HOUSE JOINT RESOLUTION

WHEREAS, It is appropriate to remember the many sacrifices and contributions to the cause of freedom made by the outstanding men and women who have served in the United States Armed Forces; and

WHEREAS, From 1946 to 1962, the United States conducted approximately 200 atmospheric nuclear tests, more than all other nuclear states combined at that time; and

WHEREAS, Approximately 400,000 servicemen in the U.S. Army, Navy, and Marines were present during these atmospheric tests, whether as witnesses to the tests themselves or as post-test cleanup crews; and

WHEREAS, The Manhattan Project was the code name for the American-led effort to develop a functional atomic weapon during World War II; and

WHEREAS, Two types of atomic bombs were developed concurrently during the war, a relatively simple gun-type fission weapon and a more complex implosion-type nuclear weapon; the Thin Man gun-type design proved impractical to use with plutonium, and therefore, a simpler gun-type called Little Boy was developed that used uranium-235, an isotope

that makes up only 0.7 percent of natural uranium; since it was chemically identical to the most common isotope, uranium-238, and had almost the same mass, separating the two proved difficult; three methods were employed for uranium enrichment, electromagnetic, gaseous, and thermal; most of this work was performed at the Clinton Engineer Works at Oak Ridge, Tennessee; and

WHEREAS, In parallel with the work on uranium was an effort to produce plutonium, which was discovered by researchers at the University of California, Berkeley, in 1940; after the feasibility of the world's first artificial nuclear reactor, the Chicago Pile-1, was demonstrated in 1942 at the Metallurgical Laboratory in the University of Chicago, the project designed the X-10 Graphite Reactor at Oak Ridge and the production reactors at the Hanford Site in Washington state, in which uranium was irradiated and transmuted into plutonium and the plutonium was then chemically separated from the uranium, using the bismuth phosphate process; the Fat Man plutonium implosion-type weapon was developed in a concerted design and development effort by the Los Alamos Laboratory; and

WHEREAS, Illinois played an important part in the Manhattan Project; and

WHEREAS, Argonne National Laboratory is a science and engineering research national laboratory operated by the University of Chicago for the United States Department of Energy; the facility is located in Lemont, outside of Chicago, and is the largest national laboratory by size and scope in the Midwest; and

WHEREAS, On July 1, 1946, the laboratory was formally chartered as Argonne National Laboratory to conduct cooperative research in nucleonics; at the request of the U.S. Atomic Energy Commission, it began developing nuclear reactors for the nation's peaceful nuclear energy program; in the late 1940s and early 1950s, the laboratory moved to a larger location in Lemont and established a remote location in Idaho called "Argonne-West" to conduct further nuclear research; and

WHEREAS, Code-named the "Metallurgical Lab", the team constructed Chicago Pile-1, which achieved criticality on December 2, 1942 underneath the stands at the University of Chicago's Stagg Field; because the experiments were deemed too dangerous to conduct in a major city, the operations were moved to a spot in nearby Palos Hills and renamed "Argonne" after the surrounding forest; and

WHEREAS, Red Gate Woods is a forest preserve within the Palos Division of the Forest Preserve District of Cook County

and is located near where the Cal-Sag Channel meets the Chicago Sanitary and Ship Canal; the original site of Argonne National Laboratory and the Site A/Plot M Disposal Site is in the woods, which contains the buried remains of Chicago Pile-1, the world's first artificial nuclear reactor; and

WHEREAS, It is important to remember and honor the sacrifices and achievements of all those who served; therefore, be it

RESOLVED, BY THE HOUSE OF REPRESENTATIVES OF THE ONE HUNDRED SECOND GENERAL ASSEMBLY OF THE STATE OF ILLINOIS, THE SENATE CONCURRING HEREIN, that we designate the portion of Illinois Route 171 between Illinois Route 83 and U.S. Route 45 as the "Atomic Veterans Highway"; and be it further

RESOLVED, That the Illinois Department of Transportation is requested to erect at suitable locations, consistent with State and federal regulations, appropriate plaques or signs giving notice of the name of "Atomic Veterans Highway"; and be it further

RESOLVED, That suitable copies of this resolution be presented to the Secretary of Transportation and the Atomic Heritage Foundation.