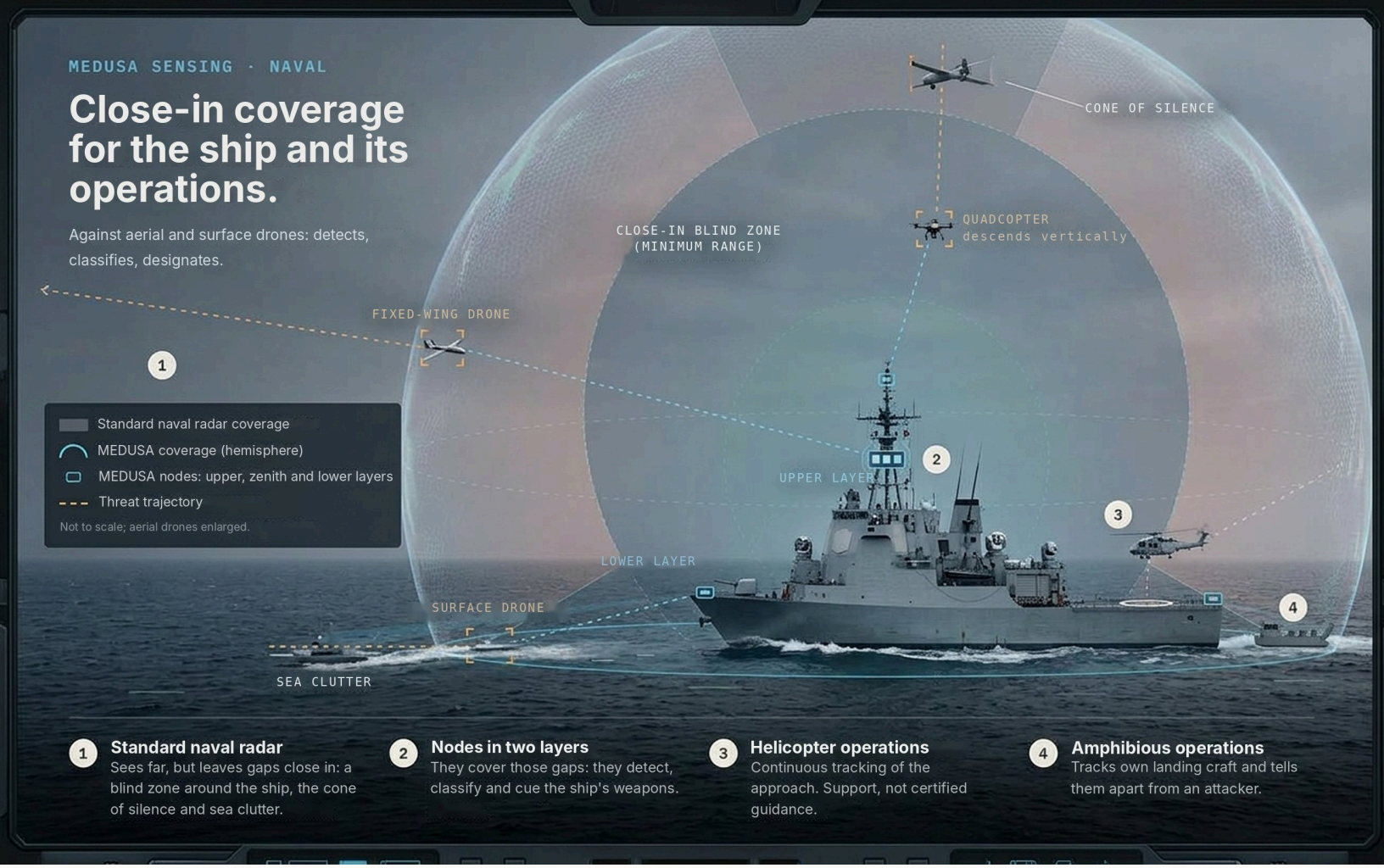


THE PROBLEM

Search radar sees far, but leaves gaps close to the hull: a blind zone of hundreds of metres, the cone of silence, masked sectors and sea clutter. There, the ship relies on its lookouts.

That is where the threat comes in, by air and by sea. An aerial drone is cheap, can be launched from the shore or from a boat, and cannot be jammed if it is fibre-optic guided. In 2024, surface drones sank a corvette, a landing ship and a patrol boat.

MATURITY

No range has been measured at sea yet. The initial campaign measures sea clutter and the detection of a boat and a quadcopter: one pier and three to six weeks.

ESTIMATED RANGES

Target	Expected range	Alert time
Small quadcopter	220 – 330 m	9 – 13 s
Fixed-wing drone	400 – 700 m	8 – 14 s
Surface drone	590 – 1,050 m	27 – 92 s
Own helicopter	1,250 – 2,210 m	Approach support

How it is estimated: an automotive imaging radar detects a car at about 350 m. With four chips combined, an antenna designed for the ship and an amplifier, that range grows about 3.6 times and is then scaled to each target's size.

THE ASK

A naval or defence-industry counterpart with access to a pier and to assets for measurement, and an integrator partner for the connection to the command and control system.

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