Harold BrownOctober 1, 1965–February 14, 1969



AROLD BROWN was born in New York City on September 19, 1927. He received a bachelor of arts degree in 1945, a master of arts degree in 1946, and a doctorate in physics in 1949 at the age of twenty-one, all from Columbia University. In 1964 the Stevens Institute of Technology awarded him an honorary doctorate in engineering. In 1967 he was elected a member of the National Academy of Engineering.

Between 1947 and 1952 Brown lectured in physics and was a member of the scientific faculty at Columbia University. He lectured in physics at Stevens Institute of Technology, spent a year in postdoctoral research at Columbia, and joined the University of California Radiation Laboratory at Berkeley as a research scientist in 1950. In 1952, when the Livermore, California, site of the E. O. Lawrence Radiation Laboratory was established, Brown joined the staff there and became the director in July 1960. In 1953 he married Colene Dunning McDowell and they had two daughters.

From 1956 to 1957 Brown was a consultant to the Air Force Scientific Advisory Board and served as a member of the board from 1958 to 1961. From 1956 to 1958 he also was a member of the Polaris Steering Committee. From November 1958 to February 1959 Brown was senior scientific advisor to the U.S. Delegation to the Conference on Discontinuance of Nuclear Weapons Tests. From 1958 to 1961 he was a member of the Scientific Advisory Committee on Ballistic Missiles to the secretary of defense.

In 1961, at age thirty-four, Brown was listed as one of the ten outstanding young men of the year by the U.S. Junior Chamber of Commerce and received the Navy Distinguished Civilian Service Award. In 1963 he was awarded the Columbia University Medal of Excellence.

Before he became secretary of the Air Force, Brown served as director of defense research and engineering for the Department of Defense from May 3, 1961, to September 30, 1965. He was considered one of Secretary of Defense Robert S. McNamara's "whiz kids."

When Brown became secretary of the Air Force in late 1965, at age thirty-eight, the buildup of ground and air forces in Southeast Asia was still underway. His immediate problem was one of deployment, base structure, procurement of bombs and other ordnance, and training. The more fundamental problem for the secretary and for the Air Force was to determine

how air power, in general, could be applied to a limited conflict in a remote area in an unconventional war. That issue would remain basic throughout Brown's tenure and beyond.

As air secretary, Brown was one of the top defense planners in the Johnson administration and had a reputation for expertise in both armament and disarmament matters. Shortly after leaving office, Brown conceded that McNamara's initiative to develop the F–111B aircraft to perform somewhat different missions for the Air Force and the Navy might have been a \$200-million mistake. Secretary Brown oversaw a great many technical changes and improvements, especially in the areas of ballistic missiles, space technology, and antiballistic missile systems. The Vietnam War refocused tactical systems from antiguerrilla actions to large-scale conventional wars. Other examples of advancements during Brown's tenure involved target acquisition, rapid processing of data for intelligence purposes, successful use of air-to-air missiles in air-to-air combat, and electronic countermeasures. The war occupied less than half of Brown's time. He maintained that one lesson McNamara, he, and others who were analytically inclined ought to have discerned from that war was that "analysis is only moderately applicable to some of the more vital questions in a conventional or subconventional war." Questions dealing with political motivation, he found, are not necessarily well suited to analytical study.

Brown left office when the Nixon administration took power in 1969. That year he became president of the California Institute of Technology (Caltech) and subsequently guided the campus through a difficult period, which included controversies over U.S. involvement in Vietnam, major cuts in aid to higher education, recession, and rising inflation. During his tenure there, women were admitted for the first time as undergraduates and equal opportunity programs were implemented. During Brown's term, the Environmental Quality Laboratory at Caltech was established, computing facilities were developed, and the social science program was expanded. From 1969 to 1975 Brown served as a delegate to the Strategic Arms Limitation Treaty talks. He left Caltech in 1977 to return to the Pentagon, this time as secretary of defense under President Jimmy Carter.

While serving as defense secretary, Brown launched a comprehensive review of the defense organization that eventually brought significant change. With regard to strategic planning, he shared many of the same concerns as his Republican predecessors—the need to upgrade U.S. military forces and improve collective security arrangements—but had a stronger commitment to arms control. He adhered to the principle of "essential equivalence" in nuclear competition with the USSR. He considered it essential to maintain the triad of intercontinental ballistic missiles, sea-launched ballistic missiles, and strategic bombers. Some of the Carter administration's most important decisions on weapons systems reflected Brown's commitment. Although he decided not to produce the B–1 bomber, he did recommend upgrading existing B–52s and equipping them with air-launched cruise missiles, and he gave the go-ahead for developing a "stealth" technology.

Arms control formed an integral part of Brown's national security policy. He staunchly supported the June 1979 Strategic Arms Limitation Treaty (SALT II) between the United States and the USSR, and he was the administration's leading spokesman in urging the U.S. Senate to approve it.

Brown left office on January 20, 1981, following President Carter's unsuccessful bid for reelection. After leaving the Pentagon, he remained in Washington, D.C., and joined the Johns Hopkins University School of Advanced International Studies as a distinguished visiting professor and served as chair of the university's Foreign Policy Institute from 1984 to 1992. He continued to speak and write widely on national security issues, and in 1983 he published *Thinking about National Security: Defense and Foreign Policy in a Dangerous World.* In later years Brown was affiliated with research organizations and served on the boards of a number of corporations, including AMAX Mining Corporation, CBS, IBM, Philip Morris, Cummins Engine Co., and Mattel. Beginning in 1992, he served as counselor for the Center for Strategic and International Studies in Washington, D.C.