Abstract

This dissertation assesses the usefulness and the feasibility of the use of multicopters drones in a SAR-operation on the high seas, after an MOB-incident on board of merchant vessels or passenger ships. Both the factors that influence a SAR-operation, as well as the characteristics of existing drones are discussed.

From the search method devised, it became clear that a drone can be useful to bridge the period when the victim is out of sight during the turn. Although, it should also be noted that more effective alternatives exist, for instance a fixed-wing drone or a MOB-detection system.

The factors that influence the search operation by multicopter in a negative way are the battery technology. The battery capacity results in a low flight radius and is not safe enough for the use and storage on board. A second issue is that autonomous systems are not yet readily available, this means the ease of use for the crew is not optimal. The last disadvantage is the limited amount of waterproof drones on the market. This sector is in full development and the interviews concluded that a search and rescue operation at sea by multicopter is possible in the future because the rapid evolution of drone technology.