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# The Birth of the Atomic Age: Commemoration and Consequences

**A Roundtable Discussion**
**Western History Association**
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**Online**

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## Rebecca Ullrich's Response to the Panel's Planned Questions

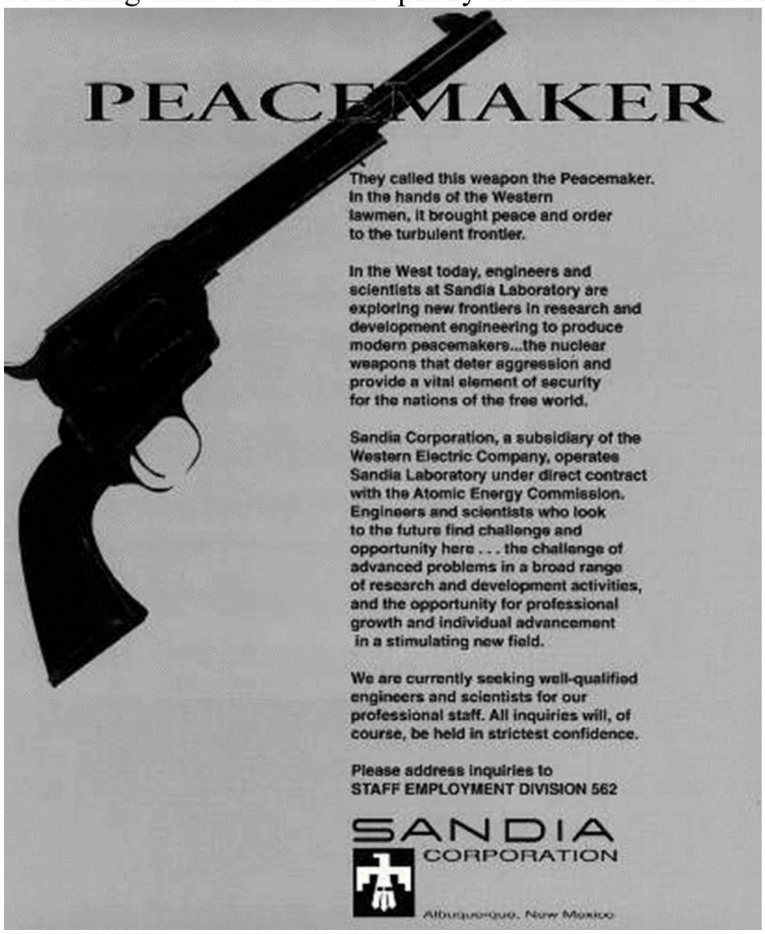
Each panelist answers each question, listening to each other so our responses build on previous answers. Given that, here are the answers Rebecca Ullrich has prepared.

- Describe your work—focus and purpose (what you do, where, and why)
    - I am the historian at Sandia National Laboratories. It's a basic public historian role within an engineering institution. I respond to questions regarding the Labs' history; provide input for exhibits, displays, and presentations, as well as the history website on the external web; give internal and external talks on the Labs' history; conduct research on topics within Sandia's history; and support cultural resources management (historic building assessments and documentation). I am currently working on a history of Sandia's work in the earth sciences.
- The role of the nuclear weapons origin story in your work
    - Sandia's own origin story is part of the early atomic weapons narrative. The Lab traces its roots to Los Alamos's Z Division, formed in July 1945. Z Division put the ordnance engineering functions into one group that included the assembly personnel who put together the test device at Trinity and the weapons on Tinian. Z also included the design engineering personnel responsible for designing the non-nuclear components for nuclear weapons, the military liaison responsibility, and the field test capability. Those functions were moved out of Los Alamos and down to a site on Sandia Base near Albuquerque. In 1949, they were separated from Los Alamos into Sandia Laboratory, managed & operated by Sandia Corporation.
    - So, the narrative I provide presents Sandia as a spin-off of Los Alamos; that spin-off is part of the early move from war to peace and the buildup of the nuclear weapons stockpile in the immediate postwar period.
- The audience for your bomb origin story (who do you speak to/write for) and their expectations from you
    - My primary audience is within Sandia—the staff working there now. Engineers, scientists, business side staff. I often speak about the Lab's origins to groups of new hires.

