

CONTENTS

THEORY AND METHODS OF SIGNAL PROCESSING

Ivanov V. A., Zadorozhniy A. S.

Attenuation average signal power helicopter antenna system.....11

Egorshin Y. A., Krasnousova O. Y.

Properties of signal switch-on functions and their use.....16

Tesik Yu. F., Moroz R. M.

Development of the method of compensating of distortions of output signal
of amplifier with non-linear load.....20

AUTOMATIC CONTROL SYSTEMS

Azarskov V. N., Kurganskyi A. U., Rudyuk G. I.

Estimation algorithm of arbitrary dynamics object state under random actions and incomplete
measuring by unstable system.....25

Gridyakina A. V.

Conductivity of composites of thermotropic ionic liquid crystals.....29

Komnatska M. M., Klipa A. M., Berezanskyi Y. A., Kiliian I. V.

On one approach of observer-based flight control system design.....33

Sushchenko O. A.

Features of pointing in systems of stabilization by ground vehicle observation equipment.....40

Komnatska M. M.

Optimal guaranteed cost control of aircraft motion.....46

Krivonosenko O. P., Savchenko O. V.

Synthesis of optimal multidimensional stabilization system of helicopter in hovering mode
under stochastic influences.....51

Korshunov N. V., Pavlov V. V., Rudyuk G. I.

The database of aircraft performance characteristics.....57

Sineglazov V. M., Kozyrskyy V. V., Trehub M. I., Vasilenko O. S.

Substantiation of adaptive self-adjusting system of autonomous wind energy turbine.....62

COMPUTER-AIDED DESIGN SYSTEMS

Charugin M. V., Halatenko O. S., Ivakhnenko I. A.

Evaluation for an automated system for determining grain quality parameters by simulation model.....69

Sineglazov V. M., Boyko V. M.

Computer-aided design of spar for rotor blade of wind-power plant.....75

Chumachenko O. I., Kupriyanchyk V. L.

Fire monitoring intellectual information system.....81

Syneglazov V. M., Godny A. P.

Means of dynamic integration data realization at the level of separate components
of the cad environment.....85

TRANSPORT SYSTEMS

Dmitriev V. A.

Development of mathematical models of helicopter pilots.....91

MATHEMATICAL MODELING OF PROCESSES AND SYSTEMS**Ziganshin A. A.**

Numerical solution of wing integro-differential equation.....95

Bordyuh H. B.

Mechanism of dimerization of viologens in liquid crystalline medium.....99

Zaritskyi O. V.

Theoretical basis of professional activity analysis and estimation expert systems development.....103

Kozhokhina O. V., Rudas S. I., Bondarev O. S.Application of reference models to determine the professional reliability of air traffic controllers
and creating a simulator.....107**Sineglazov V. M., Yurchenko A. S., Tupitsin N. F., Kozlov A. P.**

The dynamic segment memory allocation algorithms.....114

Zelenska N. C., Zelensky C. Ch.

Approximation of Bessel functions by rational functions.....121

Kit G. V.

Fast convolution algorithms in the reduction of the visual signal and image processing systems.....125

Requirements for Articles.....129