MEMORANDUM TO: Major H. R. Hill, MC, Surgeon's Office, Hq. 8th Army, Yokohama, Japan.

FROM: Harold F. Gray, Consultant to The Secretary of War, c/o Public Health and Welfare Section, SCAP, GHQ, APO 500, Tokyo, Japan.

1. It is suggested that the following memorandum be sent to the officers in charge of Malaria Survey Detachments and Malaria Control Detachments now stationed on the island of Honshu, Japan, and that they be requested to attach their recorded observations to their unit monthly reports sent to your office. It is requested that such reports be made available to me after receipt at your office.

2. The suggested text of the memorandum follows:


1. It is requested that personnel of Malaria Survey Detachments and Malaria Control Detachments on the island of Honshu, Japan, make observations, during the course of their operations in the summer of 1946, on the habits of certain species of Japanese mosquitoes.

2. Under the following categories, information is desired concerning these species:

   a. Armigeres obturans
   b. Culex tritaeniorhynchus
   c. Aedes togoi
   d. Culex pipiens pallens

A. What is the special preference, if any, for breeding habitat, as follows:

   1. Exposed to full sunlight
   2. Exposed to partial shade
   3. Under dense shade or complete coverage of water

B. Is there any special preference in breeding habitat, for

   1. Containers
   2. Cesspools, foul water
   3. Relatively clean water in ground pools or seepages
   4. Water within rice paddies
   5. Running water
C. At what hours (day or night) does biting begin and cease, and at about what time is each species most actively biting?

D. From your observations do they have any marked biting preference for

1. Man
2. Large mammals (horse, cow, etc)
3. Small mammals
4. Birds

E. Which species freely enter houses to bite? Which species attack and feed outdoors?

F. For night-biting species, where are the adults usually found resting during the daytime?

1. Within houses
2. Within out-buildings not housing animals
3. Within animal quarters
4. Under bridges, culverts, etc.
5. In shrubbery, trees, etc.

G. For day-biting species, where are the adults found resting during the night?

3. It is believed that observations to determine the foregoing points can be made in the ordinary course of operations, and that the information will be of value in planning and conducting control work in the future.

4. It is assumed that the control detachments will not be equipped for precise identification of mosquito species, but it is possible to recognize readily the adults of the four species mentioned herein, with no more apparatus than a hand lens. Identification of the larvae is more difficult, but a little experience should enable one to recognize the larvae of these four species with a fair degree of reliability. If there is appreciable uncertainty as to larvae, they can be allowed to hatch out and the adults then identified.

5. Observations made during each calendar month should be attached to the regular monthly report of each unit.