

## REVIEW OF SHIP MANEUVEARABILITY IN WAVES

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### ABSTRACT

Ships are often disturbed by waves during actual navigation. Waves will not only make the ship sway but also make the maneuvering trajectory of ship change significantly, which puts forward higher requirements on the ship's maneuvering performance. In this paper, the essence of ship maneuvering motion in waves is analyzed, and maneuverability of ships is investigated under different waves, and model maneuvering test and numerical methods in waves are reviewed. Due to the significant developments in computational fluid dynamics (CFD), the use of CFD for the study of ship maneuvering motion in waves holds great promise for engineering applications. Finally the challenges and suggestions in numerical simulation on ship maneuverability in waves are summarized.