AIRCRAFT in AGRICULTURE

Aerial Topdressing in New Zealand: Further Extracts from Sydney R. Ae.S Symposium

WITH the title "Aircraft in Agriculture," a symposium was held at the 71st meeting of the Sydney Branch of the Royal Aeronautical Society (Australian Division) recently. Extracts from three of the papers presented were given in last week’s issue: abstracts of the remaining contributions follow.

Implications of a Topdressing Pilot.—When a suitable pilot applicant joins a topdressing company, it is useful for him to gain the general atmosphere and operating procedure on the job by, say, driving an aircraft-loading truck for a short period. During his first week or two he will undergo a general flying test with the chief pilot of the company.

It is up to the operator to judge accurately, after a reasonable period of time, whether this chap is going to become quite a suitable topdressing pilot or not. It is very important in a topdressing pilot’s early training that the company’s operations manager should ensure that the new pilot can successfully complete his first several jobs, or thirty to fifty hours’ flying, from all-round strips. Many operators only realizing at the last moment that he is in for a lot of bother flying up a steepish long ridge; or sowing up a blind gully and getting back out of the gully.

A topdressing pilot’s life is very interesting, involving moving around the country from one job to another, operating from a variety of types of strips, sometimes meeting different people. The non-flying side of the job is interesting, too; if, for instance, the job is some distance from the base field, one lives at the homestead with the farmer or station owner and his family.

The Agricultural Aeroplane was the title of the comprehensive final paper, extracts from which follow.

Mr. Allman went on to deal in turn with the advantages and disadvantages of aerial pest control, overseas developments, the potential in N.S.W., local instances of pest control by aircraft, and future prospects.

Control of Weeds by means of aerial spraying was described by Mr. K. R. Green, B.Sc.Agri., in two papers concerning the application of herbicides and defoliants by aircraft. Mr. Green’s conclusion was that there was a place for both aerial and ground application of herbicides. Aircraft had a definite advantage where the ground was wet, speed important, the terrain rough or crop damage a factor. Ground equipment had an advantage of cost, uniformity of application and lower drift hazards. Between the obvious fields for each there was a wide area of overlapping area, in some cases the use of both would overcome many of the disadvantages of fixed wing aircraft and could lead to a rapid increase in the application of herbicides and defoliants from the air.

Use of Aeroplanes in Agriculture was the title of a paper by Mr. T. E. Kitamura, a paper which convinced examples of the advantages of aircraft for agricultural use were given. After dealing with the factors of time and inaccessibility, the paper concluded:—

"Where the ‘time’ or ‘inaccessibility’ factors operate they can operate absolutely in favour of the aeroplane regardless of price. Where the aircraft must compete on even terms with ground units, then price is the determining factor. The solution, of course, is to use enough aircraft to cope with the job to be done. This in turn means a heavy capital outlay. This has and is being done in America with businesslike organization and it should be possible here. The farmer already realizes that there is a big field for the economic use of aircraft in agriculture in Australia. The successful development of this field now depends on the investing public."

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(1) Because of the low flying involved, a lot of thought is needed to provide protection for engines against engine failure or misjudgment causing a forced landing, as he will have no choice of landing place.

(2) Because the risk of damage is greater in this work the aircraft operation should be absolutely in favour of the aeroplane regardless of price.

(3) Because time spent on the ground is waste time and because materials are quickly distributed, it is necessary to