

# SPECIAL PROJECTS

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In this section of the bulletin will be included items describing unusual or especially outstanding projects. Readers are urged to contribute to **SPECIAL PROJECTS** such articles on their activities as will be of general interest. **HEADQUARTERS NOTES** and **FIELD NOTES** sections have been discontinued. A section in future issues will be devoted to **DIVISION REPORTS**. These will appear in the next bulletin following receipt of regular quarterly reports from Headquarters Divisions.

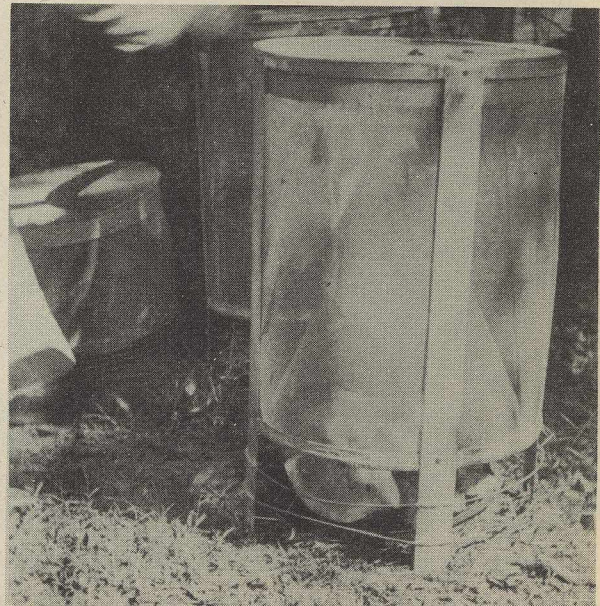
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## POLIOMYELITIS CONTROL INVESTIGATIONS

As part of a study to determine if control of flies will appreciably reduce incidence of poliomyelitis, CDC obtained permission of the State Health Department of Delaware to conduct fly control operations and make observations during the recent outbreak at Wilmington.

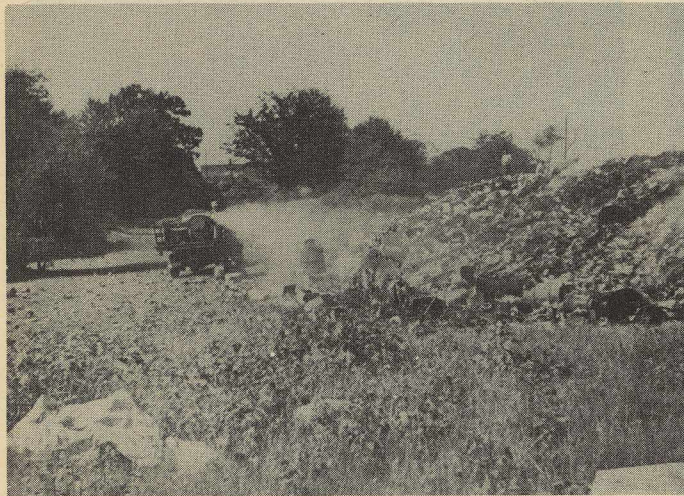
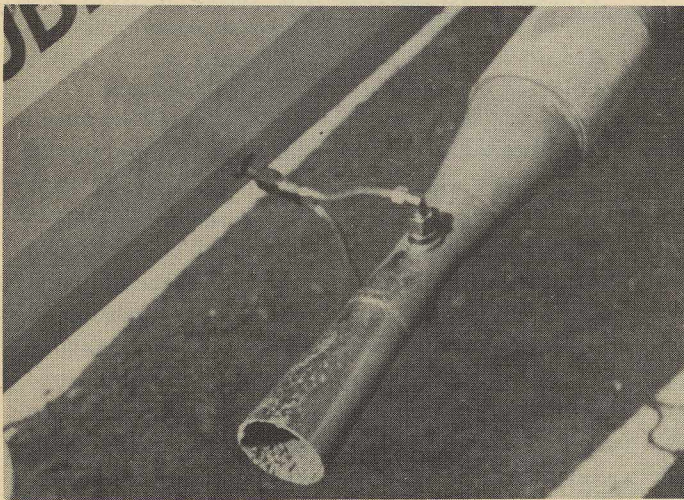
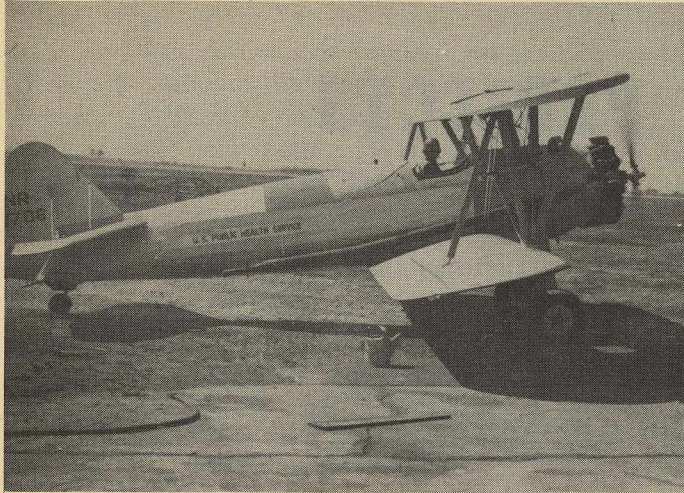
For the past several years, flies have been

considered as possible vectors of the disease. Some time ago, CDC personnel devised a program to obtain pertinent data during a polio outbreak. Control crews were trained for operations, and procedures were outlined for evaluating results. Mobile units were set up and kept standing by for quick action in event that polio was reported in a



Fly counts were obtained before and after spraying with grill (left) and traps (right).





(upper) Airplane insecticidal unit used to disperse thermal aerosol. (center) Aerosol generator used on plane for disbursing DDT (lower) Spraying garbage dump with air blast sprayer.

satisfactory study area. For practical reasons the experimental control work could be done only in cities with a population of 50,000 to 200,000. The Epidemiology Division has meticulously assembled morbidity data to detect the first indications that an unusual number of polio cases was occurring.

The Wilmington outbreak was the first since equipment and plans were ready for action. There was some premonition of an epidemic in the area in July. After the first reported cases, the number grew to 15 per week. On August 19 CDC headquarters was informed that there seemed to be an incipient epidemic in Wilmington. CDC representatives were in the city the next day. Actual fly control operations were started on August 28.

DDT was applied by airplane and by ground crews. Three-tenths pound of DDT per acre per application was applied by airplane over the entire city four times during the first week. Weekly applications were continued for the next three weeks. Airplane spraying was supplemented by ground crews using hand or power equipment.

Entomological evaluation based on grill counts of flies and fly trapping indicated that satisfactory control of flies was obtained. Specimens of flies were obtained for virus isolation work at Montgomery.

It was hoped that control could be instigated while the epidemic was increasing. Analysis of epidemiologic data gathered during the investigation indicates, however, that the peak of the epidemic was probably reached on August 13. So it may not be possible to draw conclusion as to the effect of fly reduction on the occurrence of human cases of poliomyelitis from data collected at Wilmington. When laboratory work is completed, additional data may provide more substantial information.