AUSTRALIA AND THE BOMB

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Preface

Most people do not suspect Australia of being very interested in nuclear weapons and nuclear strategy. This book shows the opposite. After World War II and until the early 1970s, policy-makers, defense officials, and the military almost managed to develop a national nuclear deterrent, which, they believed, would help defend their vulnerable island nation. But circumstances changed and eventually Australia dropped out of the atomic race. Most assume that Australia’s ratification of the NPT in 1973 was due to specific American security assurances. This work shows that the so-called American nuclear umbrella actually had very little to do with Australia’s decision to abstain from going nuclear. Instead, it was the Asia-Pacific region transforming into a much more benign security environment that made Australia feel like it could “defend” itself without an indigenous nuclear deterrent. In the unique system of the Cold War after 1973, there were no major powers that could threaten Australia without also threatening the United States, so Washington was already “doing” nuclear and conventional deterrence for Australia. But in an Asia-Pacific currently undergoing transformational geopolitical change, that logic is soon likely to change.

Understanding the historical origins of the contemporary nuclear world is crucial for thinking about how we might navigate and manage alternative nuclear futures. Historians tend to be shy in offering perspectives on contemporary policy issues. This is a big shame, as historians have tremendous understanding of the nuances and complexities of policy issues, which would benefit policy-makers around the world. Public debate is nowhere nearly as well-informed, accessible, and impartial as it should be. In that spirit, this is not a book about political science. Nor is it a historical work per se. This is a book in strategic studies.

Understanding the history of the nuclear aspect of the alliance between the United States and Australia is important for several reasons. First, it shows how certain geopolitical circumstances can shape attitudes toward the possession and use of nuclear weapons in different geostrategic contexts.
Second, it shows how such circumstances shape allied understandings of concepts of nuclear strategy. Third, it shows how different strategic circumstances can be more or less conducive to the perceived credibility of security assurances. Fourth, a proper understanding of Australia’s relationship with US extended nuclear deterrence has implications for policy today. It helps us think about how that relationship might endure and evolve in different geostrategic contexts, especially given the challenges that stability in Asia faces today.

To think that Australia “relies” on US extended nuclear deterrence is misleading. Australia’s relationship with nuclear weapons is complex, ambiguous, distant, and multilayered. Why did Australia pursue a nuclear weapons capability from the mid-1940s to the early 1970s? Why did Australia decide to cooperate with Great Britain on nuclear and missile research? Why did policymakers then try to develop a nuclear weapon capability independently? Why did Canberra eventually renounce that option and instead choose to sign the NPT and “rely” on US extended nuclear deterrence in 1973? And under what circumstances might Australia, again, love the bomb directly rather than vicariously?
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Acronyms and Abbreviations

