

ANNOTATIONS
of science works published in international magazine
«River transport (XXI st century)» 1(97)'2021

Actual problems of organization of social passenger transportations on river transport / I. Kuzmichev, A. Kornev, A. Malyshkin, V. Lyubimov // River transport (XXIst century). 2021. – № 1 (97). – p. 19-24.

The review of main problems associated with organization of social passenger transportations. Taking into account Transport strategy of Russian Federation until 2030 substantiates necessity to develop this activity on inland water transport. Analyses requirements for river transport, problems and prospects of its development.

Key words: river transport, passenger transportations, social routes.

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About responsibility for damage caused by pollution from ship / V.Dmitriev, V.Karetnikov // River transport (XXIst century). 2021. – № 1 (97). – p. 32-33.

Describes normative problem of russian legislation about definition of responsible person in case of damage caused by pollution from ship.

Key words: pollution from ship, shipowner, responsibility for damage.

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Proposals for subsidizing passenger transportations by inland water transport / O. Domnina, A. Lisin // River transport (XXIst century). 2021. – № 1 (97). – p. 34-37.

Substantiates the need of development of social passenger transportations by inland water transport with taking into account provisions of Transport strategy of Russian Federation until 2030. Analyses the experience of financial support of various types of transport, suggests their adaptation for river industry.

Key words: river transport, passenger transportation; passenger transportations, subsidies.

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Organisation of multimodal transportations and modelling of transport and logistic system which uses sea and inland water ways in european part of Russia / A. Boykov, L. Kulapat, A. Rodionova // River transport (XXIst century). 2021. – № 1 (97). – p. 38-42.

Suggests the principle of organisation transport and logistic system which uses sea and inland water ways and auto roads. Describes created algorithm to build simulation model of this system by applying multimodal transport technologies.

Key words: transport and logistic system, freight line, multimodal transportations, economic and mathematical model, simulation model.

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Mathematical approach in design of port's infrastructure objects in BIM environment / N. Maakhova, I. Makhov // River transport (XXI st century). 2021. – № 1 (97). – p. 46-47.

Describes the ways of approaches for standardization in design decisions to create families in BIM environment. Shows the mathematical approach for parameterization geometrical data of building constructions of port's historical objects.

Key words: port structures, mathematical approach, BIM environment, trigonometric tasks.

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Technological capabtility of increasing effectiveness of ship's propultions system / L. Arabyan, V. Kuz'min, A. Tokarev, M. Menzilova // River transport (XXIst century). 2021. – № 1 (97). – p. 48-49.

Describes the results of researches of wear pattern of propultion and steering system's working surfaces, technologies of appropriate hardening of propellers and guide nozzles based on results of long-lasting exploitation tests on ships pr.428 of West-Siberian river shipping company.

Key words: propulsion and steering system, wear resistance, working surface, propeller, chrome-nickel coating.

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The method to decrease ship equipment's structural noise / A. Baranovskiy, S. Vikulov, A. Spiridonova // River transport (XXIst century). 2021. – № 1 (97). – p. 49-51.

Suggests the method of reducing vibration isolation stiffness to zero by using dry friction forces. Describes the results of research of physical and mathematical models, develops principle of construction of power equipment's suspension.

Key words: vibration isolation, dry friction forces, suspension, zero stiffness.

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Using geographic information systems in researches of spatial distribution of pollutants in small reservoirs and watercourses (on the example of city Novosibirsk) / O. Spirenkova, A. Tushina, E. Roschina // River transport (XXIst century). 2021. – №1 (97). – p. 51-54.

Suggests the method of ecological monitoring of water objects and analysis of ecology by using geographic information systems.

Key words: geographic information systems, environmental monitoring, pollution of water reservoirs, environmental protection.

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Simulation modelling for vessel calls scheduling in port's inhomogeneous berths / A. Galin, G. Popov, Y. Andryshechkin // River transport (XXIst century). 2021. – № 1 (97). – p. 54-57.

Describes the process of development of simulation model for port's berth line, determines its adequacy by method of comparison results of modelling with statistical data for worldwide ports. Shows the results of experiments with model which reveals dependencies between port's parametric configuration and some of its operating indicators.

Key words: vessel scheduling, vessel calls, inhomogeneous berths, simulation modelling.

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