As part of the visit to the Commander Submarine Force in Norfolk, Virginia, NSB members and NSF staff toured the Virginia-class fast-attack submarine Pre-commissioning Unit New Jersey (SSN 796).

On May 3, 2024, National Science Board (NSB) Vice Chair Victor McCrary, other NSB members, and several staff with the National Science Foundation (NSF) visited Norfolk Naval Base to listen to members of the US Submarine Force on their Skilled Technical Workforce needs.

Skilled Technical Workers (STW) – those with without a bachelor’s degree – make up 52% of the U.S. science, technology, engineering, and mathematics (STEM) workforce, and are critical to the nation’s security and economic competitiveness.

Among the topics discussed was the importance of a strong and continuous STEM talent stream for the Navy, and Submarine Force staff shared several initiatives aimed at boosting recruitment and retention of skilled military personnel. Submarine officers need a solid STEM background and extensive nuclear power training, and the shipyard workers that build these vessels are part of the skilled technical workforce. However, recent trends in STEM education illustrate an accelerating crisis: test scores, teacher supply shortages, and rising costs of college are all impacting STEM pathways at different levels. In turn, these critical issues affect the number of available and qualified candidates to serve as officers on submarines, and affect the industrial base required to create and maintain them.
The National Science Board has a long-standing interest in the STW, including exploring ways in which more students can complete STEM education, enter STEM careers, earn security clearances, and contribute to the US National Security and Defense. The National Science Foundation’s mission includes a mandate to support science and engineering education programs at all levels.