

Meet Kenneth D. Nichols, the Father of Oak Ridge: The Manhattan Project Underway, Part 3

As published in The Oak Ridger's Historically Speaking column the week of January 13, 2025)

Barbara Scollin, grandniece of Major General Kenneth D. Nichols continues her series on his life.

Ample reasons, most notably leadership skills, personality traits and qualifications, led to choosing General (then Colonel) Kenneth D. Nichols as Deputy District Engineer and subsequently as District Engineer of the Manhattan Engineer District (MED). In this capacity he had supervision of the research and development connected with, and the design, construction and operation of all plants required to produce plutonium-239 and uranium-235, including the construction of the towns of Oak Ridge, Tennessee, and Richland, Washington.

The responsibility of his position was massive as he oversaw a workforce of both military and civilian personnel of approximately 125,000; his Oak Ridge office became the center of the wartime atomic energy's activities. He also was responsible for internal security operations in the production facilities that helped keep the development of the atomic bomb secret.

In this ninth installment of several articles covering the life and accomplishments of Kenneth D. Nichols, we learn of methods used by Colonel Nichols and Brig General Groves to create efficiency and teamwork in the Manhattan Project, their grueling travel schedules and obtaining a AAA priority rating.

With the chain of command established by September 1943 (see 8th article), a leadership pattern developed within the entire Manhattan Project. This led to efficiency and was achieved as Nichols explains: "[Brig] General Groves' ... methods of working are to violate all channels of organization. I think I have the same tendency. We both used the same methods, and the project was largely decentralized with the idea individuals on the sites would have a great deal of authority, but if they had any question, they could contact either me or General Groves concerning directives.

"We had practically no written directives. The system of operation was primarily that if there was a problem or a need for a decision either General Groves or I or Colonel Marshall initially, or all three or any combination, would visit the site, get together the necessary people, sit around a table long enough to arrive at the decision and when the decision was made, why the local representative was expected to carry it out.

"The contractors did an outstanding job because we made a point of, in every case, seeing that they put their outstanding men on the job. In fact, when we decided on a contractor and the scope of the work, it included the individuals that would be in charge and what authority they would have.

"In every case, either General Groves or Colonel Marshall or I or all of us had complete access right to the top of that company ... whenever we wanted to resolve anything in regard to that particular company ... that was our contact. [The contractors] all realized that this thing had to succeed, or they'd be spending a good many years after the war trying to explain why their part didn't.

"I would arrange to meet with General Groves at some location or in Washington at least once a week. We both were traveling about 4 or 5 days a week covering slightly different orbits but covering the whole project on an almost week to week basis or at least once a month – that was all important. For example, I was at Oak Ridge every week and also New York City [where 7 offices were located] every week and then in addition would visit two or three other places. The channels were never formalized.

"The administration was generally done completely at Oak Ridge although ... by my visiting New York once a week and sitting down the Area Engineer and giving him all the necessary approvals he needed verbally [New York administration was thus handled] ... If it were of a major type [of

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problem] that involved General Groves to get into, we would arrange for him to meet with us or with whatever contact it involved.”

Throughout the war, Colonel Nichols traveled multiple times a week to check on his four main sites of responsibility:

- Clinton Engineer Works, Oak Ridge TN,
- Hanford Engineer Works, Hanford, WA,
- New York – seven offices including material procurement, and,
- Laboratories throughout the country, including 22 university labs most importantly University of Chicago, Columbia University, and University of California.

In addition, Nichols traveled to the offices of company and corporation headquarters as needed. Finally, Colonel Nichols traveled to Los Alamos NM to carry out his administration responsibilities. He explained: “Groves made it clear that he personally would do all the direct supervision of the [Los Alamos] work. However, he indicated that I should keep myself informed by visiting Los Alamos or by meeting with Oppenheimer elsewhere concerning progress and coordinating technical specifications for U-235 and plutonium.

“In addition, I was to work out with Oppenheimer the means to determine the percent of enrichment of U-235 that would be the optimum compromise between possible production rates, which was my responsibility and bomb efficiency, which was Oppenheimer's field.

“At the same time, the [MED] district was to support Los Alamos in acquiring many unusual and rare materials and see that all expenditures under the University of California contract for operating the laboratory were properly audited. Contrary to the 1982 BBC television series... the only time I ever accompanied [Groves] to Los Alamos was during my March 1943 visit. Most of my meetings with Oppenheimer took place at Oak Ridge, Berkeley, New York, Chicago or Washington, when problems arose.”

Beginning with the first secret project meeting with Marshall in June 1942, Nick's travel diary reflects extensive travel throughout the United States throughout the war. Nichols explains, “Beginning with the trip to [Elza] Tennessee, the pattern of our method of operation began to emerge. On my part, from July 1942 to the end of the war I was destined to travel over ten thousand miles a month by train, commercial airplane and bus.

“Only in April 1945, when the project neared fruition and time became even more critical, did I obtain use of an Air Corps B-25 bomber to facilitate travel. From the start, our philosophy was to go where the work was being done and make decisions as needed on the spot. Our local area staff and contractors then formalized these decisions in writing or in the form of plans and specifications as necessary.”