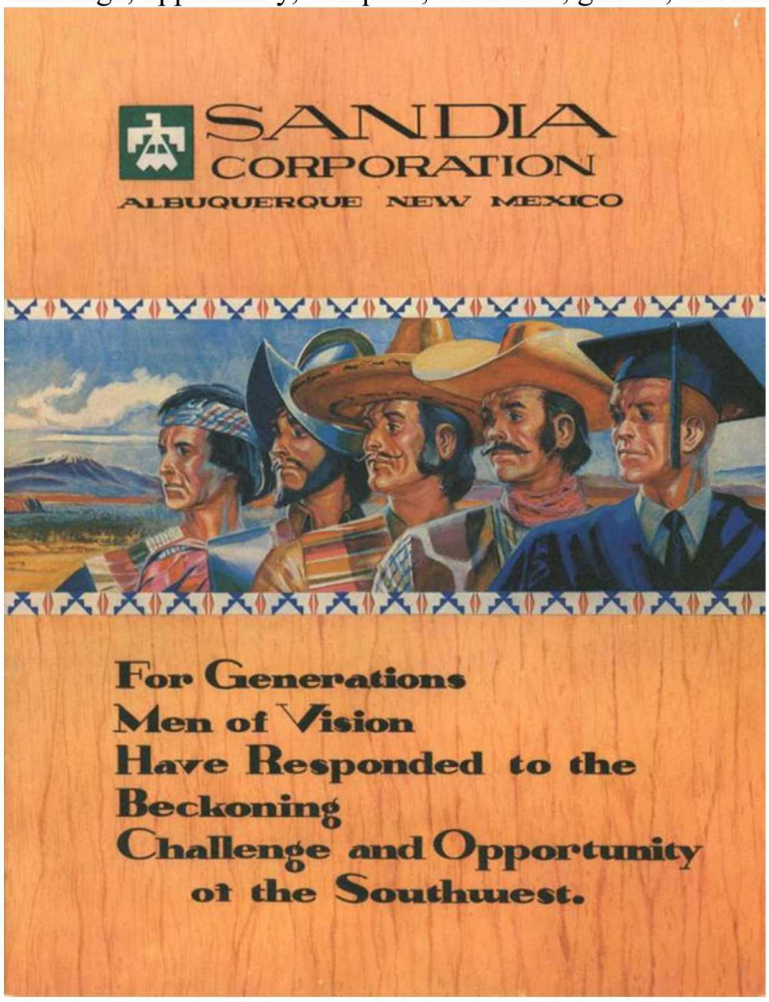
[1] Sandia National Laboratories is a multimission laboratory managed and operated by National Technology & Engineering Solutions of Sandia, LLC, a wholly owned subsidiary of Honeywell International Inc., for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525.

- I do also speak and write with an audience beyond Sandia in mind—primarily other historians of engineering and of the Cold War (or, more comprehensively, the nuclear age). And, occasionally, more public talks within the Albuquerque area.

- How do you try to focus the story? (what do you focus on and why)
    - There are layers to the way I focus the story, depending on the audience. In general, the focus is technical—what Sandia did (engineering, although it did build up a scientific research base for the technology) and why (that is, the context of U.S. policy—including the push for a large war reserve stockpile of nuclear weapons—and international relations; the development of nuclear weapons by other nations; and the technical developments that fed into and came out of the U.S. weapons program). For a broader Sandia audience and sometimes for talks outside of the Lab, I'll also discuss the interaction and impact on the local community—Albuquerque, New Mexico and, later, Livermore, California.
- Do you bring other perspectives in? (downwinders, science, local community/jobs, land use/appropriation, art, politics/policy, cultural impact)
    - I have yet to incorporate downwinders or art into my narrative; and I find it difficult to have a discussion of cultural impact—I feel I lose my audience rather quickly. My sense is that they find this a squishy, vague, or even undefined area. They are seriously overeducated people, so I think this is me and my presentation, not their ability or even willingness to understand what I'm talking about.
    - As I mentioned earlier, I do talk about local community and the impact of money and jobs—and the resulting interaction between Lab and the rest of the place it sits. I do bring in gender—specifically, in discussing women in the workplace and more generally in discussing the Lab's culture and how it has changed over time.
    - All four of Sandia's sites—the labs in Albuquerque and Livermore and the test sites in Nevada and Hawaii—sit on land that was taken by the Federal government for military use in World War II. So, that is part of the entity's history. I don't usually dive too deeply beyond that, although, all credit to my audiences, previous land use and occupation does come up in discussion. This is often triggered by or tangled up in a discussion of Sandia's use of its Western settings in its recruiting—that has changed over time, of course, but the Lab does still emphasize the attractiveness of its Western locations in recruiting (largely an emphasis on the available recreational activities). I will share a couple of slides here of two of the recruiting pieces from 1958 that I bring in to some of my presentations.

