#### ANNOTATIONS of science works published in international magazine «River transport (XXI<sup>st</sup> century)» 2(82)'2017

Economical consequences of excise taxation of shipping business / E. Lavrentyeva, G. Plavinskaya // River transport (XXI<sup>st</sup> century).2017. – № 2 (82) – p. 29-32.

Presents the substantiation of economical results of excise on marine fuel introduction and reasonability of obtaining the Certificate for shipowners of registration the organization makes operations with middle distillates.

Key words: tax, excise, middle distillates, shipping activities.

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The research of loads on drive of shipping lock's double leaf gates / Tyrva V.O., Bobrov E.V. // River transport (XXI<sup>st</sup> century).2017. –  $N_2$  2 (82) – p. 36-38. Identifies and describes patterns of changing loads on electric drive of shipping locks' double leaf gates according to geometry and position of crank-rod mechanism used in mechanical gear actuator.

**Key words:** shipping lock, electric drive of double leaf gates, crank-rod mechanism.

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## The approach to checking guard equipment of transport objects on compliance with modern functional requirements / A. Pivovarov // River transport (XXI<sup>st</sup> century).2017. – $N_{2}$ (82) – p. 38-40.

Describes the author's principle using structural-parametric scheme and original algorithm «stages of life» of technics

to checking guard equipment of transport objects on compliance with modern functional requirements.

**Key words:** functional requirements, guard equipment, checking procedures, structural-parametric scheme, algorithm «stages of life» of technics.

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## The estimation of costs for building ship's superstructures from steel thin-walled cold-formed perforated sections / A. Shamanin // River transport (XXI<sup>st</sup> century).2017. – $N_{2}$ (82) – p. 40-43.

Estimates costs for building ship's superstructures from steel thin-walled coldformed perforated sections. Makes comparison of prices, weights and laboriousness of creating constructions from this material and welded steel and aluminum allows.

**Key words:** superstructure, river ship, steel thin-walled cold-formed section, assembly technology, estimation of costs.

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## The creation of automatic system for projecting technological processes of repairing river ships / O. Zyablov, Y. Kochnev // River transport (XXI<sup>st</sup> century).2017. – № 2 (82) – p. 43-45.

Describes the authors' program for technological preparation of ship repair production. Analyses in details one of the hard stages – forming «stretch» of ship's outer skin by using popular graphical software.

**Key words:** ship repair, technological preparation of production, automatization. **Contacts:** ptps@vgavt-nn.ru

# About economical estimation of competitiveness of communications which make cargo transportations / A. Telegin, V. Kozhuhar, A. Nichiporuk, N. Goncharova // River transport (XXI<sup>st</sup> century).2017. – № 2 (82) – p. 46-48.

Makes the analysis of economical estimation principles of different types of transport which make cargo transportations. Offers the ways of increasing water transport functioning effectiveness.

**Key words:** economical estimation, competitiveness, transport, cargo transportations, effectiveness.

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#### The research of moving on stream river ship's dynamic drawdown effect / A. Klementyev, M. Churin // River transport (XXIst century).2017. – № 2 (82) – p. 48-51.

Analyses methods of calculation of fleet's dynamic drawdown on shallow water. Shows the results of calculations.

**Key words:** river ship's dynamic drawdown, shallow water, stream, methods of calculation.

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### About the principle of definition visibility of navigation situations' benchmarks / A. Sazonov, M. Matyugin // River transport (XXI<sup>st</sup> century).2017. – № 2 (82) – p. 51-53.

Describes the author's method of definition visibility of navigation situations' benchmarks for the purpose of increasing

safety of shipping on inland waterways.

**Key words:** water transport, safety of shipping, method. **Contacts:** mihasun10@yandex.ru

The method of calculation of erosion funnel generated by influence of ship propulsion unit's flow on water basin's bottom / Y. Bik, M. Polunin // River transport (XXI<sup>st</sup> century).2017. – № 2 (82) – p. 53-56.

Describes the author's method of calculation of erosion funnel generated by influence of ship propulsion unit's flow on water basin's bottom. Shows the functions of distance between propulsion unit's axis and water basin's bottom and limited sizes of erosion funnel.

**Key words:** erosion funnel, marine propulsion's flow, flow's speed field, twinshafted propulsion unit.

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#### The principles of placing fleet on winter parkings / Y. Shestakov, M. Nazarova // River transport (XXI<sup>st</sup> century).2017. – № 2 (82) – p. 56-58.

Describes the principles of placing fleet on winter parkings (on the example of Tomskaya shipping company).

Key words: winter parking of the fleet, self-propelled and non self-propelled vessels.

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### The estimation of mooring constructions' reliability / V. Degtyareva // River transport (XXI<sup>st</sup> century).2017. – $N_{2}$ 2 (82) – p. 59-60.

Substantiates reasonability of using method of estimation of mooring constructions' reliability by safety index calculated on natural examination.

**Key words:** safety index, mooring construction, statistical methods. **Contacts:** vvbik@mail.ru

#### The substantiation of profitability of using speed ferries with road trains / L. Bagrov, E. Zaretsakaya, N. Zhavoronkov // River transport (XXIst century).2017. – № 2 (82) – c. 60-62.

Analyses emissions in environment from transport exploitation in Russia. Substantiates profitability of using speed ferries with road trains.

Key words: emissions, transport, speed ferry, road train.

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