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RESEARCH EFFORT TO DEVELOP OPERATIONAL IMPROVEMENTS TO BIOLOGIC--ETC(U).
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REPORT NUMBER 9

RESEARCH EFFORT TO DEVELOP OPERATIONAL IMPROVEMENTS
TO BIOLOGICAL PROGRAMS

ANNUAL REPORT
1 September 73 - 30 August 74

ACT TECHNICAL STAFF

WILLIAM H. SMITH
Principal Investigator

15 May 1976

Supported by

U.S. ARMY MEDICAL RESEARCH & DEVELOPMENT COMMAND
Washington, D.C. 20314

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Contract No. DADA17-68-C-8106

Advanced Computer Techniques Corporation
1501 Wilson Blvd., Arlington, Virginia 22209

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FOREWORD

The present contractual effort is a continuation of a research project initiated in August of 1967.

This research is conducted under the overall cognizance of Col. William E. Rothe, V.C. Director of the Division of Medicinal Chemistry, and is conducted under the immediate direction of Lt. Col. Kenneth E. Kinnanon, Head of the Department of Biology.

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I. INTRODUCTION

Walter Reed Army Institute of Research (WRAIR) had developed a complex network of computer programming systems for storage, retrieval and association of chemical structures information and related data resulting from biology tests.

Advanced Computer Techniques Corporation (ACT) has supported the research efforts at WRAIR primarily in the area of developing biological programming systems.

During the contractual period covered by this report, the following efforts were enacted:

- A. System Specifications.
- B. File Design
- C. Data Flow
- D. Conversion Program
- E. Program Specifications

II. OBJECTIVES

- A. Design of a new biology system for the CDC3500.
- B. Develop conversion programs for converting current master files to compatible format for processing under the new biology system.

III. ACCOMPLISHMENTS DURING THE YEAR

- A. Total system specifications for the new disk oriented biology system for the CDC 3500 was completed.
- B. The following areas of development were also completed:
 - (1) File design
 - (2) Data flow
 - (3) Program specifications for the following:
 - (a) Pre-Processor

- (b) Generalized Edit
 - (c) Interface program, for interfacing with the compound inventory files.
 - (d) Sorts; source code and accession number.
 - (e) Interface Program, for interfacing with code 10 files (name and address file)
 - (f) Update Program
- (c) ACT provided maintenance services to the 7090/94 system. Some production assistance was also provided.

IV. CONCLUSION

At the end of the contract year the overall system design for the new biology system was completed. Conversion programs for converting current master files were completed.