

Contents

Preface	xi
List of Tables	xiii
List of Figures	xv

**Introduction—Nuclear Proliferation:
To Bell the Cats or Catch the Mice?** 1

The NPT: Objectives of the Co-Sponsors	3
The NPT: Objectives of the Non-Nuclear Weapons States	5
The NPT: Tactics and Roles of Sponsors and Nonsignatories	6
The NPT: Paradigm for Arms Control Agreements, 1961–1975	9
The NPT: Nuclear Weapon and Nuclear Weapon Threshold States in the Future	12
The Clark University Conference	13

PART ONE

Chapter One

**The Emergence of a New Second Order of Powers in the
International System—*Saul B. Cohen*** 19

The Emergence of Hierarchical Orders	20
Geopolitical Regions and Second Order Powers	23
Criteria for Second Order Power Status	28
Some General Principles and Conclusions	29

Chapter Two	
The United States–Soviet Arms Race: SALT and Nuclear Proliferation	
– <i>Stefan H. Leader and Barry R. Schneider</i>	35
Introduction	35
Vertical Proliferation–The US–Soviet Strategic Weapons Race	36
The Superpowers and Nuclear Spread	52
Chapter Three	
The Nonproliferation Treaty and the Nuclear Aspirants: The Strategic Context of the Indian Ocean	
– <i>Robert M. Lawrence</i>	59
Introduction	59
What Factors Caused Three Indian Ocean States to Reject the NPT?	59
How Might an Extrapolation of Current Superpower Activities in the Indian Ocean Influence the Position Taken Regarding the NPT by Indian Ocean Aspirants?	73
How Might Possible Future Activities of the Superpowers in the Indian Ocean Influence the Position of the NPT Adherents and Nonadherents?	75
Conclusions	76
Discussion Essay: Proliferation and the International Strategic System	79
The Race Between the Superpowers	79
Regional Issues	81

PART TWO

Chapter Four	
Risks of the Nuclear Fuel Cycle and the Developing Countries	
– <i>Christoph Hohenemser</i>	85
Introduction	85
The Nuclear Fuel Cycle	89
Risks of the Nuclear Fuel Cycle	95
Research on Catastrophic Nuclear Risks	103
Conclusions: Implications for the Developing Countries	107
Acknowledgments	110

Chapter Five	
Commercial Nuclear Technology and Nuclear Weapon Proliferation—<i>Theodore B. Taylor</i>	111
Nuclear Explosives Technology	116
Profile of Worldwide Nuclear Technology, 1982	118
Safeguards Against Diversion or Theft of Nuclear Materials Provided to Other Countries by the United States	120
Chapter Six	
India's Nuclear Policy—<i>K. Subrahmanyam</i>	125
Third World Perceptions of Nonproliferation and the NPT	126
International Perceptions of Indian Nuclear Capability	138
Discussion Essay: Nuclear Safety, Weapons and War	149
Risk Assessment	149
Safety	150
Weapons	150
Safeguards	151
PART THREE	
Chapter Seven	
Nuclearization and Stability in the Middle East	
— <i>Steven J. Rosen</i>	157
Loss of Faith in the Conventional Balance of Power	158
The Nuclear Deterrence Approach	161
Is a Nuclear Middle East Inevitable?	176
Chapter Eight	
Determinants of the Nuclear Option:	
The Case of Iran—<i>Anne Hessing Cahn</i>	185
General Background	186
Present and Future Capabilities	187
Military-Strategic Considerations	194
Domestic Considerations	198
International Considerations	200

viii *Contents*

Chapter Nine	
South Africa's Foreign Policy Alternatives and Deterrence Needs—<i>Edouard Bustin</i>	205
Foreign Policy Alternatives	206
Advantages and Disadvantages of "Going Nuclear"	219
Chapter Ten	
Japan's Response to Nuclear Developments: Beyond "Nuclear Allergy"—<i>Yoshiyasu Sato</i>	227
Introduction	227
Evolution of Nuclear Policy	228
Peaceful Uses of Nuclear Energy	232
Elements of Constraints	239
The Nonproliferation Treaty and Japan	246
Conclusion	253
Chapter Eleven	
Brazil's Nuclear Aspirations—<i>H. Jon Rosenbaum</i>	255
The Accord	255
Safeguards	257
Motives	261
Capabilities	262
Intentions	266
Conclusions	270
Chapter Twelve	
Incentives for Nuclear Proliferation: The Case of Argentina—<i>C. H. Waisman</i>	279
Introduction	279
Argentine Nuclear Capabilities	280
Argentine Nuclear Policy	282
Policy Options for Near-Nuclear Countries	284
The Argentine–Brazilian Interaction	286
Internal Incentives	289
Discussion Essay: The Typical Nuclear Proliferator	295
Technology and Manpower	296

Strategic Needs and Proliferation	297
Internal Politics	299
Epilogue: The NPT Review Conference, Geneva, 1975	301
Appendixes	
A – The Non-Proliferation Treaty	317
B – Final Declaration of the Review Conference of the Parties to the Treaty on the Non-Proliferation of the Nuclear Weapons	323
C – Status of the Nonproliferation Treaty	335
Bibliography	337
Notes on Contributors	345
Conference Participants	349