ANNOTATIONS
of science works published in international magazine
«River transport (XXI st century)» 4(96)'2020

About quality of service on inland water transport / V. Zhmachinsky, S. Mitrochin, G. Chuplygin, V. Shabrov // River transport (XXIst century). 2020. – № 4 (96). – p. 26-29.

Discusses one of the key directions of transport development – improving quality of transport service. The needs of customers are taken as initial category of quality. As the criterias for quality estimation are accepted: transport accessibility, reliability (safety), service of logistics, time of delivery and costs.

Key words: quality of transport service, availability, safety, logistics, transport rates.

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About Rules for maintenance of navigable passages and navigable hydraulic structures / Y. Andreev, K. Efimov // River transport (XXIst century). 2020. – № 4 (96). – p. 34-36.

Analyses legal consequences from application of several requirements of the document approved by order of minster of transport of Russian Federation 08.04.2020 № 113. Gives recommendations for its correction.

Key words: waterway, navigable hydraulic structures, inland waterways.

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The estimation of effectiveness of multimodal transportations of transport and logistics system which uses sea and inland waterways in european part of Russia / D. Koolaput, A. Boykov // River transport (XXIst century). 2020. – № 4 (96). – p. 38-40.

Analyses transport routes with sea and inland waterways, with their application describes the process of organisation and effectiveness of multimodal transportations of transport and logistics system.

Key words: transport and logistics system, freight line, economic and mathematical model, sea and inland waterways, ferries of the RO-RO type, road trains.

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The method of calculation of wing-in-ground effect aircrafts' take-off characteristics on early stages of projecting / A. Luchkov, A. Fevral'skikh, M. Makhnev, E. Zhuravlev // River transport (XXIst century). 2020. – № 4 (96). – p. 44-48.

Suggests the method of calculation of wing-in-ground effect aircrafts' landind distance for estimation possibility of operating high-speed amphibious vessels with various types of launch devices on routes with equipped or unequipped berths.

Key words: wing-in-ground effect aircraft, landing distance, method, hydrodynamic drag, power plant.

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Providing safety exploitation of ship's shaft line on the stages of fleet projecting and building (on the example of passenger vessel pr. 82880) / V. Martyanov, V. Okunev // River transport (XXIst century). 2020. – № 4 (96). – p. 48-50.

Describes the method of calculation of free torsional vibrations of ship's shaft line on the example of passenger vessel pr. 82880. By using results of computer simulation with discrete mathematical model defines natural frequency of torsional vibrations of the element and corresponding potentially dangerous frequencies of rotation.

Key words: engine, shaft line, exploitation, torsional vibrations, resonance.

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The features of using logistics principles on small rivers of Arctic zone of Russia / S. Maslennikov, M. Sinitsyn, G. Sinitsyn // River transport (XXIst century). 2020. – № 4 (96). – p. 50-53.

Describes the role of logistics in its application on small rivers of Arctic zone of Russia. Suggests the algorithm for construction and estimation of transport and logostics system's efficiency.

Key words: small rivers, river transport, transportations, transport and logistics systems.

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The estimation of non-transport effect from organisation of cargo-distributing centre based on river port / E. Zhendareva, G. Iglikova // River transport (XXIst century). 2020. – № 4 (96). – p. 53-55.

Suggests the methodological apparatus to estimate effectiveness of cargo-distributing centre based on river ports.

Key words: river port, cargo-distributing centre, non-transport effect.

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The review of technical devices to create weather forecast for the purpose of providing savety navigation / A. Privalenko, V. Umrikhin // River transport (XXI st century). 2020. – № 4 (96). – p. 55-56.

Describes the list of technical devices to collect and analyse information, to create weather forecast for the purpose to provide safety navigation.

Key words: technical devices, weather forecast, safety navigation.

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The experience of complex examination of reinforced concrete structures of hydraulic engineering facilities / A. Shilin, A. Kirilenko // River transport (XXIst century). 2020. – № 4 (96). – p. 57-60.

Describes several results of researching hydraulic structures.

Key words: hydraulic structures, complex geophysical surveys.

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The derivation of expression for coefficient of relative hydrodynamic quality ξ' by using methods of theory of dimensions and similarity / Z. Kagan, D. Kagan // River transport (XXIst century). 2020. – № 4 (96). – p. 60-63.

By using methods of theory of dimensions and similarity derivates expression for coefficient of relative hydrodynamic quality (CRHQ) ξ'. Shows the identity of CRHQ and Bendemann factor. The CRHQ has prospective use to analyse results of model and field tests, to create universal design diagram and new methods for calculating propulsion devices.

Key words: propulsion device, coefficient of relative hydrodynamic quality.

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