Amulet helicopter self-defence suite undergoes trials

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Belarus's Oboronnie Initsiativi (Defense Initiatives) held the first phase of flight trials for the Amulet helicopter self-defence suite, its newest product, from 19 June to 3 August.

Company representatives said the trials confirmed the system's expected performance parameters.

The suite, designed by BKOV (Bortovoy Kompleks Oboroni Vertolyotov: Helicopters Defence On-Board Complex), is meant to defend combat helicopters against various air-, ground-, and ship-launched anti-aircraft missiles, including with active and semi-active radar seekers, with passive infrared seekers, and with command guidance.

The trials used Mil Mi-2 and Mi-8MT helicopters. The main carriers will be Mi-8MT (Mi-17)



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and Mi-24/35 multirole and attack helicopters, but the company is proposing the system for any helicopter design.

The Amulet self-defence suite comprises two pods, a computer control unit, and control console. The pods are fitted to the helicopter's sides and contain barrier radar antenna units, radar

warning antennas, and radio jamming antennas. The Amulet suite radio antenna works in a 6-18 GHz frequency range.

It provides 360° defence, as well as 90° in elevation (±45° from longitudinal axis). Officials said the suite can detect man-portable air-defence system (MANPADS) missiles out to 3,200 m, and detect rocketpropelled grenades (RPGs) at all ranges.

The Amulet is powered by 27 V one-way voltage or 115 V alternate voltage. The input is 1,200 W and the suite output is 10 W,

The suite is fully automatic, requiring no input from the crew, and interfaces with the helicopter's onboard active self-defence suite (such as a flares release unit).

Amulet can function in several modes, officials said. The first is a radio-electronic jamming of an opponent's fighter fire-control radars and anti-air-craft artillery radars. The second is detecting MANPADS, RPGs, and other missiles, and warning the helicopter crew to start evasive manoeuvres while activating the self-defence suite for chaff release. The third working mode is to prematurely activate anti-helicopter mines.