The objective of this project is to modify and enhance the capabilities of the Mailnet telephonic bulletin board system and create "hooks" for accessing a performance database remotely.
Opinions, interpretations, conclusions and recommendations are those of the author and are not necessarily endorsed by the US Army.

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In conducting research using animals, the investigator(s) adhered to the "Guide for the Care and Use of Laboratory Animals," prepared by the Committee on Care and Use of Laboratory Animals of the Institute of Laboratory Resources, National Research Council (NIH Publication No. 86-23, Revised 1985).

For the protection of human subjects, the investigator(s) adhered to policies of applicable Federal Law 45 CFR 46.

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In the conduct of research utilizing recombinant DNA, the investigator(s) adhered to the NIH Guidelines for Research Involving Recombinant DNA Molecules.

In the conduct of research involving hazardous organisms, the investigator(s) adhered to the CDC-NIH Guide for Biosafety in Microbiological and Biomedical Laboratories.
<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOREWORD</td>
<td>iii</td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>2. METHODS</td>
<td>2</td>
</tr>
<tr>
<td>3. RESULTS</td>
<td>3</td>
</tr>
<tr>
<td>4. CONCLUSION</td>
<td>4</td>
</tr>
<tr>
<td>5. APPENDIX</td>
<td></td>
</tr>
</tbody>
</table>
1. INTRODUCTION

The Office of Military Performance Assessment Technology (OMPAT) operates a Telephonic Bulletin Board Service (TBBS) serving the performance and risk assessment communities. The TBBS is the primary means of communication and technology transfer for a rapidly expanding professional community that uses OMPAT products in government, industry, and private applications. Access to the system is limited by prior registration and password.

The TBBS operates under a software product called Mailnet. Intended for commercial applications, Mailnet is well suited for the technical/scientific uses characteristic of the OMPAT TBBS. It is written as a relational database with communication capabilities.
2. METHODS

The work to be accomplished falls into the following areas of software development. These are:

1. Restructure and rewrite the existing Mailnet system to facilitate future maintenance and upgrading of the Mailnet software.

2. Creation of system maintenance utilities to aide in the creation and operation of user work groups, modification of command structures, generation of TBBS operating reports and other utilities necessary to maintain the Mailnet file structure.

3. Replace existing software libraries with newer network and software libraries to enhance Mailnet system speed and dependability.

4. Create an external communications package to handle Mailnet security and allow users access to areas of interest other than the TBBS.
3. RESULTS

Software developed (CommCntr) provides a method for remote telephonic access to the OMPAT Telephonic Bulletin Board System (TBBS), including execution of programs (such as database access) under security constraints. The only software required by the end-user is a standard communications package. This increases the accessibility of the system by researchers, regardless of their particular platform (PC, MacIntosh, etc.). The underlying relational data structure conforms to an industry-standard database format (dBase with Clipper extensions), and is compatible with both the existing and new TBBS software database. The access software has remote access capability and uses the TBBS software database for security control.

Concurrent with the CommCntr development, the TBBS software (Mailnet) was rewritten (under limited license with the OMPAT from the developer of Mailnet) to be compatible with the new software communication methods. This included documenting the existing system, removing communication calls (to be handled with CommCntr), modifying the input/output system to use standard device access vs low-level practices, enhancing various operational aspects and correcting logical errors. The Mailnet system will run under CommCntr and will continue to provide electronic mail and discussion groups to the research community.

Modifications to enhance user interaction were also added to the Mailnet package. A full screen editor was added for message composition. Color has been added to the Mailnet system to make its use and appearance more friendly to the user.

The new Mailnet system retained the "look and feel" of the old system. Although significant changes to the software coding methods and the new software library upgrades have produced a system which will be easily maintainable and appealing to the user.
4. CONCLUSION

The final implementation of CommCntr will greatly enhance technology transfer and communications in the research community. This product provides a very cost effective method for researchers and clinicians to share human performance data and ideas by increasing accessibility to large databases regardless of the personal computer platform or communications package.
APPENDIX

PERSONNEL PERFORMING WORK ON MIPR 92MM2501

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