AAEC  Australian Atomic Energy Commission
ABM   antiballistic missile
ACT   Australian Capital Territory
ADF   Australian Defence Force
ANSTO Australian Nuclear Science and Technology Organisation
ANZAM Anglo-New Zealand-Australia-Malaya
ANZUS Australia-New Zealand-United-States Treaty
AUSMIN Australia-United States Ministerial Consultations
BMD   ballistic missile defense
C3I   command, control, communications
CHISOP Chinese Integrated Strategic Operations Plan
CS    control symbol
CTBT  Comprehensive Nuclear-Test-Ban Treaty
DSP   Defense Support Program
END   extended nuclear deterrence
EURATOM European Atomic Energy Agency
FBM   Fleet ballistic missile
IAEA  International Atomic Energy Agency
ICBM  Intercontinental Ballistic Missile
MAD   Mutual Assured Destruction
MIRV  Multiple Independently Targetable Reentry Vehicle
MNF   Multilateral Nuclear Force
NAA   National Australian Archives
NATO  North Atlantic Treaty Organization
NNSA  National Nuclear Security Administration
NPR   Nuclear Posture Review
NPT   Nuclear Non-Proliferation Treaty
NSDM  National Security Decision Memorandum
NUDET Nuclear Detonation
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<th>Acronym</th>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-Operation and Development</td>
</tr>
<tr>
<td>PGS</td>
<td>Prompt Global Strike</td>
</tr>
<tr>
<td>QDR</td>
<td>Quadrennial Defense Review</td>
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<tr>
<td>RAAF</td>
<td>Royal Australian Air Force</td>
</tr>
<tr>
<td>RGS</td>
<td>Relay Ground Station</td>
</tr>
<tr>
<td>RISOP</td>
<td>Red Integrated Strategic Operations Plan</td>
</tr>
<tr>
<td>ROK</td>
<td>Republic of Korea</td>
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<tr>
<td>SALT</td>
<td>Strategic Arms Limitation Treaty</td>
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<tr>
<td>SBIRS</td>
<td>Space-Based Infrared System</td>
</tr>
<tr>
<td>SDI</td>
<td>Strategic Defense Initiative</td>
</tr>
<tr>
<td>SEATO</td>
<td>Southeast Asia Treaty Organization</td>
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<tr>
<td>US</td>
<td>United States of America</td>
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<tr>
<td>USSR</td>
<td>Union of Soviet Socialist Republics</td>
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<tr>
<td>USSTRATCOM</td>
<td>United States Strategic Command</td>
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<tr>
<td>WMD</td>
<td>Weapons of Mass Destruction</td>
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CHAPTER 1

Introduction

Nuclear weapons have been central to Australia’s sense of security since the dawning of the atomic age in 1945. Sometimes this phenomenon has been implicit, and at other times it has been explicit. From 1956 to around 1973, senior officials in both the civilian bureaucracy and the defense establishment had concluded that Australia should have nuclear weapons. This interest in the bomb was symptomatic of a period of nuclear disorder. Certain geopolitical circumstances meant Australia could not rely on its “great and powerful” friends for defending Australia and its interests in Southeast Asia. These circumstances began to change from the late 1960s to create a more benign security environment, and Canberra came to the conclusion that any major conventional or nuclear threat to Australia was also a threat to the United States, so Australia did not really need to play the deterrence game—Washington could take care of that complicated business. That combination of circumstances was the primary reason why Canberra gave up the nuclear option. However, the Asia-Pacific today is undergoing transformational geopolitical shifts that are beginning to seriously undermine the nuclear order underpinning Australia’s attachment to what is, compared to South Korea and Japan, a minimal serving of US extended nuclear deterrence (END). The operational aspects of US END were never articulated to Asian recipients, including Australian policy-makers, the way they were to European allies. That will need to change if extended deterrence is to endure in Asia. Unless Washington is willing to share information about nuclear war planning in Asia, or make a more substantial military commitment to demonstrate its willingness to use military force (and possibly nuclear weapons) in the defense of Australia, in the next 20 years it would not be unreasonable for Canberra to seriously reconsider the possibility of wielding its own nuclear deterrent.

This book tells three interwoven stories, and examines the interconnections between them. First is Australia’s relationship with the bomb.
Second is Australian thinking about concepts of nuclear strategy. Third is Australia’s experience with and customer satisfaction with US END under the Australia-New Zealand-United States (ANZUS) alliance. It concludes with an appraisal of how the relationship between these three interrelated stories might evolve in the future. Australia’s nuclear history has proved to be complex and, at times, seemingly contradictory. That complexity shows up in the variety of roles that Australia has played in relation to nuclear weapons. It has been a “beneficiary” of US END guarantees, a possible nuclear proliferator, and a promoter of arms control and nuclear disarmament. Since the 1960s, Australia has hosted facilities of central importance to the control of the US arsenal. And it is today—and has been for over 20 years—the only major Western ally to hold formal membership in a nuclear-free zone. Yet Australian thinking about nuclear weapons, nuclear strategy, and US END remains one of the seriously understudied aspects of Australia’s strategic history. Understanding the ways in which past geopolitical dynamics have shaped Australian attitudes toward nuclear issues helps us anticipate future thinking about nuclear issues and how they relate to Australian perceptions of its defense and security in the international system.

