

NSWC Indian Head Division Makes History with First Re- grained Mk 70 Solid Rocket Motor Static Firing



INDIAN HEAD, Md. – Naval Surface Warfare Center Indian Head Division (NSWC IHD) conducted the first-ever static firing of a fully loaded, re-grained Mk 70 solid rocket motor (SRM) at the command's manufacturing facilities in Indian Head, Maryland, August 5. The demonstration is a major milestone in boosting NSWC IHD's production capacity for large SRMs and addressing a bottleneck in the defense industrial base.

"Our branch's motto is to 'ignite the industry' and today was a major step in making that a reality," said NSWC IHD Cast Propellant Production Branch team lead Keaton Hogan. "It demonstrates our capability to become a staple in the large

SRM industry.”

The static firing marks a significant step in NSWC IHD becoming the Department of War’s (DoW) second source for reclaimed and regained SRMs. The Mk 70 is a high-performance solid rocket booster heavily used by the DoW and NASA for various missions, including hypersonic test flights and target vehicle systems.

“All the processes have to work to give us a safe product and good data, and that happened today,” said NSWC IHD Ballistics Testing Branch lead test engineer Eric Meyer. “It’s the first critical step in the successful production of SRMs for hypersonic testing.”

SRMs cannot be throttled or shut down once ignited, so static firings are a more secure, ground-based assessment to test for quality assurance and performance.

The Mk 70 SRM was fired in one of the command’s restored large firing bays, which is one of hundreds of construction and infrastructure projects completed under the Energetics Comprehensive Modernization Plan (ECMP): a \$2.7 billion, 15-year modernization plan to bolster the organic Defense Industrial Base.

“ECMP made this possible for us to step up to be able to produce at a rate relevant to industry standards. We are updating our legacy facilities to get to full-rate production of large rocket motors,” said NSWC IHD Cast Propellant Production Branch project manager Hailey Stuart. “This is the largest cast composite solid rocket motor that we’ve ever tested that we made in house. This is a great moment of innovation for Indian Head and the Navy.”

NSWC IHD’s Mk 70 Production Using Salvaged Hardware program, funded by Test Resource Management Center and the Navy’s Aerial Targets Program Office (PMA 208), produces “new” Mk 70 rocket boosters by harvesting, refurbishing and refilling

existing components from the retired Mk 12 Terrier booster inventory to deliver units quicker and more cost-effectively to the fleet.

“Today’s successful demonstration is a major win for the Arsenal of Freedom and Indian Head,” said NSWC IHD Commanding Officer Capt. Paul Mahoney. “Witnessing the teamwork and collaboration of so many departments at the command to get this project across the finish line has been remarkable. It shows that Indian Head as a whole is actively delivering on the Navy’s most challenging energetics work to meet immediate wartime demand.”

By NSWC IHD Public Affairs