The Journal of

THE HELICOPTER ASSOCIATION OF GREAT BRITAIN

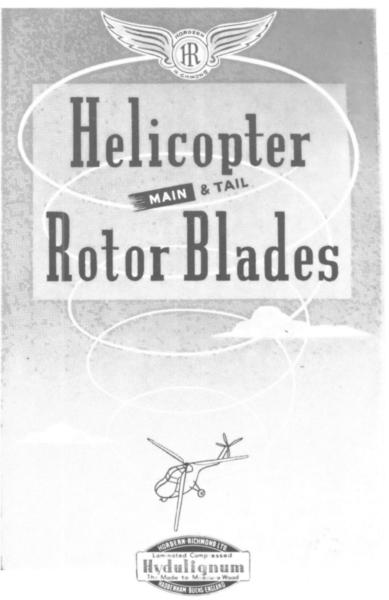
CONTENTS include

Cierva Memorial Prize Essay Competition

Annual Review of Helicopter Activities

The Tenth Annual Donner of the Helicopter
Association

LONDON
4 THE SANCTUARY,
WESTMINSTER, S W 1



HORDERN-RICHMOND

LIMITED

HYDULIGNUM WORKS, HADDENHAM, BUCKS, ENGLAND TELEPHONE AYLESBURY 1100, 1102. TELEGRAMS WINSTIX HADDENHAM BUCKS.



of the metal 1 - nvaluable to the designer

I rovides a unique service for the production

tablic ition and testing of magnesium Employs an outstanding team of research talent which is constantly breaking new ground in magnesium technology Keeps pace by its world wide ramifications with new developments in magnesium wherever they occur Magnesium alloys originated by M.F. L. are the finest in the world For lightness with strength stiffness strength at elevated temperatures they are the answer to many new and challenging demands in industry





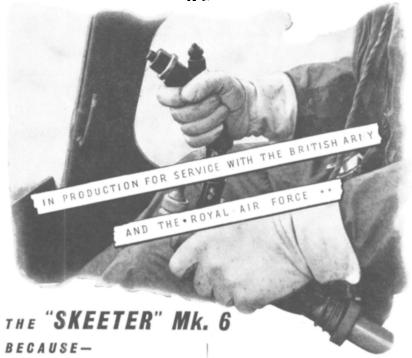




CLIFTON JUNCTION MANCHESTER

London Office 41 St James's Square SW 1 In USA Magnesium Flektron Inc. New York 20

UNRIVALLED FOR TRAINING AND LIGHT LIAISON



The handling qualities due in part to its three bladed fully articulated rotor, are just those found in the larger types of helicopter. It is not difficult to fly, and the manoeuvrability is exceptional

The throttle may readily be disconnected from the collective pitch lever permitting practice autorotative landings without stopping the engine, and the engine may safely be left running on the ground

The engine of 'One Hour Power rating gives consistent and undiminished performance

All maintenance can be done from ground level except for the main rotor hub which is reached by using footholds on the helicopter structure

Vision from the cockpit is unusually good, with a wide aspect rearwards

A manual control of the centrifugal clutch prevents overloading of the rotor system when starting

These are some of the features of the Skeeter helicopter which commend it for its chosen duties Each of them contributes towards the economy which is a feature of its initial and operating costs

