



Modelling and Simulation of High Speed Supercavitating Vehicle

By Burnwal, Santosh / Ghosh, Ajoy Kanti

Condition: New. Publisher/Verlag: LAP Lambert Academic Publishing | 6 DOF Simulation | Supercavitation is an emerging technology in which the most cursed Cavitation is used as a beneficial to engineering application. Supercavitation is achieved when a body moves through water at sufficiently high speed, so that the fluid pressure drops to the water vapour pressure and a vapour bubble (called cavity) envelops the entire vehicle (except the cavitator and fins). Hence, the skin friction drag of the vehicle becomes almost zero. Hence, vehicle can move in the two phase medium. The development of supercavitating vehicle has been confronted with various challenging problems such as the potential instability of the vehicle, the unsteady nature of the cavity dynamics and the complex, non-linear and time delayed nature of the interaction between vehicle and cavity. Moreover depending upon some non dimensional parameter e.g. cavitation number (C_v), the equilibrium of the vehicle may shift from a stable equilibrium to a limit cycle. | Format: Paperback | Language/Sprache: english | 181 gr | 220x150x6 mm | 124 pp.



 [READ ONLINE](#)
[6.51 MB]

Reviews

It is really an awesome ebook that I have ever read. It typically fails to expense a lot of. I am very easily can get a enjoyment of studying a written ebook.
-- **Delphia Fay**

A really awesome ebook with perfect and lucid reasons. Indeed, it is engage in, still an amazing and interesting literature. I am just very easily could possibly get a satisfaction of reading a composed publication.
-- **Petra Kuphal**