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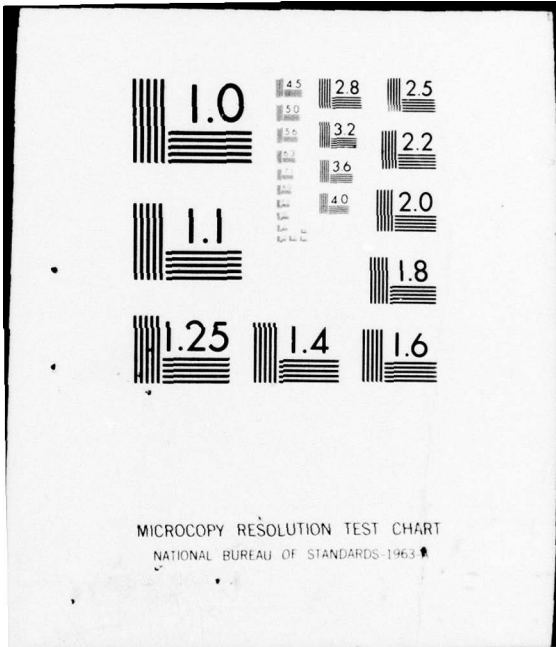
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AD A 053511

CLASSIFICATION: UNCLASSIFIED

TITLE:

6 The MOL Class: New Soviet Torpedo Boat - Successor of the SHERSHEN Class

(MOL Klasse: Neuer sowjetischer Torpedoschnellboottyp - Nachfolger der SHERSHEN Klasse);

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PAGES:

21 5 (West Germany) n 2 p 90-91 1978.

SOURCE:

Soldat und Technik, No. 2, 1978
 pp. 90-91

11 7 Mar 78 / **12** 6p.
14 NISC-TRANS-4000

ORIGINAL LANGUAGE: German

TRANSLATOR: DM

NISC TRANSLATION NO. 4000 ✓

APPROVED P.T.K.

DATE 7 March 1978

ACCESSION for	
NTIS	White Section <input checked="" type="checkbox"/>
DDC	Bull Section <input type="checkbox"/>
UNANNOUNCED	<input type="checkbox"/>
IDENTIFICATION	
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DISTRIBUTION/AVAILABILITY CODES	
Dist.	AVAIL. num./or SPECIAL
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THE MOL CLASS: NEW SOVIET TORPEDO BOAT -
SUCCESSOR OF THE SHERSHEN CLASS

Breyer, Siegfried; Soldat und Technik,
No. 2, 1978, pp. 90-91

The last Soviet torpedo boat was based on the technology of the early 1960s. It has been known to NATO since 1962 and has been designated the SHERSHEN Class.* This represented the first large

*SHERSHEN means hornet in German.

Soviet torpedo boat. Everything the Soviets had developed before it was easily under the 100-t mark, and some far under that as, for example, the P-4 Class of the 1950s. It was then soon followed by the large series type P-6, and the far less numerous P-8 and P-10 Classes. Their small size, which as a rule also meant poor seaworthiness, imposed substantial limitations on them, although they were not exclusively fair weather ships.

The appearance of the SHERSHEN Class made it clear that in future Soviet torpedo boats would have to be contended with, even in those waters where previously they had not been a factor. When the Soviets developed the SHERSHEN Class, they could rely on the obviously successful OSA Class, which had been developed as a missile boat. There are so many similar or identical characteristics between it and the SHERSHEN Class, that it is assumed that the SHERSHEN Class borrowed from the OSA Class. More precisely, elements of the OSA hull together with the power plant was used--technically, a logical and simple solution.

A meager 100 units of the SHERSHEN Class were built. Half of them were assigned to the four Soviet fleets, the remaining half given to a number of friendly and allied countries (Bulgaria, Egypt, East Germany, North Korea, and Yugoslavia). The SHERSHEN Class has now a successor, the MOL Class, which was first observed in 1976.*

*Mention of this development was made in Soldat und Technik, No. 8, 1977, p. 418. Now further information is available, making a closer examination possible. MOL in German means pier or quay.

