README file for CD with book entitled "Kinematics, Dynamics, and Design of Machinery, 2ed" by K. J. Waldron and G. L. Kinzel

The CD contains five folders and this README files. The folders are:

InstallAcrobat

Matlab Programs for First Edition

Matlab Programs for Second Edition

Linkage Animations

Math Review

InstallAcrobat

This folder contains the install file for Adobe Acrobat. The formatted files on this disk are written in Adobe's portable document format (.pdf). The flexibility of this format permits the display of electronically created or converted material on many different computers. If Adobe Acrobat (5.0 or higher) is not installed on your computer, you must install it to be able to read the files on this CD. To do this, follow the directions on the ReadMe file in the ***InstallAcrobat*** folder.

Matlab Programs for First Edition

This folder contains a folder (***Original Kinematic Programs***) with the MATLAB programs and files discussed in the text book along with a manual for using the programs. The manual is in .pdf format and can be read using Adobe Acrobat. The manual gives the general input/output format for the programs and an example run for each of the programs that contain graphics commands. Appendix A of the manual also gives a brief, general overview of MATLAB which is intended to give the novice user of MATLAB an understanding of how the program is used for solving general engineering problems.

When using both the programs and the manual, it is assumed that MATLAB (5.0 or higher) is installed on your computer. The programs were developed on a Power Macintosh using MATLAB version 5.1. They have been tested on a PC running MATLAB 5.1 and Windows 95. Because of the differences between MATLAB 5.0 and older versions, the programs will not run on versions of MATLAB prior to 5.0.

To run the programs, copy the entire contents of the folder ***Original Kinematic Programs*** onto a hard disk and follow the directions given in the manual. This requires that you set the path of MATLAB to the folder containing the m-files and type the name of any executable program listed in Table 1.1 of the manual. The programs beginning with "example" generally have the input data internally coded in the program. These routines were used to check some of the numerical examples given in the book. These are relatively short programs that can be easily edited to produce different results. The programs that do not begin with "example" are typically more complex. The required data to run these programs may be input interactively or using a file. All of the programs are structured so that an example problem can be executed simply by pressing "return" for each of the prompts. The results from sample runs are given in the manual. Several of the programs involve animations, and the speed of the animations is influenced by the speed of the computer's CPU.

Matlab Programs for Second Edition

This folder contains a folder (***GUI Based Kinematic Programs***) with the new MATLAB programs and files along with a manual for using the programs. The manual is in both MS Word and .pdf format and can be read using MS Word and Adobe Acrobat. The manual explains how each program is run. All of the programs are accessed through the "mainmenu" command which is typed to launch the program from the MATLAB command prompt.

When using both the programs and the manual, it is assumed that MATLAB (6.0 or higher) is installed on your computer. The programs were developed on a PC using MATLAB version 6.0. They have been tested on a Macintosh running MATLAB 5.1 and 6.0. All of the programs run on the Macintosh under MATLAB 6.0, and all but the cam program will run under MATLAB 5.1.

To run the programs, copy the contents of the folder ***GUI Based Kinematic Programs*** onto a hard disk and follow the directions given in the manual. This requires that you set the path of MATLAB to the folder containing the m-files and type "mainmenu" at the MATLAB command prompt. Each of the programs can be accessed through the menu presented. Details on the programs are presented in the manual.

Linkage Animations

The folder ***Linkage Animations*** contains .avi files for 26 linkage solid models. The files are QuickTime movies and can be played on either the PC or Macintosh. The files were generated using SolidEdge.

Math Review

The file ***Math Review*** contains the material for a brief math review. This material contains a discussion of most of the math concepts used in the textbook. Exercise problems are given at the end of the review. These are provided in .pdf format and requires Adobe Acrobat to read.

Questions/comments?

We have made an effort to test the programs in a teaching environment. However, it is extremely difficult to test all combinations of variables and to remove all possible errors. Therefore, the output information from the programs should be independently checked for accuracy, especially if the results are to be used in a critical design.

We would appreciate receiving any information on bugs which may be found in the programs. Comments and questions can be directed to G. Kinzel via email at *kinzel.1@osu.edu.*