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## CONTINUOUS ANIMAL EXPOSURE TO DICHLOROMETHANE

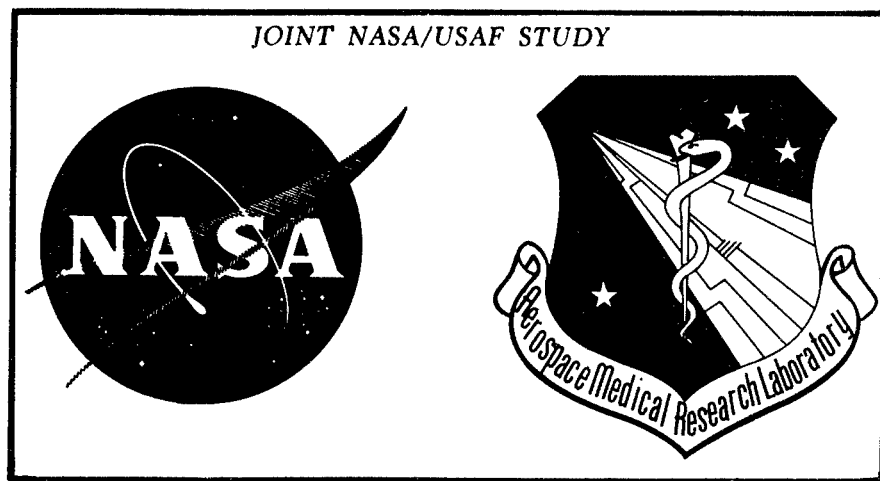
*J. D. MacEWEN*

*E. H. VERNOT*

*C. C. HAUN*

SYSTEMED CORPORATION

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The experiments reported herein were conducted according to the "Guide for Laboratory Animal Facilities and Care," 1965 prepared by the Committee on the Guide for Laboratory Animal Resources, National Academy of Sciences—National Research Council.

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13. ABSTRACT  Continuous exposures of dogs, monkeys, rats and mice to 5000 ppm and 1000 ppm of dichloromethane vapor ( $\text{CH}_2\text{Cl}_2$ ) produced severe toxic effects on dogs, rats and mice. Dogs died after 3 weeks exposure to 1000 ppm and after 6 weeks exposure to 5000 ppm. Thirty percent of the mice also succumbed during four weeks exposure to 5000 ppm $\text{CH}_2\text{Cl}_2$ . Although rats survived 14 weeks exposure to 5000 ppm, they experienced subnormal weight gains. Significant gross and histopathological hepatic lesions were noted in all 3 species at death or experimental termination in 14 weeks. In addition, rats showed abnormal kidney histopathology. Fat stains disclosed mild fatty increase in monkey livers after 14 weeks exposure to 1000 ppm $\text{CH}_2\text{Cl}_2$ .  Key Words:  Dichloromethane                      Dogs Methylene Chloride                  Mice Toxicology                              Monkeys Space Cabin Contaminants           Rats			

## FOREWORD

This is one of a series of technical reports describing results of the experimental laboratory program being conducted in the toxic Hazards Research Unit. This report is concerned with chronic inhalation toxicity of dichloromethane ( $\text{CH}_2\text{Cl}_2$ ), a solvent used in the manufacture of plastic and a common spacecraft contaminant. The research was sponsored by the National Aeronautics and Space Administration under NASA Purchase Request T-80498, funds applied to Air Force Contract F33615-70-C-1046. Work was performed by SysMed Corporation personnel located at Wright-Patterson Air Force Base, Ohio. K. C. Back, PhD, Chief of the Toxicology Branch, was the technical contract monitor for the Aerospace Medical Research Laboratory.

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This technical report has been reviewed and is approved.

ANTHONY A. THOMAS, MD  
Director  
Toxic Hazards Division  
Aerospace Medical Research Laboratory

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