W. Ross Ashby

INTRODUCERE IN CIBERNETICĂ

(Introduction to Cybernetics. Translation from English)

Editura tehnică, Bucharest, 1972

The conception is still persisting at present that the study and application of the methods and techniques of cybernetics in various fields of activity require solid knowledge of electronics and higher mathematics.

Setting out from the idea that this conception is false, the author considers that the study can be made progressively and that there are no reasons which should hinder the full understanding of the fundamental principles of cybernetics.

Through his work, the author is trying to place at the disposal of those interested an introduction to the subject, which should make them realize the methods and techniques which they must acquire in view of continuing a thorough study on the applicability of cybernetics in their own field of activity.

The work tackles the general principles of cybernetic systems, setting out from well known concepts and continuing with the way in which, starting from these concepts, exact knowledge can be obtained and how they can be developed up to the approach to subjects, such as stability, reaction, adjustment, ultrastability, information, coding, noise, etc· Exemplifications are mostly from biology and the mathematic calculuses which do not surpass the level of elementary algebra are used only to show how it blends with the subject under discussion.

The book comprises many easy exercises gradually presented with indications and applicative answers.

The work is meant for engineers, mathematicians, physicists, chemists, physicians, biologists, students in the respective specialities and pupils of the top forms.

M. D.