

ABSTRACT

“Airships” monograph by A. Kirilin is of 70x100 1/16 format, contains 416 pages, 142 figures, from which 57 are coloured ones, 66 Tables. The monograph consists of a foreword, 3 parts including 18 chapters, and 6 appendices. The book is published in Moscow Aviation Institute by MAI-PRINT Publisher.

The first part of the monograph (Chapters 1-3) considers present-day A/C flight principles, theoretical aerostatics fundamentals, and aeronautic flight principle features.

The second part (Chapters 4-12) has a historical-and-engineering analysis made of new generation airship planning and design, and service decisions (choice of geometrical shape, structural arrangement, and materials, balloon gas, power-plant, etc.) starting from aeronautics source and finishing with up-to-date multi-purpose, transport, stratospheric airship and hybrid aircraft projects.

The third part (Chapters 13-18) is devoted to new generation airship scientific-and-design technique development provision allowing, on the basis of structural and parametrical analysis and synthesis of aerostatic aircraft as complex engineering systems, to make a design and search study and, finally, an airship appearance formation of high flight performance and ecologically efficient parameters. The subjects of research are non-rigid, semi-rigid, and rigid airships in a wide range of take-off weight (a few hundred kilograms through 5000 tons) with different engine types (PE, diesel, TPE).

Monograph appendices include the following:

- essays of great aeronautics inventors;
- first-generation airship, including the Russian ones, flight performance;
- dimension range, type, design and chronology of the most important airship projects realized;
- airship classification by Federal Aeronautique Internationale (FAI).

The present issue is addressed to broad reading public taking interest in aeronautics, specialists involved in light-than-air aircraft development, as well as post-graduate students, and students of higher technical institution.

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ДИРИЖАБЛИ



Москва