- This is a 1958 print ad that appeared nationally—clearly placing the Lab in its Western setting and invoking all of the 1950s tropes of the West and combining them with the U.S. policy of containment and deterrence.
- 

- This is a 1958 Recruiting Brochure. Emphasizing the southwest as a place of challenge, opportunity, conquest. Inside, the introductory texts ends with: "The man of vision finds in the Southwest now, more than ever, the personal challenge and individual satisfaction of molding the future. Only now it is through the conquest of the frontiers of knowledge and the application of science, rather than by territorial conquest."
- I use this as a jumping off point to discuss the many assumptions about challenge, opportunity, conquest, education, gender, and race.




- That is a sample of the material that is available and the way I use it to bring in elements beyond the technical in Sandia's history.

- Do you have the opportunity to address the nuclear story beyond its origins? If so, what do you focus on, is there a particular perspective you address, and what is the audience for the story as you tell it?
    - Sandia's history is ongoing (the Lab still exists and, while it is now considered multi-mission (it has missions outside of the nuclear weapons arena), nuclear weapons work represents over half of its budget and focus. Although in speaking on the Lab's history, I tend to get stuck in the early period—too much detail—I do bring the history up to the early 2000s. And, occasionally, even more close to the present if I'm asked.

    - Again, my audience is largely internal. I try to keep the context foremost in understanding when and how Sandia changes—how new work is picked up; how older points of focus evolve. I usually emphasize Sandia within the nuclear weapons complex (now identified as the Nuclear Security Enterprise)—how its growth and change are tied to the other sites involved in nuclear weapons. But, in doing that, I don't usually deal much with, say, the source of materials—like uranium mining or the details of reactor operations. Instead, I focus on how the complex grew as part of the push for a large stockpile and how the complex shrank back down as sufficient materials were produced to support the stockpile, arms reduction treaties were negotiated, and environmental cleanup moved to the forefront of what was by then the Department of Energy's concerns, which overlaps with the end of the Cold War and fewer weapon systems in design.
    - In addition to the immediate context, I talk about the technology—how the weapon systems change, how the subsystems and components change, reflecting broader changes in technology as well as the specifics of what the weapon is supposed to do.
- If you don't already, can you foresee blending the different points of view discussed here? Is there a way to broaden the stories and the audience? (Is there a way to include the different narratives in one story?)
    - There are three areas I'd like to push on or add into the narrative overall. These are
        - Consequences, however unintended—to point out the impact of materials production and nuclear weapons testing. I do not think my audience is resistant to such information, but there is a way of telling that neither blames nor absolves. I need to explore that—in part by inviting people to speak at the Lab (that is, I don't need to own every story).
        - The perceptions of nuclear weapons and the U.S. stockpile within the U.S. and how that changes over times. The resistance to nuclear attack preparedness; citizen concerns about nuclear testing; the rise of the anti-nuke movement and its impact.
        - The notion of violence. These are weapons, they will do damage if used—that is not news to anyone in the nuclear weapons world—they argue strongly for deterrence and articulate the strong hope and conviction that these weapons should never be used. But, I would like to have some discussion with the weapons engineers about the way the language used is sometimes perceived as euphemistic outside of the weapons world and ask if they see the words that way—or have better vocabulary for describing the power and potential damage of the weapons.
- Beyond our own storytelling, where can we push to have stories more fully told (incorporating more voices) and what are the obstacles to overcome?
    - I've seen beautiful museum exhibits—the Albuquerque Museum had a wonderful exhibit marking the end of World War II and the use of the atomic bombs. It was an art exhibit—it ended up being online. It was provocative and interesting and pushed the viewer to confront both the idea and the reality of nuclear weapons in our world.

- I would like to see other physical presentations (in museums?) of the broader story—not just the weapons with their explanations or testing with its context or the stories of workers within their institutional settings. But, something that looks at the land and its control, the materials and how/where they are produced and by whom, the weapons and their designers, the tests and their impact (everything from the data gathered and the internal technical impact to the land in the short and long term and the people on the land), the policies and where that leaves the nations and their stockpiles. Something that allows everyone to speak without drowning each other out in some kind of statement of priority or importance.