The Journal of

THE HELICOPTER ASSOCIATION OF GREAT BRITAIN

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The Development of the Skeeter Helicopter by T D

Projects for Helicopter Stations in Central London Area

Experiences of a Technician in Learning to Fly a Helicopter, by M A P Willmer

LONDON

4, THE SANCTUARY, WESTMINSTER, S W 1

Vol 11 No 1 FEBRUARY, 1957



Photograph by courtesy of Helicopter Services Ltd

ROTOR BLADES...

and materials for blade manufacture produced to B C A R. by

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A complete type-testing programme using the company's Bell 47G helicopter has been satisfactorily coincluded securing A R B approi al for Bell and Hiller rotor blades manufactured by the company under licence from the Bell Helicopter Corporation U S A



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Not only the imagination of schoolboys has been captured by the possibilities of vertical flight Since the earliest days Palmer have enthusiastically worked in close collaboration with Helicopter designers—pioneering the development of many special components

The Helicopter removable polythene floor tray, for example, is a component pioneered by Palmer in this country—as is the pneumatic clutch for the smooth engagement and release of the rotor. It is because Palmer Tyres, Wheels and Brakes, as well as other. Helicopter components, possess special features that they are now fitted on most British designed. Helicopters for civil and service use

There's a wealth of Palmer experience in the development and production of aircraft components at your disposal experience which can be invaluable when an idea is at the "can it be done?" stage



components are on

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BRISTOL 'SYCAMORE'
BRISTOL TYPE 192
SAUNDERS-ROE 'SKEETER'
FAIREY 'ROTODYNE'

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

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

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

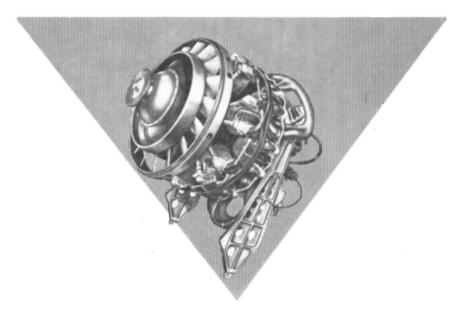
A manual control of the centrifugal clutch prevents overloading of the rotor system when starting

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 featur of its initial and operating costs

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Power for the Whirlwind



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engines of increasing a importance to helicopter, operators

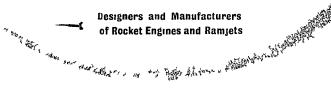


CO. B. J. M. Shenere S. Balle Fairey s new large transport helicopter, the Rotodyne, is to be powered by two Elands-basically similar to the standard Eland but with an auxiliary compressor mounted co axially at the rear Power is taken through the auxiliary compressor (in the form of compressed air to the rotor for vertical flight, and through the propeller for forward flight

ORYX The Napier Oryx 780 950 gas h p turbo gas generator provides the hot gas which is ducted to the rotor head for the propulsion of helicopters by jet reaction at the rotor blade tips This system eliminates all mechanical transmission The Oryx has been officially Type Tested at 780 and 865 gas h r

GAZELLE Gazelle 1,260 2,000 s h p A rugged new free turbine engine for helicopters—selected for the Royal Navy Westland Wessex and the RAF twin rotor Bristol 192 For ease of installation it can be mounted in any position between the vertical and horizontal

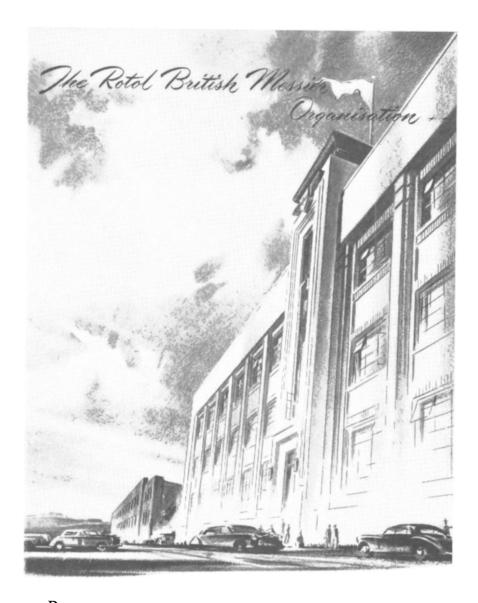
Helicopters demand tough, reliable engines—the Gazelle is designed for strenuous duty, long service between overhauls, while its outstanding simplicity means economical and speedy maintenance



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The equipment of Helicopters for short-haul work and rescue operations forms an integral part of the Company's industrial development

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4, The Sanctuary, Westminster, SW1 Abbey 5106 Offices Tel VOL 11 No 1 February, 1957 PRICE 10/6 THE COUNCIL Chairman The opinions expressed in papers read before the S Hislop Ph D B Sc (Ln₈) A R T C M I Mech L Association and in the discussions also recorded in this Journal are not necessarily those of the Executive 1 RAeS Council or of the Association as a whole B H Arkell AI R Ae S J A J Bennett D Sc 1 h D I R Ae S CONTENTS A C Brie A I R A c S A 1 I A e S L Bristow A R A e S Page Cameron A C Frise B Sc 1 R Ae S AIIAeS THE DEVELOPMENT OF THE R Gellatly Hafner ΓR Ae S E Harper A I C SKEETER HELICOPTER, R T D NISBET 1 McClements ARTO MI Mech L T Meacock A F R Ae S M C A 1 21 DISCUSSION J W Richardson VI RAe S H Roberts Ph D B Sc D I C A I RAe S A M I Mech L D I Hollis Williams B Sc PROJECTS FOR HELICOPTER Hon Secretary It Col J W Richardson STATIONS IN CENTRAL LONDON AREA 26 AIR le S Hon Treasurer W G Lislie ACIS Asst Secretaries Miss P Chute Miss I St George EXPERIENCES OF A TECHNICIAN IN Lecture Sub Committee LEARNING TO FLY A HELICOPTER, J A J Bennett DSc 1h D I R Ae S (Chairman) R \ C Brie A I R Ae S \[\quad \quad \text{FI Ae S} \] 39 by M A P WILLMER A McClements ARFC Notices 44 M McClements A R F C M I Mech L W Richardson A F R Ac S R H Whitby D I C A R C Sc B Sc A I R Ac S D L Hollis Wilhams B Sc F R Ac S OBJECTS OF THE ASSOCIATION Journal Hon Lditors The objects of the Association are to collect compile and disseminate information of a technical and semi technical nature pertaining to Helicopters and all other types of Rotating Wing Aircraft. The Association aims to work in close co operation with existing Aeronautical Bodies on matters affecting its objects and it may act as an Advisory Body in the promotion of legislation calculated to be of benefit to the development of Rotating Administrative B H Arhell A F R At S Technical D M Davies M A A F R Ae S R H Whitby D I C A R C Se B Sc A F R Ae S H Roberts Ph D B Sc D I C A F R Ae S A M I Mcch E Wing Aircraft I ibrarian 1 W L Cure

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