As initially decided by Colonel Marshall and later instructed by the Secretary of War, Nichols and Groves rarely traveled on the same airplane or train for security and safety reasons. Nichols recalls, “I was on a plane en route to Chicago when Groves boarded it at an intermediate stop. Looking for a seat, he saw me, sat down next to me, and said, ‘You are violating Stimson's instructions. Why didn't you get off the plane when you saw me come aboard?’”

Of most importance to streamlining the Manhattan Project's work was the AAA designation given to General Groves. Colonel Marshall had begun the paperwork needed for the priority, but Groves along with Dr. Vannevar Bush worked miracles to overcome wartime obstacles in securing the rating. Nichols recounts that Donald Nelson, head of the War Production Board: “... signed the letter Groves had drawn up, which stated: ‘I am in full accord with the prompt delegation of power by the Army and Navy Munitions Board through you, to the District Engineer, Manhattan District, to assign an AAA rating, or whatever lesser rating will be sufficient, to those items the delivery of which, in his opinion, cannot otherwise be secured in time for the successful prosecution of the work under his charge.’”

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Colonel Nichols now had clear delineation of command and the highest priority rating for procurement of staff and materials needed for the Manhattan Engineer District. Jackie and Nick moved to New York upon his designation as District Engineer. Soon another move was in store for them.

Next up: Building Oak Ridge "from scratch," Part 1

Grateful acknowledgements to K. David Nichols, Jr.; Ray Smith; Sandy Fye; Dr. Bianka J. Adams, Alisa Whitley, Douglas J. Wilson and the U.S. Army Corps of Engineers Office of History; Diane Gulley; Gerald A. Potts; and Bruce W. Scollin for their assistance with this article.

Thank you, Barbara Rogers Scollin, grandniece of General Kenneth D. Nichols, for your continuing research and sharing such detailed insights into the actual operational activities of the Manhattan Project. Your great uncle was uniquely able to describe what went on as he was personally involved in most all aspects of the amazing accomplishment.

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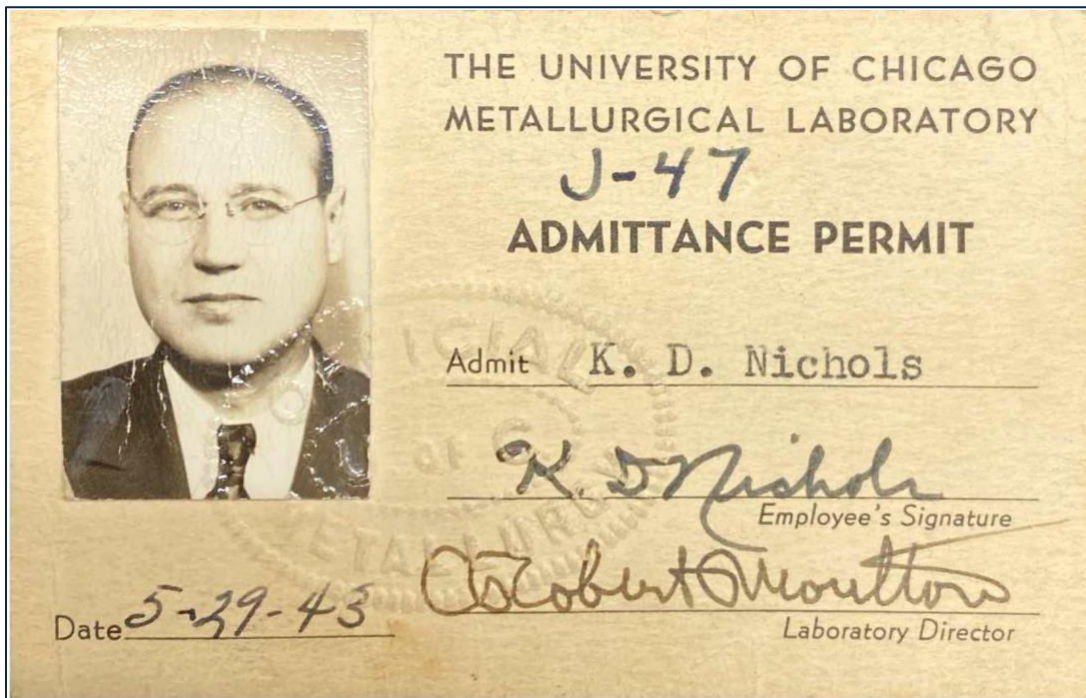
*Colonel Kenneth D. Nichols, District Engineer, Manhattan Engineer District
Courtesy K. David Nichols, Jr.*

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*Colonel Kenneth D. Nichols' Card
Dr. Ernest Lawrence's University of California Radiation Laboratory
Courtesy U.S. Army Corps of Engineers, Office of History*



*Colonel Kenneth D. Nichols' Identification Card
Dr. Arthur Holly Compton's University of Chicago Metallurgical Laboratory
Courtesy U.S. Army Corps of Engineers, Office of History*