Preface

This is a book about the weapon acquisition process. In it, I look at how American weapon acquisition programs begin and why they turn out the way they do. These are important issues because they affect both national and international security.

The book's empirical foundation is a series of case studies of weapon acquisition in the U.S. strategic bomber program. I examine every major American bomber program of the postwar period, a total of fifteen programs ranging from the B-35 of the 1940s to the B-2 of the 1980s. My focus is weapon acquisition activity that falls within established mission areas. Such mainstream programs have been neglected by most students of weapon acquisition and arms racing because innovative programs, such as the first ballistic missile programs, are more glamorous.

In this study I examine the value of technological, economic, bureaucratic, and strategic explanations about the origins of weapon programs. I find no significant support for technological and economic arguments, which are extremely prominent in the literature on the subject. I find some support for bureaucratic accounts and a great deal of support for strategic explanations of how weapon development efforts begin. Some of our ideas about the driving forces behind the Soviet–American arms race and the American military-industrial complex should therefore be reconsidered.

I also examine competing explanations of the cost, schedule, and performance problems that plague contemporary acquisition efforts in the United States. One school of thought holds that these problems are rooted in the American military's fascination with “high-tech” weapon-

ry. Another school maintains that problems occur when development and production activities are allowed to overlap, that is, when they take place concurrently. Each group is half right: acquisition programs run into trouble when they try to advance technology and employ concurrency at the same time. In the period studied in this book, powerful strategic and bureaucratic forces led American military organizations to set their performance requirements far beyond the state of the art and to push their programs as fast as possible. The result, all too frequently, was disastrous from an acquisition standpoint.

The U.S. Air Force and its predecessors, the Army Air Corps and Army Air Forces, were flying blind when they initiated many of their bomber programs. In many cases, emerging operational threats were far from clear when they set performance requirements for new systems. In addition, the technological possibilities for weapon system development were rarely well understood, because the Air Force decision makers generally failed to make a thorough assessment of the technological horizon before they launched new ventures. They routinely compounded the unknowns their programs faced by setting performance requirements far beyond the state of the art. The Air Force and its predecessors were also flying blind when they imposed concurrency on programs that were intended to make a great leap forward technologically. They rushed headlong into projects that needed to proceed in a more orderly manner. As a result, many bomber programs were acquisition accidents waiting to happen.

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