Control optimization of structurally complex systems

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In the article several typical and perspective structures of complex control systems are considered, known and newly developing methods of the optimization of the control of multi-plant multi-criteria systems (MMS) and hierarchical systems are discussed. A new optimization scheme for the two-level hierarchical system of "control—regulation" based on an example of the "guidance—stabilization" system of the aircraft and results of the development of a new algorithm of the equilibrium-arbitrary optimization of the MMS on the basis of the three-channel stabilization system of the aircraft are considered.

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