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3.11 Underwater appendage drag 3.12 Total ACV and SES drag over water; 3.13 ACV skirt/terrain interaction drag; 3.14 Problems concerning ACV/SES take-off; 3.15 Effect of various factors on drag; Chapter 4. Stability; 4.1 Introduction; 4.2 Static transverse stability of SES on cushion; 4.3 SES transverse dynamic stability; 4.4 Calculation of ACV transverse stability; 4.5 Factors affecting ACV transverse stability; 4.6 Dynamic stability, plough-in and overturning of hovercraft; 4.7 Overturning in waves; Chapter 5. Trim and water surface deformation under the cushion; 5.1 Introduction
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7.3 Static geometry and analysis of forces acting on skirts 7.4 Geometry and analysis of forces in double or triple bag stern skirts; 7.5 Geometry and forces for other ACV skirts; 7.6 Analysis of forces causing the tuck-under of skirts; 7.7 Skirt bounce analysis; 7.8 Spray suppression skirts; 7.9 Skirt dynamic response; Chapter 8. Motions in waves; 8.1 Introduction; 8.2 Transverse motions of SES in beam seas (coupled roll and heave); 8.3 Longitudinal SES motions in waves; 8.4 Longitudinal motions of an ACV in regular waves; 8.5 Motion of ACV and SES in short-crested waves; 8.6 Plough-in of SES in following waves

Sommario/riassunto

This definitive text describes the theory and design both of Air Cushion Vehicles (ACV) and Surface Effect Ships (SES). It begins by introducing hovercraft types and their development and application throughout the world in the last three decades, before going on to discuss the theoretical aspects of ACV and SES craft covering their hovering performance, dynamic trim over calm water, resistance, stability, manoeuvrability, skirt configuration and analysis of forces acting on the skirts, ACV and SES seakeeping, and the methodology of scaling aerodynamic and hydrodynamic forces acting on the ACV