**Importance of the Study**

In 2009, US President Barack Obama gave a speech in Prague in which he outlined a course toward achieving a world without nuclear weapons. Since the end of the Cold War, there have been a number of efforts to revive consideration of minimum deterrence postures and, eventually, move toward the complete elimination of nuclear weapons. Existing studies of the question of low numbers have tended to focus on the strategic relations between the United States and Russia, only to the neglect of other nuclear and nonnuclear states, whose defense postures will significantly impact the overall military balance in an Asia-Pacific with lower nuclear numbers. James Acton’s study (published by the Carnegie Endowment) on stability in moving to lower numbers is almost exclusively deductive in its logic, focused entirely on US-Russia relations. Moreover, Acton assumes that smaller nuclear players and other regional actors do not need to be considered because of their smaller, latent, or nonexistent arsenals. This ignores the much-overlooked reality that nuclear weapons are not the only regulators of stability. The conventional balance is an integral (though too often subsumed) second layer under nuclear weapons, shaping perceptions of the overall security environment. As Professor Ron Huiskes astutely notes:

For some of the smaller (and, mostly, newer) nuclear weapon states, such as Israel, Pakistan, the DPRK and, potentially, Iran, countering superior
conventional capacities constitutes the core rationale for the acquisition of nuclear weapons. And since sustainable conventional defenses correlate so strongly with geography, population and economic capacity, this reality abruptly presents the eradication of nuclear weapons as a daunting challenge of geopolitical transformation.\textsuperscript{1}

The issues of how global and regional conventional (and overall) military balances might work and be managed in moving toward and arriving at a post-nuclear world, and how countries allied with the United States might react politically or militarily to US nuclear reductions have simply not been considered. We are still on the cusp of the nuclear age in human history, and our experiences of nuclear weapons strategy and extending nuclear deterrence have been strongly marked by the rigid bipolar structure of the Cold War.

We need to understand the legacy of nuclear weapons on our understanding of concepts of strategic studies and international relations in order to propose policies for the future. We need to appreciate, for example, the fact that nuclear weapons and long-range missiles emerged at roughly the same time, and their histories have been conflated. How might concepts of strategy work in a world without nuclear weapons, but where conventional long-range missiles still operate? What might a “post-nuclear” world or “second conventional age” look like? Examining these issues is critical because nuclear weapons are central to the nature of US primacy: it is unlikely that the United States would ever have been so capable and willing to take on the role of a global superpower without having been able to wield the bomb.

Top-level declassified documents from around the world provide a view into the history of alliances, nuclear statecraft, and proliferation dynamics that was previously unavailable.\textsuperscript{2} This important new history will lead both academics and policy-makers engaged in thinking about nuclear strategy to revisit and probably challenge widely held assumptions about the dynamics of nuclear proliferation, strategy, and concepts of international relations more generally.\textsuperscript{3} Indeed, the results will have significant implications for contemporary policy issues in the areas of arms control, nuclear reductions, alliance management, US and allied force structuring, and US nuclear posture, as well as understanding and implementing core concepts of nuclear strategy, including escalation control, escalation dominance, and the implications for achieving strategic stability in a multipolar maritime environment.

This research reveals insight into broader questions and debates of international security and the role of nuclear weapons, which have significant policy relevance, including the following:

1) How do nuclear weapons strengthen an alliance?
2) How does Washington do successful alliance management?
3) How do different nuclear postures influence the credibility of END?
4) How do these influence allied behavior toward other great powers and regional neighbors?
5) Is END a stabilizing or destabilizing force? And under what circumstances?
6) To what extent are America’s alliances in Asia “nuclear” in nature?
7) And what are the implications of the answers for questions of arms control, nuclear reductions, and instruments for maintaining strategic stability in the region?
8) To what extent are nuclear and conventional forces interchangeable?
    To what extent is the real source of deterrence nuclear weapons themselves, or long-range precision strike weaponry? Might conventional long-range weaponry have the same “gravitational” effect as nuclear weapons, and, by that virtue, have the same “effect” as intercontinental nuclear missiles in shaping and “managing” global order?
9) How do these combined elements shape US allies’ perceptions of US primacy and great-power status in Asia? How will America’s alliances in Asia endure?
10) How do alliances, and specifically “nuclear” alliances, contribute to shaping international order?

