

DRDO develops new generation Man-portable Autonomous Underwater Vehicles for mine countermeasure missions

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A new generation of Man-portable Autonomous Underwater Vehicles (MP-AUVs) have been successfully developed by the Naval Science & Technological Laboratory (NSTL), Visakhapatnam of Defence Research and Development Organisation (DRDO) for mine countermeasure missions. The system comprises multiple AUVs equipped with Side Scan Sonar and Under Water cameras as primary payloads for real-time detection & classification of Mine-Like Objects. The onboard deep learning based target recognition algorithms enable autonomous classification, significantly reducing operator workload and mission time.



Additionally, a robust underwater acoustic communication has been integrated to facilitate inter-AUV data exchange during operations ensuring enhanced situational awareness.

The recently-concluded field trials at NSTL/Harbour have successfully validated salient systems parameters and critical mission objectives. Multiple industry partners are involved in system realization and the system will be ready for production in next couple of months.

Secretary, Department of Defence R&D and Chairman DRDO Dr Samir V Kamat has complimented the NSTL team for the successful development of MP-AUVs, terming it as a major milestone towards deployable, intelligent, and networked mine countermeasure solution. It offers rapid response capability with reduced operational risk and logistic footprint for naval mine warfare applications, he said.

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