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# An Improved PC User Interface for Remote Access to the GE Motors Math Model Running on a VAX Host

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*IPFW School of Engineering, Technology and Computer Science  
Electrical Engineering Technology Department  
Senior Design Project  
Phase II  
Final Report*

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**An Improved PC User Interface for Remote  
Access to the GE Motors Math Model Running on  
a VAX Host**

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*Ricky R. Haynie*

*Richy D. Brunk*

*September 3, 1998*

## **Abstract**

### **“An Improved PC User Interface for Remote Access to the GE Motors Math Model Running on a VAX Host”**

by Ricky R. Haynie and Richy D. Brunk

The user interface for the motor math model at GE HVAC Fan Engineering is based on command line input to and scrolling text output from a VAX VT-100 terminal emulation program on running on a desktop PC. The system has been in use for more than 30 years and has not changed appreciably. Given the improvements made in computers and operating systems in that time, It was decided to improve efficiency of this system with a more graphical based user interface.

The process of designing a winding using the current interface was broken down into the component steps and a study was performed to determine where the most time was spent and then improve the performance of that operation with a graphical user interface. That study pointed out that the process of locating data in the output stream of the terminal consumed more time than any other single operation.

Improvements have been made to that system and as a result the time spent locating data in the math model output stream has been reduced to a negligible amount.

# Table of Contents

Abstract .....	i
Table of Contents .....	ii
Table of Figures .....	iv
Executive Summary .....	1
Introduction .....	2
Methods .....	2
Process mapping .....	2
Measurement .....	3
Analysis .....	3
Improvement .....	4
Results .....	6
Conclusions .....	6
Appendix A - Nomenclature of Motor Parameters .....	8
Appendix B - Source Code .....	9
*frmFind .....	9
frmLoadADesign .....	12
frmLogin .....	15
*frmTelnet .....	18
frmWait .....	26
*frmMDI .....	27
*frmNotePad .....	48
frmOutputDisplay .....	56
frmSetParameters .....	78
frmTelnet2 .....	81

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*filopen.bas .....	90
FitObjects.bas .....	93
FormOperations .....	96
*mdinote .....	100
modMathModel .....	105
modModWTSDatabase .....	137
modStringManipulations .....	139
SelectParamGrid .....	140

**\* Based largely on examples from Microsoft Visual Basic 5.0™ or Dart Communications PowerTCP™. All other code is entirely the work of the authors.**

## Table of Figures

Figure 1. Process Map.....	3
Figure 2. Pareto of Design Events .....	4
Figure 3. Screen Display.....	5
Figure 4. Display Parameter Selection Dialog.....	6

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