Book Review

The Independent Nuclear State: The United States, Britain and the Military Atom. By John Simpson. St. Martin's Press, New York (1983). 340 pp. $30.00.

The thesis of this book is that the British nuclear weapons capability, originally developed indigenously because of American secrecy, has now become so interlinked with the American weapons program that it cannot be disentangled from it—as by unilateral British nuclear disarmament, for example.

This thesis is developed by sketching the history of the British nuclear weapons program. It appears that the original incentive was a worry that the United States, in excluding Britain from the "secret" of the atomic bomb, would be capable of imposing a Pax Americana on the world, in which British interests would be not so much thwarted as ignored. Thus, Britain instituted successful programs in weapons design and plutonium production, and by the mid-1950s had a small nuclear weapons arsenal, the knowledge to make hydrogen bombs, and a growing supply of weapons-grade plutonium.

At that time, aided by the common ideological posture of British and American governments (Conservatives under Churchill and MacMillan in Britain, Republicans under Eisenhower in the United States), a true alliance was forged between the two countries—an alliance that consisted of exchanges of weapons information, components, and materials, and that included occasional use of each other's testing sites, the exchange of nuclear submarine design information, and the use of each other's delivery systems under certain circumstances. With the U.S. defense program so much larger than the British one, this exchange has tended to be one-sided. The British have maintained some independent development so as not to become too much an American client state, and are clearly proud of what they have done; but withal, the British nuclear weapons program is by now so built into the American program that independence seems impossible. For example, the British cannot contemplate withdrawing from the nuclear aspects of the alliance without jeopardizing the ability of the United States to pose a credible nuclear counterthreat against a Soviet invasion of Western Europe.

This much is logically and cogently presented, primarily by presenting a chronological history of the British nuclear weapons program. There are, however, some flaws. Important events in nuclear power history (U.S., U.K., and Canada information exchange, the first Geneva conference, the role of the International Atomic Energy Agency in the development of nuclear power) are ignored, even though they have a major bearing on relations between the United States and Britain on nuclear matters in general. A certain British parochialism is notable, as in the claim that the United States needed British plutonium in the 1960s, when in fact there was actually a glut developing in the United States. There is also a misunderstanding of American politics at some points, for example, in attributing to the 1964 "private ownership" law an intention to sell off the U.S. enrichment plants—a shibboleth to the Democrats who controlled both the Presidency and the Congress.

The book is recommended as an insightful account of the British nuclear weapons development program, and how its relationship with the U.S. program appears from a British point of view. On matters not related to that theme, the book is not reliable. It draws primarily on official documents and previously published histories for source material. For additional sources, however, it uses the literature of the antiproliferation community and, in so doing, accepts many of their theses uncritically as facts.

The author, John Simpson, is a British political scientist, and should not be confused with John Simpson of Westinghouse, a well-known nuclear engineer, or with John Simpson of the University of Chicago, a well-known physicist.

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About the Reviewer: Bernard I. Spinrad began his career as a reactor physicist at Clinton Laboratories (now Oak Ridge National Laboratory) in 1946. He moved to Argonne National Laboratory in 1949, where he stayed until 1972, as senior physicist and, for seven years, director of the Reactor Engineering Division. He took time out for three years (1967 to 1970) to serve as director of the Nuclear Power and Reactors Division of the International Atomic Energy Agency. From 1972 to 1982, he was Northwest Energy Chair Professor at Oregon State University, and assumed his present position (professor and chair of the nuclear engineering department at Iowa State University) early in 1983. He has a long record of activity as a reactor design physicist, including conceptual design of the Materials Testing Reactor and the Savannah River reactors. He was also an early codifier of reactor physics theory, specifically two-group calculations and long-term reactivity change theory. In recent years he has been active in more general nuclear energy problems (service on the steering committee for the Committee on Nuclear and Alternative Energy Systems), in safeguards research, in decay heat research, and in nuclear economics. He regularly teaches courses in reactor physics and on the nuclear fuel cycle, and occasionally in a broad spectrum of topics within his interest.