ABSTRACT

As per the National Oil spill Contingency Plan (NOSCOP), Sri Lanka Navy/ Department of Coast Guard and Sri Lanka Air Force has given separate responsibilities when an oil spillage occurs at Sri Lankan Water. Oil slick behaviour identification is most important for the effective and efficient oil spill management process. At present Sri Lanka Air Force provides aerial observation data by manned aircraft due to non-availability of air surveillance capability at SLN/SLCG at present. Therefore, a qualitative study has been carried out to enhance Integration of Drone Technology to SLN for efficient and Effective Management of Oil Spill in Sri Lankan Water. During the study, the researcher identified that many lapses in the existing method such as non-availability of sea current, locate of the oil slick, thickness of oil slick, continuous monitoring over the oil spill, etc. Through inductive research, the researcher has identified that there is a gap between the existing oil spill response process and requirement of efficient and effective oil spill management process. The study is mainly focusing on, how best could be integrated drone technology with SLN platforms to enhance Oil Spill Management process. Further, the study revealed that many advantages over the conventional aerial observation mechanism and also, it is revealed that most of the navies in the present day have incorporated modern technologies to overcome these existing difficulties. Therefore the study found out that the conceptual model able to enhance of Integration of Drone Technology to SLN for efficient and Effective Management of Oil Spill in Sri Lankan Water in the present and future context.

Key Words: Oil Spill Response, Oil slick Monitoring, Integrated Drone Technology, Sri Lanka Navy, Aerial Observation, Sri Lanka Coast Guard