

## FROM ALL QUARTERS . . .

open to women training for such licences and to those interested in furthering the Association's aims.

The chairman is Miss Freydis Leaf, who was last year's air racing champion, and the vice-chairman is Mrs. Monique Rendall; Miss Janet Ferguson is hon. secretary, and Miss Anthea Williams hon. treasurer.

It is proposed to make the Women's Junior Air Corps rally at White Waltham on Whit Monday the first flying event in which the Association will take part. Details of membership are obtainable from the hon. secretary of the B.W.P.A. at the headquarters of the Women's Engineering Society, 45, Eastcastle Street, London, W.1.

## Plastics Exhibition and Convention

**I**N a little over a week the third British Plastics Exhibition and Convention (June 1st-11th) opens at Olympia. This year's show promises to be on an even larger scale than that of 1953, which was attended by buyers from over fifty countries.

At the Convention, 20 papers will be read. Full details of the titles and lecturers were given in *Flight* of March 25th, but the following is a condensed list of dates and subjects:—

(1) June 2nd, a.m. *Polymer structure and properties* (1)—Synthesis of new polymers. (2) June 2nd, p.m. *Polymer structure and properties* (2)—Irradiation of polymeric materials; polythene molecular weight and

properties. (3) June 3rd, a.m. *Expanded plastics*.—Blowing agents and processes; technology of polyurethane. (4) June 3rd, p.m. *Thermoplastics*.—P.T.F.E. dispersions; new nylon polymers and compositions. (5) June 6th, a.m. *Extrusion*.—Fundamental problems of single screw extruders. (6) June 6th, p.m. *Work study*.—Application of work study to plastics processes, and the effect on productivity. (7) June 7th, a.m. *Injection moulding* (1)—Effect of variables on the quality of injection mouldings. (8) June 7th, p.m. *Injection moulding* (2)—Recent advances in injection moulding technique and evaluation of an injection moulding material; injection mould design. (9) June 8th, a.m. *Patents*—Patent law and the filing of patents in plastics, in Britain and abroad. (10) June 8th, p.m. *Foundry resins*.—Development in the use of plastics in the foundry. (11) June 9th, a.m. *Glass reinforced plastics* (1)—Consistency in moulding; possibilities in the motor industries. (12) June 9th, p.m. *Glass reinforced plastics* (2)—Chemical resistance of glass-reinforced materials; testing and specifications; epoxide resin glass laminates.

Tickets for both the Exhibition and Convention are obtainable free, from The Manager, British Plastics Exhibition, Dorset House, Stamford Street, London, S.E.1., the name of the applicant's firm being included and the convention sessions for which tickets are required being specified.

In connection with the show the journal *British Plastics*—which is organizing the show, with the co-operation of the British Plastics Federation—is publishing a special show guide number on June 1st, giving the fullest possible information about the exhibition, and providing a useful work of reference to the plastic industry's latest materials, products, plant and equipment. A show report issue will appear on July 15th.

# A Triumphant British Picture

**B**EFORE Princess Margaret and a distinguished audience, the long-awaited film *The Dam Busters* had its première, in aid of Service charities, at the Empire Theatre in London last Monday evening; and so heavy had been the applications for seats that the "first night" was extended to Tuesday evening also, when the Duke and Duchess of Gloucester had consented to attend.

Most of the general-release films which come our way are easy to review; words of criticism are rarely difficult to find, and the majority of air-war films are not only indifferent in their technical accuracy but treat their subjects with the familiar Hollywood approach that effectively prevents the critic from caring very much about either the subject-matter or the outcome. For a change, *The Dam Busters* (an Associated British picture directed by Michael Anderson) comes as a breath of fresh air, carrying the viewer back into the grim and great days of 1942-3, holding him entranced, and leaving him with a strong impression that here, at least, is a film of which Britain can be proud.

Any film telling such a story (it should be noted that the picture is based on Paul Brickhill's best-seller of the same name, together with W/C. Guy Gibson's own *Enemy Coast Ahead*) could hardly fail to be exceptional. But it would have been a tragedy had—as could easily have happened—the company responsible not done their utmost to record what happened. In the event, practically every living person who could materially help in the production was brought in as an adviser; the airfield location scenes were shot at 617's actual base—Scampton—whose war-time commander, G/C. J. N. H. Whitworth, was technical advisor-in-chief during the making of the picture.

The film opens in a particularly pleasant quarter of Surrey, where Michael Redgrave as Dr. B. N. Wallis (who today is Vickers Armstrongs' chief of aeronautical research and development) is obviously engaged in a very "back-roomish" experiment. To be frank, we had misgivings at this stage: the wife worried at her



Richard Todd plays the part of the late W/C. Guy Gibson, V.C. (right); this rather film-star-like "still" does not, perhaps, do justice to a convincing characterization.

husband's overwork, the doctor called in ostensibly to examine a daughter but really to check up on Wallis's own health, and other familiar "ploys", could have introduced an indifferent production. Nor are the inventor's struggles with "The Ministry" particularly stimulating, although no doubt accurate enough.

Eventually, however, a development contract is awarded, and we see some of the trials off the North Kent shore; this sequence is a genuine one, from the ciné record made at the time. To this extent only is the skipping bomb actually used in the operation revealed; many of its most significant features are not displayed, but its behaviour is clear. It was designed to be dropped on to calm water from a low altitude, when it would skip in a predicted fashion across torpedo nets and other obstructions until it finally hit the dam itself at a much reduced speed; it would then sink against the face of the wall until triggered by a hydrostatic pistol. Early trials of representative weapons were disastrous, and only with difficulty did Dr. Wallis retain support for his conception right through to the eventual successful trial early in 1943.

Considerations of the water-level in the dams (the Möhne, Eder and Sorpe) and the state of the moon pointed strongly to an attack in the middle of May—i.e., exactly a dozen years ago. Air Chief Marshal Sir Arthur Harris, then C-in-C. Bomber Command, picked W/C. Guy Gibson—already an outstanding officer—to form a new squadron, from hand-picked crews, solely to breach the great Ruhr dams.

From this moment on *The Dam Busters* lifts itself head and shoulders above almost any other air-war film which we can recall.

The story of how the Lancasters were modified,\* how the crews trained, and how the operation itself fared is by now generally known.

[Continued opposite



Dr. B. N. Wallis—a recent photograph—with Michael Redgrave (right), who portrays him as he was twelve years ago.

\*For the film, this considerable task was performed by A. V. Roe and Co., Ltd.