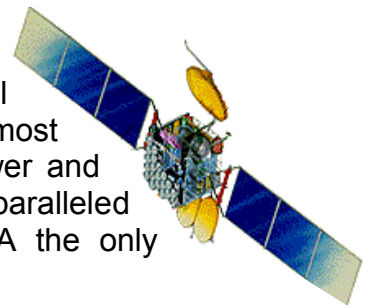


# NEVADA<sup>TM</sup>

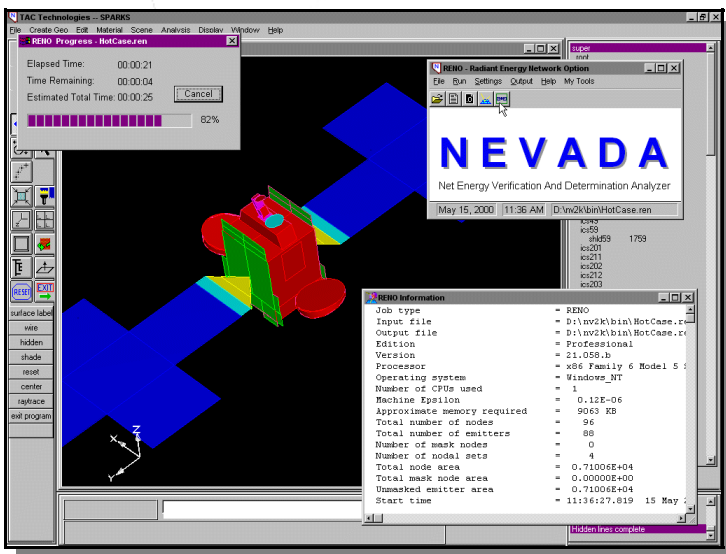
NET ENERGY VERIFICATION AND DETERMINATION ANALYZER

## FAST. POWERFUL. PROVEN.

Sophisticated thermal radiation analysis needs software that is up to the challenge. For over three decades, NEVADA has been chosen to solve some of the industries toughest thermal radiation problems. With the features to model even the most complicated thermal radiation scenario, NEVADA has the power and flexibility that space flight analysis demands. An unparalleled performance record and unbeatable support makes NEVADA the only thermal radiation analysis tool you will ever need.



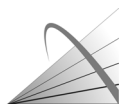
- **Fast, accurate** thermal radiation analysis
- Used for the design and analysis of *hundreds* of space missions



Radiation analysis of a satellite

## Key Features

- *True curved surfaces*
- *Orbit plotting and visualization*
- *Variable surface properties*
- *Percent specular surfaces*
- *22 surface types*
- *View/Interchange factors*
- *Advanced orbital heat loading options*
- *Extremely accurate calculations*
- *Integrates with SINDA/ATM*
- *Available for PCs, Workstation, Mainframes*
- *Fully supported*



TAC TECHNOLOGIES

# NEVADA

## TECHNICAL HIGHLIGHTS:

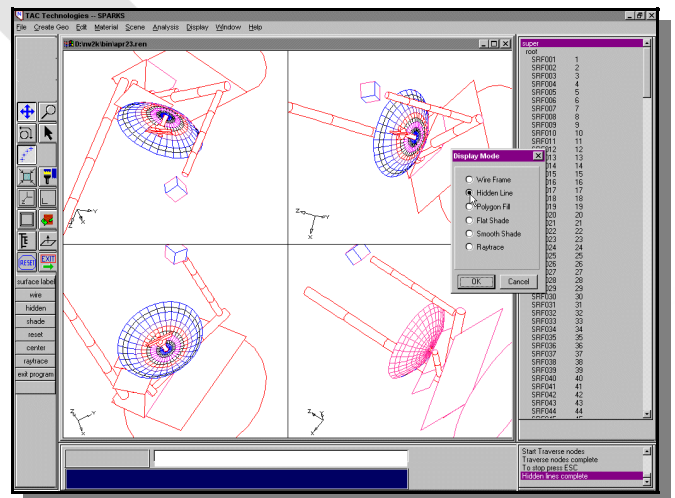
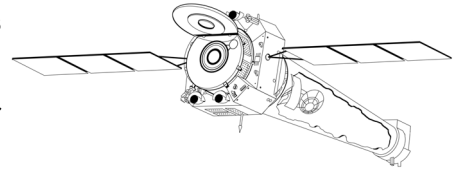
- *Calculates View/Interchange factors*
- *Calculates Direct and Indirect energy factors*
- *True geometric surface shapes*
- *Diffuse, specular, and percent specular material properties*
- *Angular dependent properties*
- *Spinning surfaces*
- *Articulating surfaces*
- *Nodal Sets*
- *Independent surface properties on each side of surface*
- *Variable planetary properties*
- *Multiple orbit orientation options*
- *Sun-locked surfaces*
- *Orbital maneuvering*
- *Transmittance, translucence, and critical angle calculations*
- *Absorbing/Participating media*
- *22 true surfaces types*
- *Divergent or collimated solar source*
- *Fully supported commercial code*

For decades, NEVADA has been trusted to perform the most mission critical radiation analysis, more than any other radiation code. Everything from communication satellites, interplanetary missions, to high-vacuum contamination analysis have been calculated with NEVADA. The basic package comes with a model builder/viewer, solvers, and postprocessor for input into SINDA.

The model viewer has multiple display modes, including realistic model rendering with bitmapped texture files. Leading CAD packages such as PATRAN have interfaces that work directly with NEVADA. It also seamlessly integrates with FEMAP based SINDA/ATM.

While other radiation tools *may* have features such as true curved surfaces or a divergent solar source, only NEVADA offers such advanced options as variable albedo and Earthshine, 4 dimensional angular dependant properties, and transmittance with refraction and critical angle calculation. There are never any simplistic assumptions or unrealistic approximations made.

From simple view factor calculations to complex environmental orbital heating NEVADA has unmatched capabilities that you will never outgrow.



Four view model building

Since 1974.

## Available in three different packages to suit companies and budgets of all sizes

- NEVADA REF—Basic Radiation Exchange Factor calculations
- NEVADA EHL—All the features of NEVADA REF plus the Environmental Heat Load module
- NEVADA Pro—Full package with a host of advanced features

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