PROGRAMS FOR THE CONTROL OF SHIPS IN MEETING MOTIONS

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ABSTRACT

In this paper, the author presents the algorithms and numerical procedures for the control of going vessels to ensure the implementation of the processes of oncoming traffic. The development of these algorithms performed so that the class limitations are imposed on the control action and phase position can be easily expanded to restrictions on the rate of variable control or the acceleration, with the general form of this algorithm is fully maintained. This property allows them to use these algorithms for the synthesis of control systems and controlling the power plant complex in order to ensure safe navigation and obtaining economical control modes. In some cases, it is sufficient to purely qualitative assessment of the proposed algorithm to generate the correct control. But most require specific, that is, numerical solutions. This led to the development of such control uses the principle of maximum of LS. Pontryagina. The paper devotes the algorithm for ship control as: meeting movement; the predetermined moving area; the environmental variation of a time function.

Keywords: Ship **c**ontrol in a predetermined moving area, Ship control in meeting motion, Ship control in environment variation of time function.