## Thermal Synthesizer System

Thermal Synthesizer System (TSS) is a thermal design and analysis software package which provides thermal simulation of spacecraft. The applications are written using consistent user interface libraries to provide consistent behavior throughout the software package. The end-user can load CAD data, build a model within the software, determine the heating and radiant exchange environment and determine temperatures of the spacecraft components. Typical use consists of determining results and then changing the model to achieve a desired result called design synthesis.

## Section 1194.21 Software Applications and Operating Systems - Detail TSS Voluntary Product Accessibility Template

Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported: Fully supported.	<ul> <li>TSS features text input from the command line. Almost all GUI features produce a command set that is issued to the command line. Furthermore, the GUI allows usage of navigation keys such as tab, alt-<character> and F1 for help.</character></li> <li>Much of the navigation functionality is new in Version 14.01. The GUI was refreshed to add Section 508 Compliance. All 508 Compliant features can be turned on using Tools   Options   Global tab – "Use Section 508".</li> <li>This applies to QWERTY keyboards.</li> </ul>
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported: Fully supported	TSS will not disrupt or interfere with the operations of other applications running on the PC.

(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported: Fully supported	Provided by Windows
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported: Fully Supported	Compliant features can be turned on using Tools   Options   Global tab – "Use Section 508". This exposes the underlying Microsoft Accessibility functionality to convey buttons and images as text objects.
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported: Fully supported	In this requirement, the term "bitmap" refers to a broad number of image formats, such as .bmp, .gif, .jpeg, .tif and .svg. The version 14.01 GUI was refreshed to add Section 508 Compliance.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported: Fully supported	Provided by Windows
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported: Partially supported	Applications do not override display attributes. If high contrast black is used, some icons may not be visible.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Supported: Fully supported	Database lists can show animation data as a text output. Use pull down menu Tools   List to access this functionality. Self-scrolling and moving text are considered animation.

(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported: Fully supported	Mapped data can be viewed as text content. This requirement is also addressed in provision 1194.25(g).
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supported: Fully supported	A range of colors is provided for the user when adjusting color. See www.lighthouse.org/color_contrast.htm This requirement is also addressed in provision 1194.25(h).
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported: Fully supported	TSS does not show flashing or blinking text at all. Other elements include turning graphics on and off or changing between images. This requirement is also addressed in provisions 1194.22(j) and 1194.25(i).
(I) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported: Fully supported	Compliant features can be turned on using Tools   Options   Global tab – "Use Section 508". This exposes the underlying Microsoft Accessibility functionality to convey buttons and images as text objects. This requirement is also addressed in provision 1194.22(n).