Overall, it provides insights into the nature of alliance discord, the reliability of major-power patronage, how weapons technologies buttress security guarantees that influence state perceptions of alliance reliability, and, by extension, the incentives for engaging in nuclear behavior. These issues, discussed throughout the book, are addressed in detail in Chapter 7.

Several core questions were used to identify different periods of Australian strategic thinking about issues of nuclear weapons. First, how has Australia’s view of nuclear weapons in its strategic posture evolved? Second, how has that evolution been shaped by changes in the global and regional strategic environment? What role do nuclear weapons play in the international order? The more specific questions include the following:

1) What role did nuclear weapons play in Australian strategic policy?
2) How can they be used to achieve policy objectives in international politics?
3) When did policy-makers begin to think about the concept of END?
4) To what extent did they believe in it? How did they articulate it?
5) To what extent did policy-makers think consciously about the concept of END, as opposed to merely being aligned with a nuclear superpower?

6) How did policy-makers think about nuclear proliferation?

7) How did they think about the military usability of nuclear weapons?

8) To what extent does Australia think about its own situation as a consumer of extended deterrence as distinct from Japan’s or South Korea’s and as distinct from the wider Asia-Pacific regional context?

9) What made US END credible?

10) How did these elements shape the interest in a national nuclear capability?

In the first decade of the nuclear age, Australian thinking about nuclear weapons remained inchoate. The idea that another state could “protect” the continent through threatening the use of nuclear weapons did not emerge until the late 1950s. In spite of Prime Minister John Curtin’s statement in December 1941 that Australia should now turn to the United States as its most important ally, and the formation of the ANZUS Treaty in 1951, Canberra still considered Britain to be Australia’s primary defense partner; policy-makers were still very much attached to the notion of “Empire defense,” and interest in a national nuclear capability had little to do with thinking about the credibility of US END. It was not until around 1957 that Australia began to shift its strategic posture to reflect a primary focus on US interests and strategy. Before then, nuclear weapons were not considered as vital to the defense of Australia per se. END was not even a properly formulated concept. Australia’s interest in acquiring nuclear weapons was symptomatic of an ongoing period of nuclear disorder in Asia. Both China and Indonesia were considered serious threats, bent on invading other countries. Britain was withdrawing troops from the region, and Canberra wanted to be perceived as a responsible contributor to the defense of the Empire. Nuclear weapons were considered usable instruments of warfare, and a suitable compensation for inferior conventional military capabilities. They were considered instruments of tactical, not strategic, war fighting. There were also beliefs that they would become a more normal feature in the region. All these elements contributed to a general climate of instability and precluded the establishment of managed systems of deterrence and abstinence requisite for a nuclear order. Chapter 2 is the first empirical chapter detailing the very secret history of Australia’s ambitions to acquire or develop atomic and nuclear weaponry.

It was not until 1957 that policy-makers began to think much more carefully about how nuclear weapons would contribute to Australia’s specific
defense needs, and much more vigorous efforts were made to acquire nuclear weapons from first the British and later the United States. Increasing British withdrawal from the region made it abundantly clear that London was no longer willing or able to provide sufficient support to Australia in the event of an attack by an Asian power, notably China or Indonesia. Canberra would turn to Washington for guarantees that American nuclear weapons would be used both to defend Australia and its interests on the continent and for the protection of Australian troops operating in Malaya. Policy-makers in Canberra began to appreciate the idea that nuclear deterrence could be extended, while at the same time advances in military technology were making that security guarantee much less credible. In 1957, the Soviet Union launched Sputnik 1, the first satellite, and it became clear that the American mainland was no longer invulnerable to a Soviet nuclear attack. This made Washington’s perceived commitment to the defense of its allies much less credible. Regional proliferation was still of great concern, major-power war was still considered a distinct possibility, and Canberra considered it likely that any major confrontation would escalate to a full-scale nuclear war. From the very late 1950s to the late 1960s, officials in Canberra made great efforts to harness the scientific and technological power required for Australia to develop its own nuclear arms that could be used to defend the continent and strike targets in Indonesia and communist China. As subsequent chapters demonstrate, END, broadly defined, proved to be the key concept for explaining the evolution of Australia’s attitudes toward nuclear weapons and nuclear strategy from 1957 onward.

