#### BRITISH MESSIER LTD

Over the past twelve months, in the helicopter field British Messier activities have been concentrated on the production of the undercarriage for the Bristol Sycamore and the Bristol Type 192 On the latter aircraft production is now in full swing not only on the shock absorbers and roll dampers but on all the associated undercarriage structure

The undercarriages for the Type 192 are designed on the principle that the energy during a landing is absorbed by the four shock absorbers, and the rolling motion is damped out by the separate mechanical dampers

British Messier are now engaged on the design and manufacture of the undercarriages for the new Bristol Type 203 Helicopter, the prototype of which is targetted to fly during the summer of 1959

Some years ago, British Messier set up a special department to investigate the theoretical problems associated with ground resonance In this theoretical approach the elasticity of the undercarriage, the three dimensional stiffness of the tyres and the rotor parameters have all been taken into account The resulting equations are necessarily complex but using a digital computer the equations can be solved and the behaviour of the helicopter predicted

In addition, they have extended the use of simulators to undercarriage performance predicti ns with a definite reduction in numerical analysis work, and in some cases reducing the amount of drop testing required

## **BOOK REVIEW**

#### "HELICOPTERS AND AUTOGYROS OF THE WORLD"

by P Lambermont with A Pirie (Cassell, London, 1958, 30/-)

This book sets out to provide a catalogue of the world's helicopters and autogyros giving leading particulars and a brief description of the layout, it is, in fact, a book of reference from what one might call the historical point of view Within these terms of reference the book is extremely satisfactory Apart from the most recent products, nothing appears to have been omitted and it is quite fascinating to read of some of the early developments

On the important point of accuracy, it is difficult to comment without undertaking exhaustive cross checks Some of the Russian data, for example, differs from that obtainable from other sources, but this merely reflects the difficulty of obtaining reliable information As far as possible the data seem to have been collected with considerable care

There is an adequate list of contents so that it is quite easy to look up any matter of interest without exhaustive search, and the book is also generously illustrated The information is given simply and without critical editorial comment, one can imagine a veteran reader supplying his own in some cases

The Index of Personalities is intriguing with a certain preponderance of "Central European" names Yet another example of the original contributions to human endeavour that have derived from this part of the world

DMD

328

The Journal of the Helicopter

# ADDITIONS TO THE ASSOCIATION'S LIBRARY

#### American Helicopter Society Publications

Journals Volume 3, Nos 1, 2 and 3, January, April and July, 1958 Newsletters Volume 4, Nos 1-9, January to September, 1958

## Books

Men and Machines—A History of D Napier & Son by G H Wilson and W Reader (Weidenfeld and Nicolson, 1958, price 35/-) Von Richthofen and The 'Flying Circus' by Bruce Robertson (Harleyford Publications Ltd, 1958, price 45/-)

## NEW MEMBERS

#### Members

- L H Clare (GB) H Cooper, A M I P E (GB) C Cresswell, A M S L A E (GB)
- T Opatowski, D C Ae, Grad R Ae S (GB)
- P Ovadias, Dr Eng, BE (Israel) I V Wansbrough (GB)

#### Students

D W Lean, Stud R Ae S (G B) P W McDavitt, B S (U S A)

Associates

T A Gawade, A F R Ae S (G B) E R Kendall, D C Ae (G B) F/Lt J W Peckowski (Malaya) A D Raven (G B) G/Capt P E Warcup (Malaya)

#### Companions

W/Cdr A R Collins (GB) E J Jack (GB) M Lowe, CBE (GB) W/Cdr K J Powell (Germany)

# TAX RELIEF ON MEMBERSHIP SUBSCRIPTIONS

Members are advised that an application has been submitted to the Commissioners of Inland Revenue for the Helicopter Association of Great Britain to be approved under Section 16, Finance Act, 1958

If approval is granted, members will be notified immediately

## HELICOPTER RALLY AND GARDEN PARTY

We are pleased to be able to announce that, once again, through the courtesy of MR & MRS CHARLES HUGHESDON, the Association's fourth Helicopter Rally and Garden Party will be held on Saturday, 6th June, 1959, at Dunsborough Park, Ripley, Surrey

Association of Gt Britain

329