

ANNOTATIONS
of science works published in international magazine
«River transport (XXIst century)» 3(87)'2018

The control system for rowing electric unit / F. Gelver, V. Samoseyko // River transport (XXIst century).2018. – № 3 (87) – p. 48-51.

Describes the author's structure of control system for rowing electric unit to realize automatic control with limits for power, electromagnetic moment and propeller's rotation speed. Shows the results of mathematical modeling of ship's electric moving system with present control system.

Key words: electric drive, control system, static and dynamic actions, delayed feedback, adjustment for technical optimum.

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The method of ships caravan's work on rivers with difficult areas / M. Sinitsyn // River transport (XXIst century).2018. – № 3 (87) – p. 51-53.

Describes the principle of navigation of ships caravan on difficult areas of water ways; analyses elements of this caravan and variants of fixing with it additional tonnage.

Key words: small rivers, caravan of ships, expedition form, river transport.

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The estimation of complexity of channel processes on river Lena and control it to provide normal shipping conditions / R. Chalov, A. Chalova, A. Sakharov, E. Kuz'mina // River transport (XXIst century).2018. – № 3 (87) – p. 53-60.

Describes the experience of ranging areas of river Lena from port Osetrovo (city Ust'-Kut) to estuary. Shows the results of the analysis correlation between different criterions by using special method to estimate complexity and danger of channel processes's development which affect water way's condition.

Key words: classification, river Lena, channel processes, shipping conditions, exploitation of water way.

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Intelligent system for ships' collision avoidance at sea/ S. Smolentsev, A. Sazonov // River transport (XXIst century).2018. – № 3 (87) – p. 61-62.

Describes the problem of ships' collision avoidance at sea. Suggests original intelligent multi-agent system of decision-making for ship's control to solve it.

Key words: safety of navigation, collision avoidance, COLREG, multi-agent system, automation of navigation, decision-making.

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