OPERATION OF HYDROTECHNICAL STRUCTURES CONDITION OF CONTROL AND MEASUREMENT APPARATUS FOR EXTENSION

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Abstract. *In this work, under geologically complex conditions the filtration process in the foundation of the located water intake structure and deformation resulting from its action issues of studying the phenomena of Transferred collection of materials in the field of laboratory research, necessary for the emergence of methodologies and the results obtained the ground for conclusions has been created.*

Keywords: *hydraulic structures, soil, water, filtration, ground, complex conditions, water intake, dam, upstream and downstream.*

Introduction: Many years of large-scale research today class III-IV, despite the fact that it is located in difficult conditions Unified methodology for extending the service life of the GTI development of approaches and improvement of physical and mechanical properties of soils calculation methods that account for changes in properties conducting comprehensive research work on improving unvisited.

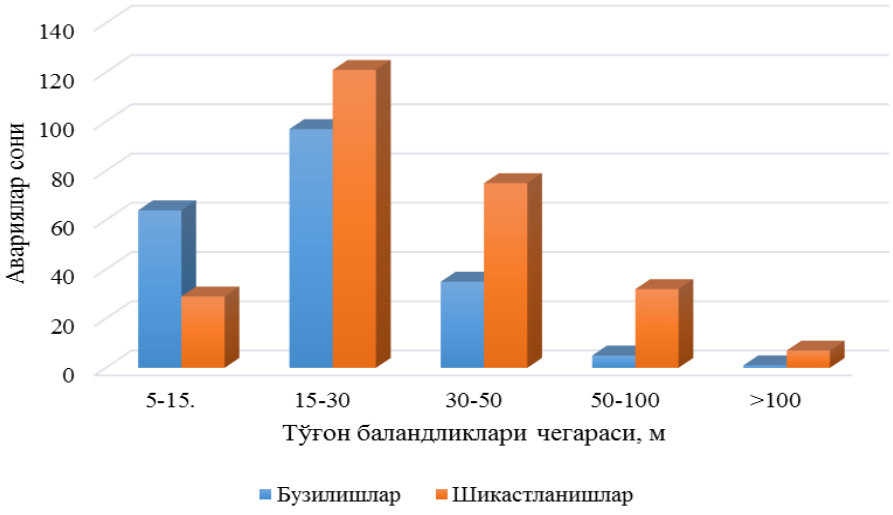
Main part: For Class I and II GTI in accordance with SHNK [2], must be equipped with remote sensing equipment, and for Class III GTI is advisory in nature. GTI Class IV Remote Equipment is not intended for . It can be concluded that all GTI can be divided into three groups based on the provision of remote control AIRs.

The first group is sufficiently equipped with remote controlled unmanned aerial vehicles and information collection is performed in automatic mode I and II class includes GTI. To the second group, information is transmitted remotely via NPA.

Assembly is carried out by maintenance personnel in manual mode class II and III, which are subject to increase. To the third group, a remote is not fully available and their condition is monitored visually classes III and IV.

The widespread use of Class III and IV GTI and taking into account the number of accidents in structures (Fig. 1.4), such that remote monitoring of structures and equipping them with radar it is advisable to develop criteria that allow for the ability to predict possible emergencies more quickly will give.

Design, construction, operation, and operation of hydraulic structures extension, decommissioning, or termination, and their the use of simulation modeling in research is expedient is appropriate. Imitation modeling is an artificial experiment, in which, instead of field trials with real objects, mathematical experiments are conducted using models, processes, and phenomena modeling, developing a series of variants using statistical methods and they are compared. One of the important aspects from GTI changing knowledge about the field during use they can be adjusted.



1.1-Figure. GTI accident status

Conclusion: The probability of an emergency occurring annually new models, systems, and software that automate detection developments are appearing. GTI using software safety officer safety adequate at a level and in a timely manner, which in many ways reduces the risk of potential emergencies.

The use of the most common soil-based hydraulic structures in practice and measures to extend the service life of their lands; the main stages of implementation have been developed.

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