SAUNDERS-ROE LIMITED

HEAD OFFICE OSBORNF EAST COWFS ISLF OF WIGHT TFL COWFS 22II HELICOPTER DIVISION EASTLFICH SOUTHAMPTON TEL EASTLEIGH 273I

Power for the Whirlwind



ALVIS Leonides MAJOR 870 b h p

The power plant for the

Westland-Sikorsky

Whirlwind



ALVIS Leonides MAJOR

ALVIS LIMITED

COVENTRY

ENGLAND

Keeping abreast of modern development

DOWTY

UNDERCARRIAGES

HYDRAULIC AND ELECTRO HYDRAULIC COMPONENTS

ELECTRICAL EQUIPMENT

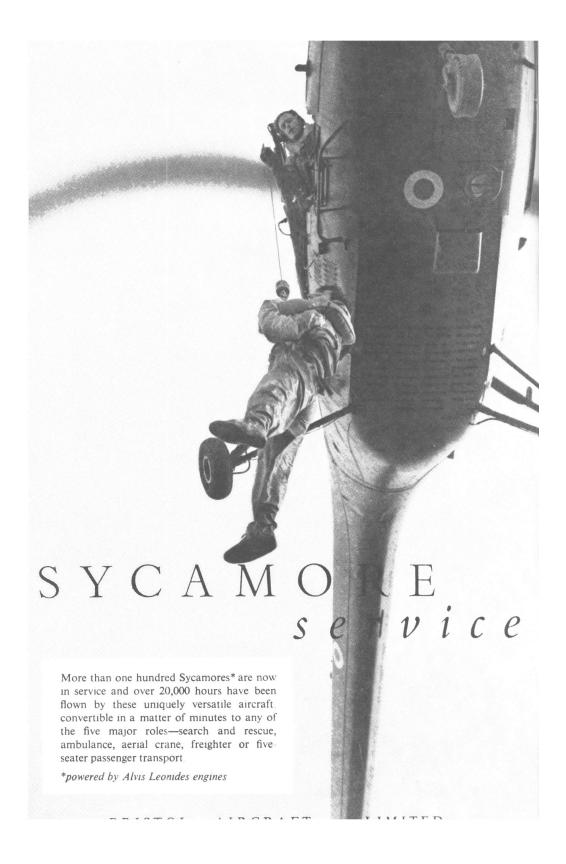
FUEL SYSTEMS FOR GAS TURBINES

DOWTY EQUIPMENT LIMITED CHELTENHAM





on the Sycamore



The Journal of

THE HELICOPTER ASSOCIATION OF GREAT BRITAIN

Offices 4, The Sanctuary, Westminster, S W 1

Tel Abbey 5160

VOL 10 No 2	October 1956	PRICE	10/6
President The Rt Hon Lord Brabazon of Tara G B L M C I C Hon F R Ae S Past Presidents J (Weir C M G C B L I R Ae S I Mensforth C B L M A M I Mech J I R Ae S	The opinions expressed in papers read before the Association and in the discussions also recorded in this Journal are not necessarily those of the Executive Council or of the Association as a whole		
MIIL Marshal of the RAI Lord Douglas of Kirtleside CCB MCDFC Vice Presidents Norman Hill AMIMech I ARAES MCAI RACBRIE AFRAES AFIAES	CONTENTS		
I HE COUNCII Chairman G S Hislop Ph D B Sc (1 mg) A R T C M I Mech Γ F R Ae S B H Arkell \ A R Ae S J \ J Bennett D Sc Ph D	CIERVA MEMORIAL PRI COMPETITION, 1955 THE PRIZE ESSAY	ZE ESSAY	Page Z
FR 4e S K A C Brie 11 RAe S A F I A C Bristow A R Ae S J A Cameron I C Frise B Sc 1 K Ae S AFI 1 C S W R Gellathy A F C R Hafner FR Ae S L Harper A F C	On The Generalized Sin For Automatic Stabilis Helicopter in Hovering I	ATION OF A	4
A McClements A R I C M I Mech 1 F T Meacock A F R Ae S M C A I J W Richardson A F R Ae S H Roberts I h D B Sc D I C A F R Ae S A M I Mech E	THE DESIGN STUDY OF A ROTOR SYSTEM BY THURSTAN		
D L Hollis Williams B Sc F R Ae S Hon Secretary Lt Col J W Richardson A I R Ac S	ANNUAL REVIEW OF HE ACTIVITIES	ELICOPTER	118
Hon Treasurer W. C. Leshe. A C. I.S. Asst Secretaries Miss P. Chute. Miss. J. St. Ceorge Lecture Sub Committee	THE TENTH ANNUAL DIN HELICOPTER ASSOCIATION	NER OF TH	E 128
I ceture Sub Committee J A J Bennett DSc Ph D F R Ae S (Charman) K A C Brie A I R Ae S A F I Ae S	Notices		130
A McClements A R T C M I Mech L J W Richardson A F R Ae S R H Whitby D I C A R C Se B Sc A F R Ae S D L Hollis Williams B Sc F R Ae S Journal Hon I divors Administrative B H Arkell A R Ae S Technical D M Davies M A A F R Ae S R H Whitby D I C A R C Sc Auditors W B Keen & Co	OBJECTS OI THL ASSO The objects of the Association are to c seminate information of a technical an pertaining to Helicopters and all other Aircraft The Association aims to wo with existing Aeronautical Bodies on mal and it may act as an Advisory Body in the calculated to be of benefit to the de Wing Aircraft	ollect compile id semi technica types of Rotati rk in close co o ters affecting its e promotion of le	I nature ng Wing operation s objects gislation



Fortune Hunting 1956

The search for mineral deposits is now performed by the Helicopter equipped with a wire-borne magnetometer. These close range surveys at treetop height replace slow footslogging and often make a survey possible where no other means of transport could penetrate.

Westland Helicopters are daily employed throughout the world on surveys, crop spraying, exploration remote oilfield transportation and in more publicised personal rescue services on land and at sea in times of blizzard, storm and flood

