

OPENING STATEMENT

“Bringing the gifts that my ancestors gave, I am the dream and the hope of the slave. I rise. I rise. I rise.” Maya Angelou

Rising above significant societal and professional challenges, the civil engineers listed below accomplished impressive careers. This month provides the opportunity to celebrate the contributions of African Americans who had an impact on the civil engineering profession and helped pave the way for future generations of engineers.

Howard P. Grant (1925 – 1997)

- First black student to graduate from the Berkeley College of Engineering.
- Became the first known black member of the American Society of Civil Engineers in 1948.
- Became the first African-American civil engineer for the City and County of San Francisco.
- The second African-American civil engineer to be licensed by California.
- Past president and treasurer of the California Society of Professional Engineers.
- In 1970 hosted the first meeting of Northern California's black engineers at his home
- Grant served as the council's president from 1971 to 1973. The group evolved into the Northern California Council of Black Professional Engineers, an organization devoted to encouraging African-American youth to consider careers in engineering.
- Founding member of the Engineering Societies Committee for Manpower.
- Training Board member for Big Brothers, Hunter's Point Boy's Club, and the San Francisco Urban League's scholarship committee.

Shelly Nathan Bailey (1928-2012)

- Co-founded Northern California Council of Black Professional Engineers Served as President of the Sacramento Section of ASCE.
- In 1968, ASCE named Bailey California Outstanding Engineer of the Year.
- As manager of the concrete materials lab at the the California State Department of Water Resources, helped to develop a new type of concrete for building dams.
- Was one of the first five African American civil engineers in the state of California.

George Biddle Kelley (1884-1962)

- The first African American engineer registered in the state of New York.
- Founding member of Alpha Phi Alpha Fraternity- oldest black Greek fraternal organization Alpha Phi Alpha Fraternity first president.

Elijah McCoy (1844 – 1929)

- Engineer and inventor, holder of over 50 patents.
- Born free in Colchester, Ontario, the son of fugitive slaves who had escaped from Kentucky through the Underground Railroad.
- At age 15, traveled to Edinburgh, Scotland for an apprenticeship and study, and was certified as a mechanical engineer before returning to the US.
- Worked in Michigan in a home-based shop, where he developed inventions and improvements on them.

- He obtained his first patent On July 12, 1872, for his automatic lubricator for oiling steam engines on locomotives and ships, an invention that greatly benefitted the railroad industry by enabling trains to run more efficiently. (U.S. Patent 129,843)
- Recognized by Booker T. Washington in Story of the Negro as having produced more patents than any other black inventor up to that time.
- Continued inventing throughout his life and obtained 50 patents for lubrication and a number of others including household items a folding ironing board and a lawn sprinkler.
- In 1920 he formed the Elijah McCoy Manufacturing Company.
- The United States Patent and Trademark Office plans to open the Elijah J. McCoy United States Patent and Trademark Office in Detroit during July 2012.

William H. Dammond (1873 – 1956)

- Educator, civil engineer and inventor holding several important patents
- The first African-American graduate of the Western University of Pennsylvania (University of Pittsburgh) in June 1893. Graduated with honors.
- Worked as an assistant bridge engineer at the Michigan Central Railroad, where he invented an electric signaling system that earned a patent on December 29, 1903.
- Issued a patent for a railroad operating safety system in 1906.
- Recognized for his work in a 1915 issue of The Michigan Manual of Freedmen's Progress, a publication of notable African-Americans in Michigan.

Archie Alexander (1888 – 1958)

- First black graduate from the University of Iowa engineering program.
- 1929: Formed Alexander & Repass where he spent his life working.
- Alexander & Repass were responsible for the construction of many roads and bridges in the DC area, including the Whitehurst Freeway, the Tidal Basin Bridge, and an extension to the Baltimore-Washington Parkway.

Alaska Highway Veterans (1942)

- The Alaska Highway was authorized by Franklin D. Roosevelt in February 1942 and was assigned to the Army Corps of Engineers for completion.
- While the military was segregated at the time, the War Department made the unprecedented decision to assign three regiments of African-American troops to work with four white regiments. Despite working on the same project, the regiments were still kept segregated, and the white regiments often received preferential treatment in regard to equipment. For example, the African-American 95th Regiment, despite being more experienced with machinery, was given no machinery and provided only with hand tools.
- Due to the intense schedule and climate conditions, an estimated thirty men died during the construction of the highway.
- On Oct. 25, 1942, an African-American soldier and a white soldier shook hands to mark the completion of the Alaska Highway, a moment captured in an iconic photograph
- The Black Veterans Memorial Bridge, one of the veterans memorials along the highway, was dedicated in 1993 and stands as a monument to the engineers who not only completed a difficult

General Hugh G. Robinson (1932 – 2010)

- US Army Corps of Engineers' first African American general officer.
- Earned his bachelor's degree from West Point, graduating in 1954.
- Promoted brigadier general in 1978, becoming the first African-American general officer in the history of the Corps of Engineers.
- Earned his Master's degree in civil engineering from Massachusetts Institute of Technology In 1965 he became the first African-American to serve as military aide to a president when he was appointed as military aide to President Lyndon B. Johnson.
- Member of ASCE and the National Society of Professional Engineers.
- Military honors include an Air Medal, Bronze Star and the Legion of Merit and Army Commendation Medal.