Compared with the SHERSHEN Class, it is 4 meters longer and, therefore, heavier as well. Its 170/210 tons compare to the 145/160 tons of the

SHERSHEN Class.* Part of this increase (relative to type displacement)

*These figures represent the type displacement/operational displacement.

is due to the increased weight of the larger hull. The increased operational displacement could suggest an enlarged fuel supply and, therefore, an enhanced range.

Externally, the MOL Class greatly resembles the SHERSHEN Class. What distinguishes one from the other is the placement of the after 30-mm AA mount. On the SHERSHEN it is immediately aft of the long deck superstructure, while on the MOL Class, on the other hand, it is a considerable distance aft of it, just forward of the stern. It is not yet definitively known what this signifies. The bridge configuration resembles that of the TURYA Class, the hydrofoil that has proved itself as a subchaser. The side walls of the long deck superstructure with its numerous vertical stiffening ribs brings the STENKA Class to mind, which likewise is classified as a member of the OSA type family.

The power plant suggests that it is more powerful than that of the SHERSHEN Class. American naval sources indicate that it is another three-shaft system. However, the power output has been increased by about 1470 kW (2000 hp). As far as may now be determined, the power plant consists of three Type M-504 diesel engines. Given a total power output for the three shaft system of 8826 kW (12,000 hp), each engine yields 2940 kW (4000 hp). It is conceivable, then, that the M-504 engine, perhaps with throttled power, is identical to the engine designated Type 56 ChNSP 16/17, which is a successor to the M-503A diesel and which was recently discussed here.* The 1470 kW

*Soldat und Technik, No. 4, 1977, p. 206

(2000 hp) power increment represents but a modest speed increase and, therefore, should be considered rather as compensation for the larger, heavier ship's hull. The more powerful engines in all probability require more space and weightwise are doubtlessly somewhat heavier than the earlier power plants. This could be the reason why the ship's hull is more than 4 m longer than the SHERSHEN Class. Moreover, the increased displacement could, in part, result from the increased weight introduced by the engines.

Externally, armament and electronics correspond in kind, model, and arrangement exactly to the SHERSHEN Class. Four 53.3 cm torpedo tubes, two on each side deck diverging from the ship's longitudinal axis, serve as main armament. Two 30-mm-L/65 twin AA mounts, one fore and one aft, constitute the defensive armament. Depth charge launchers, like those on the SHERSHEN Class, have not yet been

identified, nor have mine launch ways. There is a POT DRUM radar on the quadruped trellis mast, a HIGH POLE on the mast aft of it, and a SQUARE HEAD antenna on the underlying sponson (both part of the shipborne IFF system), and a DRUM TILT torpedo tube control system aft on a relatively high tower.

