Radiation Effects Testing Facility Control Software

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DOS-based version of the Radiation Effects Testing Facility control software (program Seuss) has been upgraded. The new version (program SeussW) is designed as a Microsoft Windows™ application. Although SeussW has the graphical users interface (GUI) typical of the Windows-based applications, it retains all the functionality of the previous version, so that the users familiar with Windows operating system and the old Seuss should have no trouble adjusting to the new software. The goal was to make SeussW as easy to use as possible. This was accomplished by putting all the controls on the screen, rather than having them "hidden" as menu items. Also, all the buttons and edit boxes are labeled in plain English and those that are not available in the given context are disabled or hidden. Furthermore, user controls are separated from the controls intended for use by the authorized Cyclotron Institute personnel. Guidance via pop-up message boxes and status bar messages is provided for the procedures that require more than a single step. The need to use the keyboard was minimized, so that most of the features can be activated using the mouse.
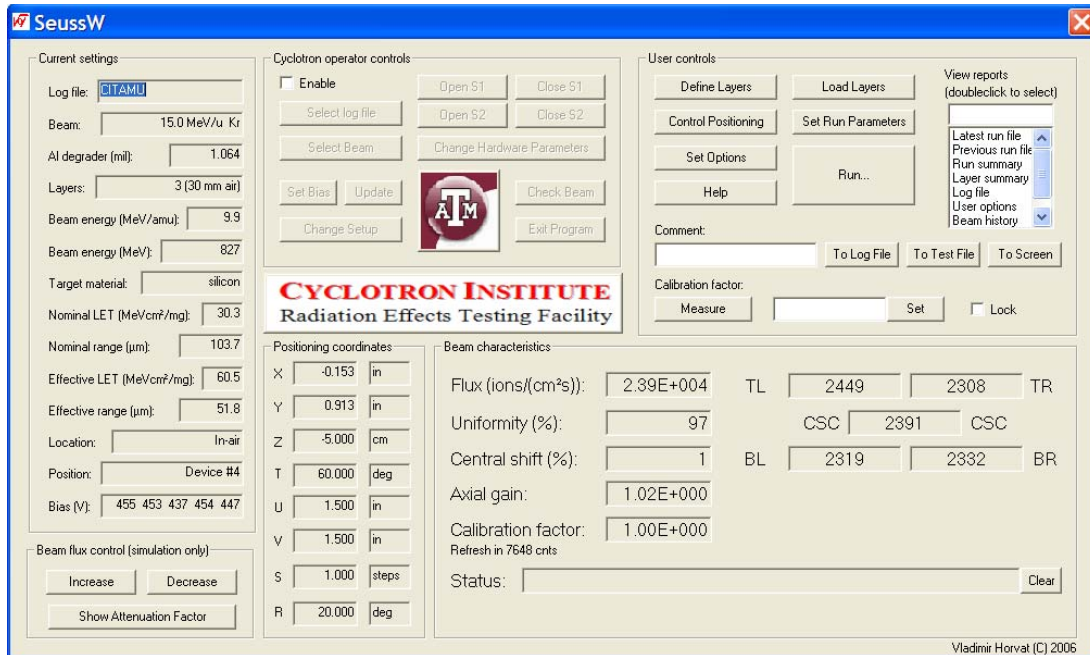

Figure 1. The screen snapshot of the new version of program SeussW

SeussW is designed to control the hardware present at the Radiation Effects Testing Facility. However, if a required hardware component is not detected, the program runs a simulation. This feature enables the users to become familiar with the software before arriving to the site. The files necessary to run the control software using simulated data are distributed in an archive that can be downloaded from

http://cyclotron.tamu.edu/vladimir/SeussW.zip

Under Windows XP[TM], the files can be extracted from the archive using Windows Explorer[TM]. Generally, SeussW should run on any Windows operating system. However, the use of Windows XP[TM] is recommended.

