

Y-12 and the history of clearance designators

One of the major areas of emphasis for the Manhattan Project was to ensure that information about the project remained secure. There was good reason for concern as the information about splitting the atom had recently been announced in the scientific community and thus was known worldwide. Otto Hahn and Fritz Strassmann of Germany split the uranium atom, building on research by Enrico Fermi.

The Atomic Archive's biography of Lise Meitner (1878–1968) states, "After Austria was annexed by Germany in 1938, Meitner was forced to flee Germany for Sweden. She continued her work at Manne Siegbahn's institute in Stockholm, but with little support, partially due to Siegbahn's prejudice against women in science. Hahn and Meitner met clandestinely in Copenhagen in November to plan a new round of experiments. The experiments that provided the evidence for nuclear fission were done at Hahn's laboratory in Berlin and published in January 1939. In February 1939, Meitner published the physical explanation for the observations and, with her nephew, physicist Otto Frisch, named the process nuclear fission. The discovery led other scientists to prompt Albert Einstein to write President Franklin D. Roosevelt a warning letter, which led to the Manhattan Project."

In *Counter Intelligence in World War II*, Chapter 1, the section entitled "Security and the Manhattan Project," states, "The leaders of the American atomic energy program, aware of the tremendous military potentiality of atomic research, recognized almost from the beginning the need for maintaining a high degree of secrecy."

The section continues, "An important factor in their decision in early 1942 to turn over administration of the program to the Army was their conviction that it was the organization best prepared during wartime to enforce a foolproof system of security. Such a system would ensure that the Axis powers remained ignorant of Allied interest in developing atomic weapons; reduce the likelihood that the Axis states, particularly Germany, would accelerate their own efforts to produce atomic weapons and undertake espionage and sabotage activities against the American program; and, most significantly, from the standpoint of military effectiveness, allow the Allies to employ these weapons against the Axis nations with maximum surprise."

The word "uranium" was classified during the Manhattan Project. Don't you know that General Groves was frustrated when he learned that the folks at Y-12 in Oak Ridge, Tennessee, were numbering all their uranium processing buildings starting with the number "92," the atomic number for uranium.

There is a story of an individual working at Y-12 whose wife called to say she had just read in the newspaper on August 6, 1945, that the uranium for Little Boy, the atomic bomb dropped on Hiroshima, came from Oak Ridge. The worker supposedly ran out of his office and, throwing up his arms, shouted at the top of his lungs as he ran the length of the hallway, "URANIUM, URANIUM, that's what we are making!"

It is also told that, in some reference books at the University of Tennessee library, the edges of the pages near the section on uranium were discolored from so many people turning to that section.

A number of methods were used to control information within the Y-12 plant area. For example, each person's badge had a letter A–D on it, which indicated who a person could talk to about the project. If your badge had a "D," you could only talk to others with that same designation. If your badge had an "A," you could talk to anyone.

Colored bands were also worn on the arms to let it be known which areas of the buildings you could enter. All this compartmentalization was intended to restrict the amount of information flow. As the need to control information flow transitioned from the military to civilians after the war, even more methods were developed.

The following *Origin of "Q" and "L" Clearances* was sent to me by an individual to whom I gave a tour of Y-12 and who was interested in the history of the designation for various levels of security clearances. I found it interesting and think you will enjoy it as well.

"The need for security clearances became an issue at the end of World War II when the Manhattan Project was transferred to a new entity, the Atomic Energy Commission (AEC). Thousands of civilians were going to be hired, and the newly drafted Atomic Energy Act of 1947 required controls over access to restricted data and nuclear materials.

"Col. Charles H. Banks, an intelligence officer under General Leslie Groves, proposed a formal security questionnaire to be used for all applicants. It asked relevant questions about loyalty, personal history, etc., which were used to determine a person's suitability for a security clearance. The questionnaire was known as the Personnel Security Questionnaire or PSQ (as it has been known until just recently).

"Because of the rush to hire people for the AEC, another of Groves' security officers at Los Alamos during the war, Thomas O. Jones, was hired to implement the personnel security program. Jones wrote a regulation that established three types of clearances based on the individual's need for access to restricted data. As was the trend of the day, single letters of the alphabet were used. Jones took the 'P,' 'S,' and 'Q' from the Personnel Security Questionnaire form and used those letters for the three levels. 'P' was for employees having no access to restricted data or security exclusion areas, 'S' was for frequent visitors to AEC facilities who would not have access to restricted data, and 'Q' was for those with access to restricted data and security exclusion areas.

"It was the 'Q' that required a full FBI background check. Interestingly, the military implemented an 'M' clearance for noncivilian personnel who needed access to restricted data, and the AEC had the right to review 'M' clearances to ensure that comparable standards were being used.

"Today the 'P' and 'S' clearances no longer exist, although today's 'L,' which is now common across the government, probably comes close to the original 'S' clearance.

"According to Earnest Wagner of K-H classifications, the 'L' designation was the invention of the U.S. Navy's Admiral Rickover. When the Naval Nuclear Propulsion Lab was added to the agency, Rickover didn't want to comply with all the requirements for the AEC 'Q' authorization. Therefore, the 'L,' which stands for 'limited access authorization,' was adopted. It originally applied only to Naval Nuclear information classified as confidential for research and development purposes.

If you have ever seen this information and can help me trace its origin, I would appreciate it. The person who sent it to me said he got it from the Office of Scientific and Technical Information and, while they did not know the origin, thought that maybe it originated at Sandia National Laboratory.