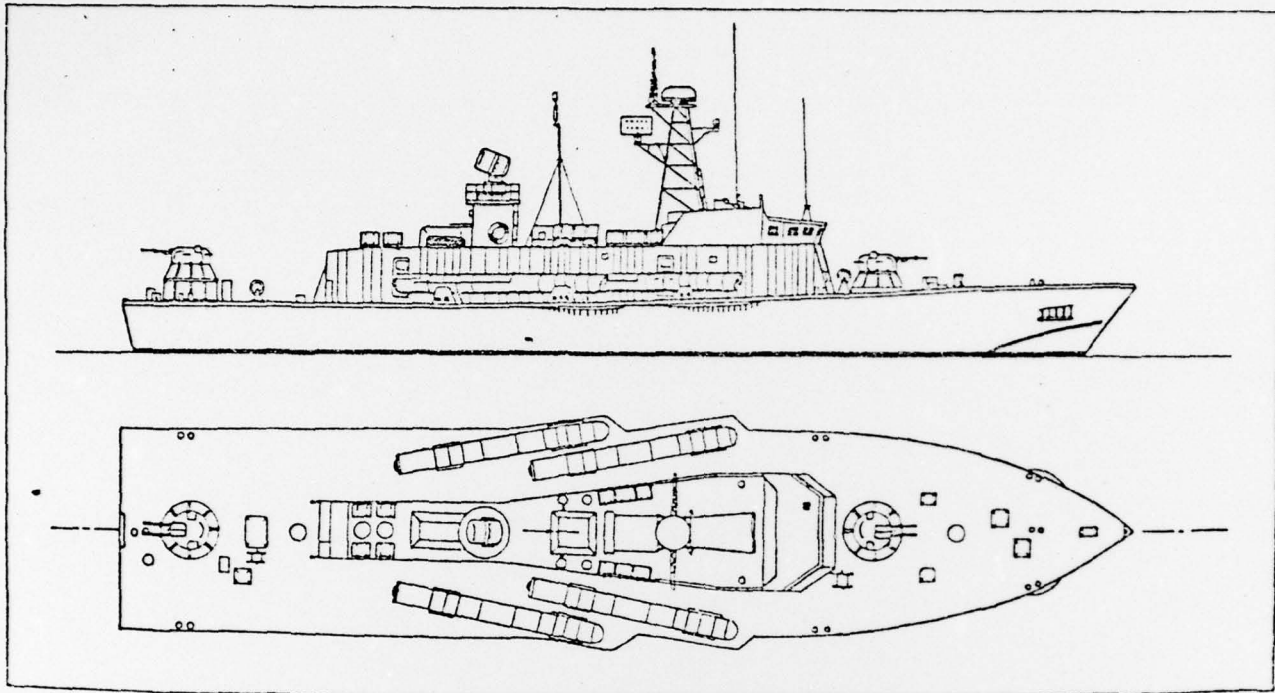
The fact that a boat of the MOL Class had been delivered to Sri Lanka, formerly Ceylon, in late 1975 has been reported earlier.*

*Soldat und Technik, No. 8, 1977, p. 418.

Four other boats were delivered to Somalia in 1976, some with and some without (boat to Sri Lanka) the torpedo tubes. In this case (Sri Lanka), without any other armament in its place. This shows clearly that the MOL Class is also built in a patrol or gunboat model in addition to a torpedo carrier, perhaps at the request of the buyer. This would be a simple matter. The torpedo tubes either need not be mounted in the first place or can be removed. Only a little time and effort would be required for that. Even though it is unusual for the Soviets to export units of an entirely new type, it must not be immediately concluded that the MOL Class is being built exclusively as an export model. It has long been clear that the Soviets need a successor to the SHERSHEN Class, and it appears quite conceivable that this new development can also serve their own needs. /Original article contains photograph of a MOL Class unit delivered to Somalia./

Characteristic	OSA Class*	SHERSHEN Class	MDL Class
Type displacement (tons)	160	145	170
Operational displacement (tons)	205	160	210
Length overall (m)	39.3	35.2	39.9
Beam, greatest (m)	7.7	7.7	7.6
Draft, average (m)	1.8	1.5	1.8
Power plant	3 diesel engines	3 diesel engines	3 diesel engines
Power (kW (hp))	7280 (9900)	7280 (9900)	8826 (12,000)
Speed (knots)	35	38	40
Armament	4 SS-N2a 4 30-mm AA	4 TR 533 mm 4 30-mm AA depth charges mines	4 TR 533 mm 4 30-mm AA
Electronics	SQUARE TIE SQUARE HEAD HIGH POLE DRUM TILT	POT DRUM SQUARE HEAD HIGH POLE DRUM TILT	POT DRUM SQUARE HEAD HIGH POLE DRUM TILT

*Figures are for the OSA-1. The OSA-11 differs: displacement 165/210 tons and armament 4 SS-N-2b.



Side and deck view of MOL Class