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an agenda for the 1990s**

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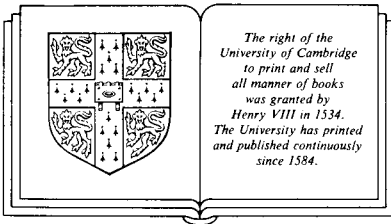
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Preface

In the autumn of 1983, the Ford Foundation of the United States awarded the University of Southampton a multi-year grant to enable a team of researchers in its Department of Politics to investigate the problems likely to be encountered in North–South security relations in the 1990s and the policy options relevant to them. One area singled out for intensive investigation was nuclear non-proliferation, for if additional states were to acquire nuclear weapons it would drastically alter the future context of global security relationships.

When research work commenced in mid-1984 the international community was starting to make preparations for the Review Conference on the Non-Proliferation Treaty (NPT) scheduled for September 1985. One component of the Southampton research effort was a national seminar on non-proliferation problems which met several times in London in the months preceding the Conference. This seminar involved a mixed group of academics, officials and industrialists and the idea of holding an international symposium in the immediate aftermath of the Review Conference on problems of nuclear non-proliferation in the 1990s arose from it. Such a symposium could be given a clear empirical focus because the NPT provides for a conference in 1995 to discuss how the treaty will be extended beyond that date.

I was fortunate enough to be able to both attend the NPT Review Conference in Geneva as part of my Ford Foundation funded research activities and discuss the proposal for a symposium with many delegates and observers. This led to some changes in the proposed structure for the meeting and to several of those present in Geneva agreeing to write papers for it. The meeting itself, called the Sarnia Symposium after the Roman name for the Channel Islands, was held in the Old Government House Hotel on the island of Guernsey from 17–20 March 1986. The chapters

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which follow are derived both from papers prepared for it and ideas which arose out of it.

I owe a debt of gratitude to many people for their assistance and unstinting support in both preparing for the symposium and producing this volume. Ian Forbes, Mary Hendy, Elizabeth Schlamm, Freida Stack, Angela Wilkinson and Jane Tsabet were largely responsible for the detailed organisation of the symposium and typing and copy editing drafts of the chapters in this volume. Darryl Howlett acted as rapporteur for the symposium and prepared the final manuscript for publication. William Walker was particularly helpful in discussing possible papers in the formative period of the enterprise, as were some of the British government officials responsible for this policy area.

All the contributors gave generously of their time and expert advice in both the preparation and running of the symposium and in responding to my many suggestions for revisions to their papers prior to publication. My colleagues at Southampton, especially Roy Allison, Mark Hoffman and Caroline Thomas gave me invaluable support, whilst without the financial assistance and encouragement of the Ford Foundation and particularly its International Relations Programme Officer, Enid Schoettle, this volume could never have been created.

J.S.

Southampton, October 1986

Abbreviations

ABM	Anti-Ballistic Missile
ALCM	Air Launched Cruise Missiles
ASAT	Anti-Satellite (weapon)
ASW	Anti-Submarine Warfare
BARC	Bhabha Atomic Research Centre
C ³ I	Command, Communication, Control and Intelligence
CAS	Committee on Assurances of Supply (International Atomic Energy Agency)
CEP	Circular Error Probable
CEPS	Centre for European Policy Studies (Brussels)
CIRUS	Indian Research Reactor
CIVEX	Project to develop a new type of reprocessing system
CMEA	Council for Mutual Economic Assistance (Eastern Europe)
CORTEX	System developed in the United States for on-site monitoring of the yield of nuclear weapon tests
CTBT	Comprehensive Test Ban Treaty
DHRUVA	Indian Research Reactor
EURATOM	European Atomic Energy Community
FBR	Fast Breeder Reactor
FBS	Forward-based Nuclear Weapon Systems
FSS	Full Scope Safeguards
GCD	General and Complete Disarmament
GW	Gigawatt
HEU	Highly Enriched Uranium
HEXAPARTITE	Project to develop safeguards system for gas centrifuge enrichment plants
IAEA	International Atomic Energy Agency
ICBM	Inter-Continental Ballistic Missiles

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ICF	Inertial Confinement Fusion
IISS	International Institute for Strategic Studies
INF	Intermediate Range Nuclear Forces
INFCE(P)	International Nuclear Fuel Cycle Evaluation (Programme)
INFCIRC	IAEA Information Circular
IPEN	Instituto de Pesquisas Energéticas e Nucleares
IRR	Israel Research Reactor
MARV	Manoeuvring Re-entry Vehicle
MIRV	Multiple Independently-targetable Re-entry Vehicle
MX	United States Heavy Ballistic Missile
NATO	North Atlantic Treaty Organisation
NNPA	United States Nuclear Non-Proliferation Act (1978)
NNWS	Non-Nuclear Weapon States
NPT	Non-Proliferation Treaty
NSG	Nuclear Suppliers Group
NWFZ	Nuclear Weapon Free Zone
OECD	Organisation for Economic Cooperation and Development
PINSTECH	Pakistan Institute for Nuclear Science and Technology
PNE	Peaceful Nuclear Explosions
PTBT	Partial Test Ban Treaty
PUNE	See UNCPICPUNE
PWR	Pressurised Water Reactor
SAARC	South Asian Association for Regional Cooperation
SDI	Strategic Defence Initiative
SIPRI	Stockholm International Peace Research Institute
SLBM	Submarine Launched Ballistic Missiles
SWU	Separative Work Unit (Unit for measuring uranium enrichment work)
TASTEX	Tokai Advanced Safeguards Technology Exercise (IAEA project)
UNCPICPUNE	United Nations Conference on Promoting International Cooperation in the Peaceful Uses of Nuclear Energy
URENCO	United Kingdom-Netherlands-West Germany Centrifuge Enrichment Company