of the current nuclear controversy is questionable: the authors assert that “for more than two decades Tehran has secretly pursued the ability to produce nuclear materials than can be used in weapons” (p. 295), while in fact the UN Security Council Resolution 1737 (2006), referring to the IAEA Director general report of 27 February 2006, stated only that: “the IAEA is unable to conclude that there are no undeclared nuclear materials or activities in Iran”<sup>7</sup>. It is obvious that there is more than a nuance between these two assertions. It is also to be noted that the book, due to the year of its publication (2005), does not take into account the latest developments, among them the sanctions imposed in 2006-2007 by the UNSC, and the work plan agreed on 27 August 2007 between Iran and the IAEA<sup>8</sup>.

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<sup>3</sup> President Bush, quoted by the British newspaper *Telegraph*, April 19, 2006: See <http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2006/04/19/wiran19.xml>.

<sup>4</sup> See ‘Olmert inadvertently acknowledges Israel has the bomb’, *International Herald Tribune*, December 19, 2006, <http://www.ihl.com/articles/2006/12/12/news/israel.php>.

<sup>5</sup> See Cohen, Avner, “Israel and the Bomb”, New York, Columbia University Press, 1998; also Cohen, “Israel and CBW: History, Deterrence, and Arms Control”, in: *Nonproliferation Review*, Fall 2001, pp. 1-20.

<sup>6</sup> See the notes on Iran on pp. 308-310.

<sup>7</sup> The reader will find a less partisan and more correct presentation of the history of the Iranian nuclear controversy in Kile, S. N., ‘Nuclear arms control and non-proliferation’, *SIPRI Yearbook 2005: “Armaments, Disarmament and International Security”*, Oxford University Press, Oxford, 2005, pp. 555 sq.

<sup>8</sup> ‘Understandings of the Islamic Republic of Iran and the IAEA on the Modalities of Resolution of the Outstanding Issues’, attached to the IAEA Director general report ‘Implementation of the NPT Safeguards Agreement and Relevant Provisions of Security Council Resolutions 1737 (2006) and 1747 (2007) in the Islamic Republic of Iran’. See <http://www.iaea.org/Publications/Documents/Board/2007/gov2007-48.pdf>.

In conclusion, one can say that “*Deadly Arsenals: nuclear, biological, and chemical threats*”, despite the above-mentioned weaknesses, is beyond dispute a comprehensive and useful guide to nuclear and CBW proliferation issues, and an essential companion to the *SIPRI Yearbook*.