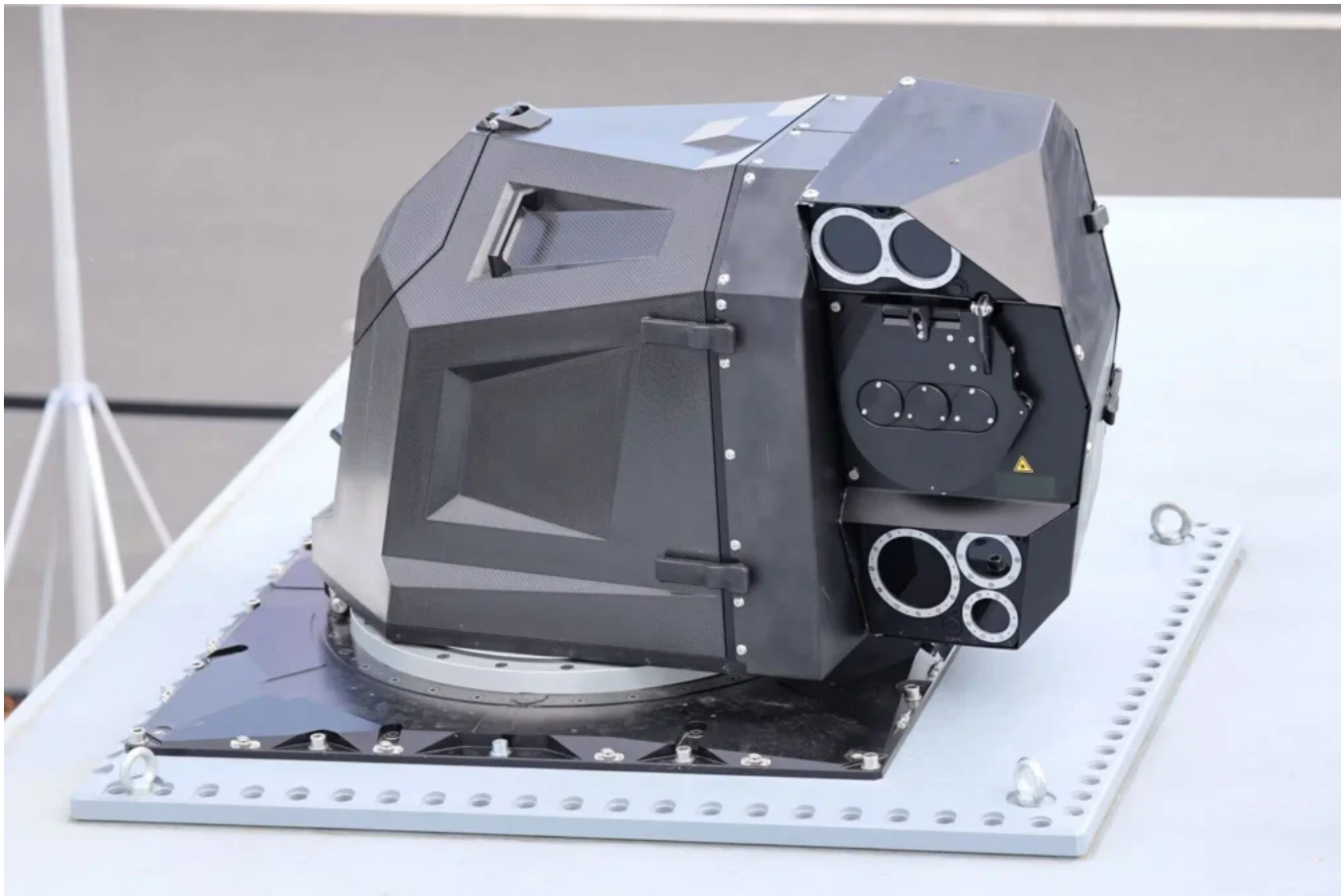
German Companies Hand Over Laser Weapon System to Bundeswehr

Germany's High-Energy Laser Naval Demonstrator Working Group (ARGE), comprising Rheinmetall and MBDA Germany, have transferred a naval laser weapon demonstration system to the Bundeswehr for further evaluation. The ARGE formally transferred the 20-kW laser system to the Laser Competence Center (Testphase zur See einen Laserdemonstrator) at the Technical Center for Weapons and Ammunition (Wehrtechnischen Dienststelle für Waffen und Munition – WTD 91) in Meppen.

The demonstrator, which is housed in 20-ft container, combines the outputs of a dozen 2-kW fiber lasers and can be scaled to deliver outputs up to 20 kW. The two companies began development of the laser weapon system under a 2020 multimillion-euro contract awarded by the Federal Office for Bundeswehr Equipment, Information Technology and In-Service Support (BAAINBw). Earlier efforts saw Rheinmetall demonstrate a shipboard laser in 2015 that engaged land targets, and a 2018 demonstration of a 20-kW laser source.

Beginning in mid-2022 the laser weapon system participated in a successful series of evaluations that included 100 laser firings under operational conditions at sea on board the German Navy's F-124 frigate *Sachsen*. The system can engage drones, speedboats and anti-ship cruise missiles. The aim is to deliver an operational laser weapon system by 2029 that potentially can defeat supersonic anti-ship missiles. In the meantime, the system will undergo further evaluations on land at WTD 91 for counter-drone applications. – *J. Knowles*

Below: Most of the laser weapon system's components, seen here onboard the German Navy frigate Sachsen, is housed in a 20-

foot container. The sensors and beam director sit atop the container. (Rheinmetall photos)