

**ABSTRACT OF LECTURE BY SQUADRON-LEADER R. M. HILL on
A COMPARISON OF THE FLYING QUALITIES OF
SINGLE AND TWIN-ENGINEED AEROPLANES.**

(1) **Introduction.**—The best way to analyse the flying qualities of twin-engined aeroplanes is to examine the accumulated fund of experience on single-engined aeroplanes, to deduce first principles from it, and apply them to twin-engined aeroplanes.

(2) **Control and Design.**—Control may be divided in two: Control of the aeroplane and control of the engines. The key to the problem is the correct appreciation of their interreaction.

(3) **Effect of Engine on Control.**—Intentional variation of engine power or engine failure affect the aeroplane in four main directions.

(4) **Effect on Single-Engined Aeroplanes.**—The above four effects are applied in detail to the single-engined type, and some practical examples are given.

(5) **Effect on Multi-Engined Aeroplanes.**—Only two of the above effects vitally concern the multi-engined type, and these are discussed in detail.

(6) **Details of Engine Controls on Multi-Engined Aeroplanes.**—The means at the pilot's disposal for controlling the engines are discussed.

(7) **Practical Flying Notes on Twin-Engined Aeroplanes.**—These notes are based on the writer's experience of twin-engined aeroplanes, and are mainly concerned with the pilot's ability to deal with the sudden failure of one engine in flight near the ground.

(8) **Conclusion.**—A justification is given for the attitude of extreme caution adopted in the remarks on the flying of twin-engined aeroplanes, and the importance of the careful study of type peculiarities is emphasised.

The above is an abstract of the paper which will be delivered at the Royal Society of Arts, on October 21st, at 5.30 p.m.

CORRESPONDENCE.

To the Editor of the AERONAUTICAL JOURNAL.

DEAR SIR,—I notice in the August number of the AERONAUTICAL JOURNAL, in the report of the discussion on Major Linton Hope's paper on "Flying Boat Hulls," page 466, that the remarks contributed by me to that discussion have been included in the contribution of Lieutenant-Colonel Travers.

As my knowledge of Colonel Travers' opinions leads me to suppose that he will not altogether agree with my remarks, I think it would be well if this error were pointed out in the next issue.

Actually my part of the discussion starts at line 8, "His practical experience," etc., and continues to the beginning of Mr. Gibson Knight's contribution.

I am, yours faithfully,

W. H. SAYERS.