The screen snapshot above in Figure 1 shows the main application window. Other windows pop up when certain features are selected. Currently, there are 14 separate program units performing various tasks ranging from file management and hardware control to data acquisition and ion energy loss calculations. As an example, the window containing positioning controls is shown below in Figure 2.
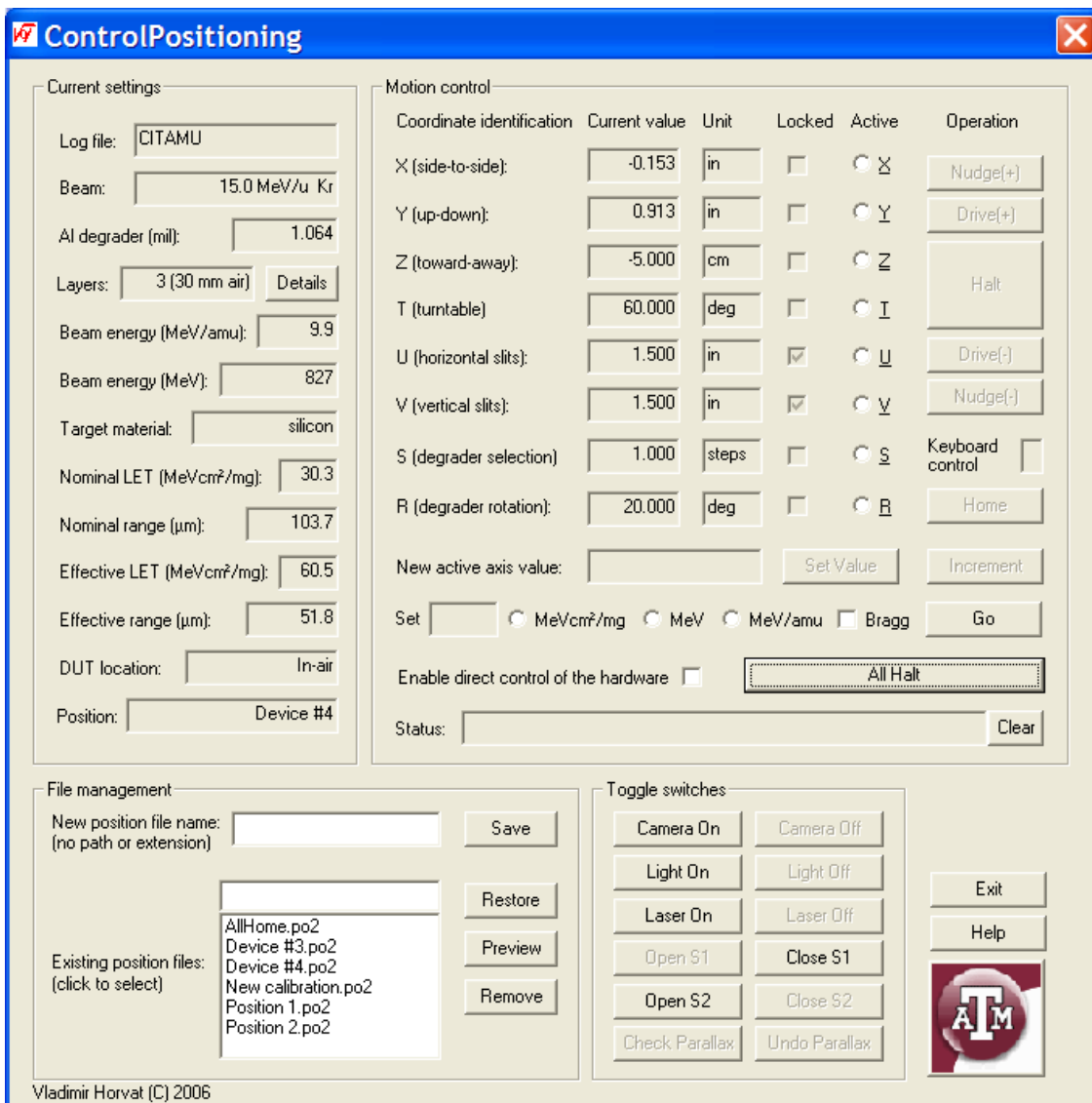

Figure 2. The window containing positioning controls in program SeussW