From 1968 to about 1973, Canberra gradually abandoned the idea of a national nuclear deterrent and decided it was acceptable to “rely” instead on the United States to deter threats against Australia with nuclear weapons. That “decision,” however, had little to do with specific guarantees by Washington and the change of leadership in Canberra, but was rather because of changes in global geopolitical circumstances that led to the formation of a recognizable nuclear order, and with it the notion that the security of the United States and that of Australia were indivisible. Indonesia and China were no longer perceived as direct conventional threats to the mainland. Proliferation was becoming less of a concern, and there was a growing norm against both the possession and use of nuclear weapons. In contrast to the preceding era of disorder, there was a notion in policy circles that Australia was actually benefiting from US extended deterrence. The “test” of END had shifted from a local to a globalized level. However, Prime Minister John Gorton’s decision to sign the Nuclear Non-Proliferation Treaty (NPT) in 1970 was a means to buy time until Australia could harness the technology required to build and detonate a nuclear bomb. Australia was still
hedging, given uncertainties about the robustness of the emerging nuclear order. It was not until the arrival of the Labor Whitlam government that Australia finally ratified the treaty in 1973. Whitlam was a strong opponent of nuclear weapons, and the most ardent proponents of an Australian bomb lost significant influence under the new government.

From the mid-1970s to the end of the Cold War, Australian officials were dangerously ignorant of, and relatively uninterested in, American nuclear strategy and nuclear war planning. However, Australia’s strategic environment remained relatively benign, and the managed systems of deterrence and abstinence underpinning a recognizable nuclear order remained strong. There were no immediate and major nuclear or conventional threats to Australia that would not also threaten the United States. As such, policy-makers concluded that whatever Washington might have decided was required to deter Beijing and Moscow would be satisfactory for Australia. END did not have to be tailored to specifically Australian circumstances. The nuclear alliance was indivisible. A number of events did, however, spark public debate about Australia’s own contribution to the possibility of nuclear war. The first American facility in Australia—the naval communications station at North West Cape—was established in 1963, but it was not until 1980 that serious debate about its function and that of other installations took place. Debates about nuclear weapons in this period revolved around the joint facilities and their role in nuclear war-fighting plans, as opposed to contributing solely to communications and deterrence: What role were North West Cape, Pine Gap, and Nurrungar playing in the nuclear balance between the United States and the Soviet Union? This then led to a new debate about Australia’s role in the global strategic balance and its relationship with the United States. This led policy-makers to give more focus to the circumstances under which Australia might be subject to nuclear attack from the Soviet Union. Before the landmark publication of *A Suitable Piece of Real Estate* by Desmond Ball, even senior policy-makers had very little knowledge of the precise function of the various American monitoring and communications facilities in Australia.

Debates over Pine Gap, Nurrungar, and North West Cape—the extent to which Australia was contributing to US nuclear war-fighting capabilities, verification, and communications, damage limitation, and survivability—generated two more sets of debate that continued into the early 1990s. First was the idea held by the New Zealand government that it was possible to separate the nuclear element of the alliance from ANZUS. Second was how to balance the maintenance of deterrence with gradual moves toward nuclear disarmament.

The importance of END in the 1980s became increasingly tied to issues of arms control and disarmament. The government came under increasing