

GROUND TO AIR SIGNALS USED IN THE SPRAYING OF INSECTICIDES FOR MOSQUITO ABATEMENT DISTRICT

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Drawings by MRS. DOROTHY M. OWEN

The problem of communication between the pilot and the inspector during airspray operations for mosquitoes was a haphazard system of frantic arm waving and loud shouting until the District's pilot, Roy W. Owen, devised a system of visual hand signals. The Merced County Mosquito Abatement District operates three

(3) Aeronca airplanes in which all load capacity is reserved for insecticide and spray apparatus leaving none for the inclusion of radio equipment. After the adoption of the standard signals, the efficiency of the aerial spray operations was greatly increased throughout the District.

1. *Fly Swaths Farther Apart*—Arms extended down, thumbs pointed out, arms in an outward movement. This signal is used to show the pilot he is getting an overlap on the spray swaths.
2. *Fly Swaths Closer Together*—Arms extended out from shoulders, thumbs pointed in, arms in an outward movement toward hips. This signal is to show the pilot to fly his swaths closer together, that there is an area between swaths that is not receiving coverage by the spray.
3. *Denoting Boundary of Field to be Sprayed*.—Signal may be given either in the position illustrated showing the corner boundary with arms extended straight out from the shoulders, one forward and one sideward, or with both arms extended sideward denoting the end of the field to be sprayed. When giving this signal the signalman will be standing on the corner boundary when giving the corner boundary signal, and on the end boundary when giving the end of the spray run, and in both cases his extended arms will be pointed parallel with the boundaries of the field he wants sprayed.
4. *Direction of Spray Paths*—Arms above head, then moved to forward extended position. This signal is used to direct the pilot to the best heading on which to fly his spray patterns as determined by the ground man after taking into consideration such factors as wind direction, length of spray run, and obstructions in the line of flight.
5. *Repeat Spray*—One arm extended above head then moved to forward extended position. This signal used to direct the pilot to repeat spray over the swath just completed or in some cases over the entire field or area just completed, in cases of heavy infestation where positive kill is to be assured.
6. *Bring Spray Closer to Ground*—Arms extended at waist level, palms down, short up and down movement of arms from the elbow. This signal directs the pilot to fly the airplane lower to the ground in the event that the temperature or winds have risen; and by lowering the spray, drift of the spray is decreased.
7. *Danger! Obstruction in Line of Flight*.—One arm pointed to danger point, other arm in short circular movement from the elbow—otherwise self explanatory.

