

ANNOTATIONS
of science works published in international magazine
«River transport (XXI st century)» 3(95)'2020

The analysis of wording of terminology «stability» of ship / P. Bimberekov // River transport (XXIst century). 2020. – № 3 (95). – p. 26-28.

With critical point of view and basing on requirements of russian classification organizations for ship's stability analyses wording of homonymous terminology suggested by different specialists, in encyclopedic and reference materials. Suggests the author's variants of wording this term.

Key words: stability of vessels, wording of term «stability».

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The principles of development of internal water system of Russia's Northwest / P. Garibin, K. Morgunov // River transport (XXIst century). 2020. – № 3 (95). – p. 35-35.

Describes conceptual provisions to create internal system in Northwestern federal district as a subsystem of Unified deep-water system of european part of Russia. Formulates proposals about perspective tracks which bypass against Saint-Petersburg channels.

Key words: waterway, transport system, bypass channels, multimodal transportations, logistic center.

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The principle of definition of inertia moment of waterline to estimation ship's stability on waving / M. Osokin, R. Khvostov // River transport (XXI st century). 2020. – № 3 (95). – p. 40-43.

Describes the author's method of mathematical estimation of decreasing area and moment of inertia of active waterline while vessel moves along passing wave with length similar to vessel's length, influences periodical loss of metacentric height, changing static stability diagram and appearance of parametric rolling. Shows the results of calculations based on existing onboard documents.

Key words: moment of inertia of active waterline, parametric rolling, ship's stability on waving.

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Probabilistic models to estimate constructive security for modern sea and mixed navigation ships / M. Moskalenko, B. Druz', M. Moskalenko // River transport (XXIst century). 2020. – № 3 (95). – p. 43-47.

Based on probabilistic models, analyses problems of providing constructive security for modern sea and mixed navigation ships. Suggests adequate mathematical model to estimate constructive safety as a system with «non-economic responsibility» independent of vessel's normative lifespan and purpose.

Key words: risk, reliability, structural safety, limit point of resistance, hull fracture.

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The influence of «digitalization» of transport sector on exploitation of mixed (river-sea) navigation ships / M. Diakonova // River transport (XXIst century). 2020. – № 3 (95). – p. 47-51.

Describes the problems which appear in process of fleet exploitation in interaction chain «office–ship». Suggests network matrix of events which corresponds to network diagrams. Shows the results of experimental research of changing dependence of critical path of speed of selected work's schedule.

Key words: network schedule, exploitation of fleet, digitalization.

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About forensic examination on water transport / V. Dmitriev // River transport (XXIst century). 2020. – № 3 (95). – p. 52-54.

Describes tasks of navigation and water transport forensic examination, causes of accidents on water transport, risk in navigation, main provisions of theory of causal communication, most frequent causes of traffic accidents on inland waterways, recommendations of the Guide to the investigation of «human factors» in accidents and incidents at sea, methodology for investigating accidents.

Key words: forensics, accidents, traffic accidents, causal communication theory, accident investigation methodology.

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The calculation of riverbed' bandwidth with taking into account inhomogeneous of living section's roughness and presence of ice cover / Y. Bik, V. Degtyareva// River transport (XXIst century). 2020. – № 3 (95). – p. 54-56.

Describes the approaches to take into account inhomogeneous roughness of riverbed's living section. Substantiates conditions in which heterogeneity of riverbed's bed determines unimportant influence on river's bandwidth.

Key words: coefficient of riverbed's inhomogeneous, riverbed's bandwidth, roughness of riverbed's bed.

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The algorithmic approach to calculate last-minute maneuver / V. Sichkarev, E. Osipov // River transport (XXIst century). 2020. – № 3 (95). – p. 56-58.

Describes the algorithmic approach to calculation last-minute maneuver for safe divergence of ships.

Key words: shipping, safety, algorithical approach, last-minute maneuver.

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