

Study on zigzag maneuver characteristics of V-U very large crude oil (VLCC) tankers

Abstract :

The Department of Marine Technology at the Faculty of Mechanical Engineering, University Teknologi Malaysia has recently developed an Ship Maneuverability tool which intends to upgrade student's level understanding the application of fluid dynamic on interaction between hull, propeller, and rudder during maneuvering. This paper discusses zigzag maneuver for conventional Very Large Crude Oil (VLCC) ships with the same principal dimensions but different stern flame shape. 10/10 zigzag maneuver characteristics of U and V types of VLCC ships are investigated. Simulation results for U-type show a good agreement with the experimental data, but V-type not good agreement with experimental one. Further study on zigzag maneuver characteristics are required.