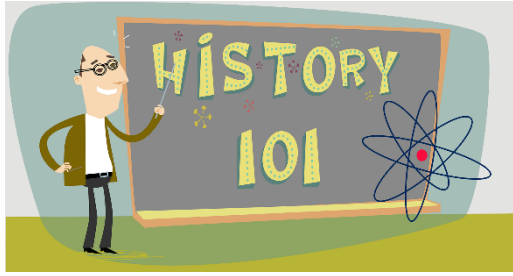


The Mystery of the Trowel – Solved



Uncovering the real story of Joe Ball’s trowel required research at the Department of Energy’s archives, where I could get more information about the AEC’s move from Washington, D.C., to Germantown, Md., in 1957. The AEC’s move was precipitated by the Soviet Union development of thermonuclear weapons. To survive a 20 megaton blast over the capital mall, AEC offices needed to be at least 20 miles away. Germantown was selected over 50 other sites.

This Cold-War move coincided with new initiatives by the AEC to promote civilian nuclear power plant construction. Thus, the dedication ceremony became a chance to highlight the atom’s contribution to national defense and its potential peaceful applications.

The AEC created a ceremony heavy in symbolism. Electricity from batteries charged by eight military and civilian power reactors lifted a curtain on a commemorative plaque in the new building lobby. A time capsule was placed behind the cornerstone packed with military and civilian artifacts, such as pictures of the Nautilus and scraps of linen wrappings for the Dead Sea scrolls dated by radiocarbon techniques.

As I found out from the DOE archives, AEC Chairman Lewis Strauss wanted even more symbols for the dedication ceremony. He asked for a trowel with some historical significance and Argonne National Laboratory obliged, including, as mentioned in Part I, creating a blade made from uranium. AEC officials planned on giving speeches about its symbolism to local groups. But there was a problem.

The uranium metal had been reused for many years in other experimental reactors, most likely in the CP-2. The uranium was still radioactive, enough that an Argonne official told the AEC to use only the handle and not touch the blade. Hoping to preclude objections from the White House, the AEC medical staff reassured the Secret Service that the trowel was a “unique opportunity” for Eisenhower “to demonstrate under completely safe conditions the proper way to perform an operation involving radioactive material.”

AEC assurances didn’t work. Ike’s staff refused to allow the president to touch anything radioactive. Stymied, the AEC substituted three silver-plated trowels. The uranium trowel was dropped from the ceremony and the silver-plated trowels that history records were used instead. The fate of the symbolic trowels – of which there were either two or three – were mostly lost to history, with one spending decades in storage at Eisenhower College’s old campus.

Joe Ball’s unusual auction win find reminds us why we love artifacts—their stories are fun. They teach us about the society that made them. The CP-1 trowel was born out of an optimism in the possibilities of the atomic age, but even in the 1950s radiation concerns proved powerful. Today most people likely sympathize with the White House’s fear of radiation, and the trowel probably seems like a questionable use of radioactive material. And so Argonne’s creation reminds us how the nation had changed in the last half century in shifting to a more sober attitude toward nuclear hazards. (The trowel is now displayed in the NRC HQ lobby.)

By Thomas Wellock, NRC Historian