

This volume reports the major findings, conclusions, and recommendations from a series of non-occupancy and shelter occupancy studies designed to evaluate the ability of typical shelterees to utilize (1) a Package Ventilation Kit (PVK), (2) three types of Effective Temperature meters, (3) a toxic gas detector, and (4) a prototype drinking water dispenser; and to evaluate the ability of this equipment to integrate into the shelter system.

The approach and results of the various occupancy studies are presented in Volumes II and III of this report.

The shelterees were able to assemble the PVK but could not deploy it correctly unless they were supplied with detailed floor-photograph plan instructions. The set-up, deployment, and operation of the PVK did not interfere with the performance of the other shelter functions, such as Food and Water, Communications, Sanitation, Safety, Sleep, etc.

Most of the problems with the PVK can be attributed, in part, to shelter management deficiencies. The water dispenser proved awkward, especially when the water level was low. The toxic gas detector was not easily operated due to ambiguities in the instructions. Errors of 7 F and greater in temperature estimation were observed with all of the Effective Temperature instruments.

Further evaluations, following the same test design format, is recommended for this prototype equipment, incorporating the recommendations contained in this volume, and for other prototype equipment as it becomes available.