Anchoring harpoon intended in particular for an aircraft and anchoring system including one such harpoon.

The present invention concerns an anchoring harpoon intended in particular for an aircraft able to cooperate with an anchoring grate of a platform, and an anchoring system including one such harpoon.

Such harpoons and such anchoring systems are already generally known in the state of the art.

Thus for example, document FR-A-2 701 689 describes a harpoon intended to equip a rotocraft such as a helicopter, for example, and that can be pulled towards a landing platform of a vessel so that the head of the harpoon attaches on the grate and thus forms an anchoring point of the aircraft, in particular facilitating the landing operation thereof.

The anchoring harpoon described in the aforementioned document includes cylinder means wherein piston means move provided with a shaft extending beyond the cylinder means and the free end of which includes a harpoon head for hooking in the grate. This harpoon head is in fact provided with retaining fingers for retention in the grate, radially movable between a retracted position and an active position using control means.

Such harpoons have already been successfully implemented on a number of vessels to ensure anchoring in particular of helicopter-type aircrafts.

For some time, a number of attempts have also been made to land drone-type rotocrafts on platforms, in particular military ones.

The applicant has also successfully developed and tested an automatic landing and take-off system for a rotary-wing drone on and from such a vessel.

The implementation of these drones also requires the use of harpoons and anchoring grates.

Studies have shown that adapting already known anchoring harpoons for helicopters directly on rotary-wing drones could not be done successfully.

Indeed, these studies have shown problems related to size, power, maintenance, etc...

The aim of the invention is therefore to resolve these problems.

To that end, the invention concerns an anchoring harpoon, intended in particular for an aircraft, able to cooperate with an anchoring grate of a platform, including jack means comprising cylinder means containing mobile piston means provided with a rod that extends beyond the cylinder means and the free end of which includes a harpoon head that is hooked in the grate, provided with retaining fingers for retention therein, that can be moved between

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