Book Reviews

After Apollo, next mission is Mars

by Anthony Wikrent

Liftoff: The Story of America's Adventure in Space
by Michael Collins
Grove Press, New York, 1988
288 pages hardbound, $24.95

NASA's Director of Educational Publications "wanted people to understand how spacecraft and space equipment worked, and know who had designed and built them." He asked astronaut Mike Collins to write a book, and Collins's intimate knowledge and wry sense of humor have resulted in a narrative that is both highly entertaining and exceptionally informative.

After recounting the first manned mission to the Moon, Apollo 11, on which he served as pilot of the Command Module, Collins presents a chronology of the American manned space program. Though not an academic work, in the sense that sources are not cited, Collins's book will undoubtedly become a standard reference for both laymen and academicians interested in the history of NASA spanning from Projects Mercury, Gemini, Apollo, Skylab, to the Space Shuttle.

Unfortunately, the book is misleading in one crucial detail. At the beginning of the second chapter, he gives extensive credit to an early 1946 report of the then recently created RAND Corporation, for both encouraging and foreseeing the development of manned space flight. The story of "America's adventure in space" cannot be told without highlighting the pioneering work in rocketry accomplished by the German "Peenemünde group," and the magnificent feat of U.S. Army Maj. Gen. John Bruce Medaris of transferring that group and its work to the United States, and nurturing it to fruition. The best known (in the United States) of the Peenemünde scientists was Wernher von Braun, and other notables included Hermann Oberth and Krafft Ehricke. To truly understand the leadership and preeminence of the Peenemünde group (they were building inertially guided missiles in the 1940s!), one should read Willy Ley's classic *Rockets, Missiles and Men in Space* (New York: Signet, 1968, paperbound, out of print).

The American space program has been crippled not only by budget cuts, but by the "legal" assault centered in a Soviet-steered branch of the U.S. Justice Department which has defamed members of the Peenemünde group as "Nazi collaborators."

While Collins fails to specifically identify the malaise which has been caused by this assault on the contribution of the continental European scientists, he does prominently cover its symptoms, and even hits on the proper cure. On page 238, he writes, "my own observation is that other parts of NASA are discouraged, morale is low, and a feeling of lassitude pervades the organization" after the Challenger disaster. And, Collins notes, even if NASA can "get flying again . . . that may not restore the sense of excitement I remember from Apollo days. . . . To me, walking the halls of a NASA installation was always different from visiting the Department of Commerce, or State. . . . NASA was new, and people scurried about with zest, with a youthful spring in their step. Now NASA seems pretty much like other oldtimers, a mature bureaucracy, a bit set in its ways, shuffling, not dancing, through austere times. Its arteries are hardening a bit."

Wave the banner of Mars

Collins recounts a conversation he had with Tom Paine, former NASA administrator, and chairman of the National Commission on Space, which issued its 20-year blueprint for the American space program just three months after the Challenger tragedy. "Today Western civilization is on trial," Paine declared to Collins (page 259). "We have to get the nation back on track and NASA can make the U.S.A. the leading technological nation, to lay the foundation. . . . It's much more important to understand what areas this country is going to emphasize. . . . What careers are our youngsters going to pursue, will they be lawyers or entertainers or study science and technology? . . . The U.S. may decide not to lead on the space frontier but then if we turn our back, as Toynbee pointed out, nations rise and fall."

Collins criticizes the Paine Commission report for recommending an overly broad, 12-point program, rather than a clearly focused goal. "We need a banner to wave," Collins writes on page 261, "and a 12-point program is too much to embroider on it. . . .

"I would wave a very small flag, but wave it vigorously. On it would be printed 'MARS.' The quest for Mars would pull in its wake most things NASA is trying, in a fragmented fashion, to do today, plus create the climate for American enterprise and leadership that Tom Paine seeks. A space station would be a necessary precursor, as would the development of lower cost transportation. A return to the moon might be involved. But the country would have a destination, a focus for the whole range of technologies required to rebuild American preeminence."