

ago, aviation advocates in Detroit, Michigan, failed to win the air mail routes which were crucial, as Young argues, to making a city part of the permanent infrastructure of commercial aviation. In the twenty-first century, Gary, Indiana, may win its bid to host the Chicago area's next large-scale airport.

Chicago Aviation's narrative, and not its images, is the book's strength. Images reproduced from private and

well-known archives do not particularly illuminate or develop the author's points. The reproduction is often grainy, and the details mentioned in the accompanying captions are indeterminable.

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The Treatment

The Story of Those Who Died in the Cincinnati Radiation Tests

By Martha Stephens

(Durham, N. C.: Duke University Press, 2002. Pp. xxi, 349. Illustrations, appendices, notes, sources, index. \$29.95.)

This is the story of experimental radiation procedures designed by the radiology group at the University of Cincinnati Medical School and used on about ninety seriously ill cancer patients from 1960 to 1972. Patients tended to be poor, and sixty percent were African American. All died, most before the term indicated by regular diagnosis. They were human subjects in one of a series of more than 4,000 such experiments funded by the Department of Defense, the National Institutes of Health, and other federal agencies.

Martha Stephens divides her account into three sections: discovery and public knowledge of the hitherto semi-secret experiments; case studies of selected families; and legal issues and trial. Stephens learned of

the radiation experiments about the time they were being concluded, in 1974. As a member of the Junior Faculty Associates at the university, she began her investigations because she felt that "what had happened . . . touched me directly" (p. 8). "It seemed to me then," she writes, "and it seems to me now, that we had become a secret slaughterhouse, a secret death camp" (pp. 8-9). Her horror and outrage inform the whole book. The author does not offer a history of whole-body radiation, nor an analysis of oncology from the 1970s onward. There is no broad perspective.

In the early cold war period restrictions upon human subject scientific experiments were fluid. The subjects of these experiments were

generally poorly educated, economically disadvantaged, and unaware of the dangers of massive radiological dosages. Informed consent was nonexistent: verbal assent was sufficient. Dr. Eugene Saenger, the principal investigator, was a respected radiologist. Officials of the American College of Radiology, who investigated the program in 1972, found no fault in its procedures or results. In this same time period, however, Stephens and her colleagues began to investigate these experiments, and then to agitate for publicity about them. Her frustration with what she regards as the inattention paid to their findings shines through her writing. She uses a colleague's statement to open chapter five: "In my own mind, this project borders on what happened at Auschwitz."

Some of us of a certain age can recall the irradiated dimes we received when the Atomic Energy Exhibit came to town to tout what the later Eisenhower administration would term "Atoms for Peace." We were told that radioactive tracers in the blood would improve medical diagnostics; that food preservation through irradiation would prevent world hunger and starvation; and that new products would flow from the cornucopia of physics and chemistry. Humans became commodities in the process.

In theory, massive radiation therapies might have proven useful in combating cancer. During the cold war period, when so many other threats loomed over the nation, nuclear tests, militarization of most sciences, and concern for national security research goals led to a cavalier attitude towards research involving human subjects. When some of the affected families finally had their day in court, in the 1990s, their internal squabbling prevented definitive closure. For some families money was important; most wanted an apology from the doctors for the wrongs done.

In 1994 President Bill Clinton appointed an Advisory Committee on Human Radiation Experiments (ACHRE). The final report, which offers a broad look at the studies and the rationale behind them, was issued in the hope that the legacy of distrust would disappear. But the secrecy lives on—some sections of that final report have recently been reclassified and are unavailable.

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