
Preface

Readers of *Tracking Nuclear Proliferation, 1998* who are already familiar with the 1995 version may benefit from a word on how this 1998 volume was produced. Most will recognize this book also reflects the spirit of Leonard S. Spector, the originator of the Carnegie series on nuclear non-proliferation. Sandy Spector accepted a position in the U.S. Department of Energy in September 1997, when he relinquished responsibility for this 1998 book, and ceased contributions to the manuscript. Carnegie turned to me to pull together the updating work already under way, and to produce the book. This meant updating preliminary chapter drafts and supporting materials, as well as authoring several that had not yet been produced.

This has been a challenging but rewarding task. The new version of *Tracking Nuclear Proliferation, 1998*, like its predecessor, is a factual and analytical treatment of the main features of the nuclear non-proliferation regime. It records regime successes and tracks continuing proliferation threats, country by country. It retains the easy-to-use format featuring maps and charts on the national nuclear programs of seventeen countries, appendices introducing newcomers to the basics of nuclear technology and multilateral nuclear controls, and detailed citations to help researchers and students who wish to go deeper. While the writing of each *Tracking, 1998* chapter was not completed at precisely the same time, the cutoff point for new material was generally December 1997. Selective updating continued until the book went to press in June 1998, primarily to cover the Indian and Pakistani nuclear tests of May 1998, but with some attention to developments in China, Russia, and Iraq as well.

This latest *Tracking* book has a number of new features. An Overview of Global Trends highlights the important changes and developments since April 1995—the cutoff date for the contents of the previous *Tracking* volume—and looks to the future. The complicated subject of U.S. legislative sanctions is given extensive coverage in several chapters, especially those on Iran, Iraq, Pakistan, China, and Russia. Each country chapter follows a basic two-part scheme. Material retained from the earlier book was placed in the Background section of each chapter, while material covering the period since April 1995 was placed in a Developments section. Instructors and scholars familiar with the previous book may find this demarcation of old and new helpful.

The International Nuclear Non-Proliferation Regime chapter is linked with new appendices on the outcomes of the 1995 NPT Review and Extension Conference, the negotiation and signature of the Comprehensive Test Ban Treaty, and the formation of Nuclear-Weapon-Free Zones (NWFZs). In this 1998 book, the subject of missile proliferation is covered in greater detail, both in several country chapters and in a chapter specifically dedicated to the subject, Missile Proliferation, 1995-97, along with charts of missile types, the countries that possess or export them, and an appendix describing the Missile Technology Control Regime (MTCR).

Like its predecessor, this book focuses primarily on the nuclear regime and nuclear proliferation, but it weaves in information on the proliferation of other weapons of mass destruction (WMD), particularly chemical- and biological-weapon capabilities and related export control issues. The formation of the Wassenaar Arrangement, touched on in several chapters, has its own new appendix. Wassenaar's export control guidelines focus on the transfer of conventional arms and dual-use technologies, and thereby reinforce the national and multilateral export control features of the nuclear non-proliferation regime as well as the MTCR. The maps and charts that track nuclear programs and weapons capabilities generally follow the format of the previous version of *Tracking Nuclear Proliferation*, but have been updated and, in several cases, modified, to reflect changed conditions or to make the presentation of detailed information more lucid.

As overall editor and co-author, I was pleased to share preparation of this book with Mark McDonough, who also co-authored the 1995 book with Leonard Spector. Mark's extraordinary attention to the detailed record and cogent analysis is evident in all the chapters on the Gulf and Middle East, as well as in the core International Nuclear Non-Proliferation Regime sections of the book. Richard Speier's primary contribution was the missile proliferation chapter and elucidation of the MTCR, but he also read, commented on, or improved the missile proliferation content of all of the country chapters. Toby Dalton, Gregory Koblentz, and Gregory Webb of the Carnegie Non-Proliferation Project staff each carried heavy loads, at different points, in doing primary periodical research, preliminary drafting of the updates of certain chapters, and the updating of maps and charts. Toby Dalton, who continues with the Project, worked intensively on the final

assembly of the book. Anna Ivannakova and Antoine Duvauchelle, Project interns, provided vital research support, and Renate Seldon assisted with word-processing, clerical, and administrative tasks.

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While acknowledging appreciation to others who have contributed importantly to improving the quality of this book and to making it possible, including some who could not be named, the authors alone accept responsibility for the content and any errors that remain.

Rodney W. Jones