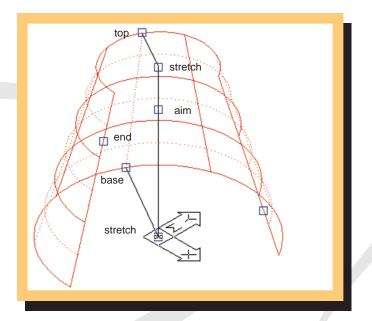
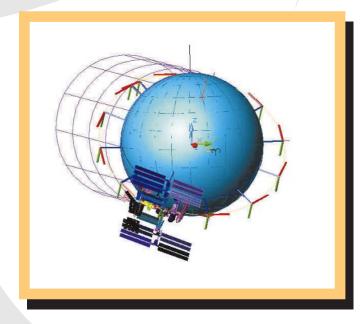


## **C&R TECHNOLOGIES**



RadCAD<sup>®</sup> custom surfaces stretch with the mouse, accurately represent the true geometry, snap on to CAD drawings, and are rapidly solved



Full orbit definition and viewing

RadCAD<sup>®</sup> is an optional module of C&R's Thermal Desktop<sup>®</sup>. RadCAD<sup>®</sup> calculates form factors or radiation exchange factors ("RADKs") for input to C&R Technologies' SINDA/FLUINT and similar thermal network analyzers. It also calculates absorbed direct and indirect environment fluxes.

## FEATURES

- Performs calculations using either Monte Carlo raytracing or advanced radiosity methods.
- Run amazingly fast due to proprietary advances in ray-tracing methods along with other innovations.
- Enables concurrent engineering for thermal analysts by providing full access to CAD-based geometry and CAD model building without sacrificing good thermal modeling practices.
- Imports and exports IGES and STEP CAD geometry.
- Uses CAD geometry directly, or accepts snap-on thermal surfaces.
- Stretch and reshape surfaces directly on the screen in addition to traditional form-based inputs.
- Facilitates model verification by graphically displaying active side and surface property information.
- Provides true curved geometric surfaces for speed and accuracy: spheres, cones, etc., avoiding thousands of tiny facets.
- Handles specular and diffuse surfaces.
- Accepts angle-dependent properties.
- Easy incorporation of variable model geometry and rotating parts via the use of programmable articulators.
- Fast techniques for spinning surfaces.

## Hot Engineering ... Cool Software™

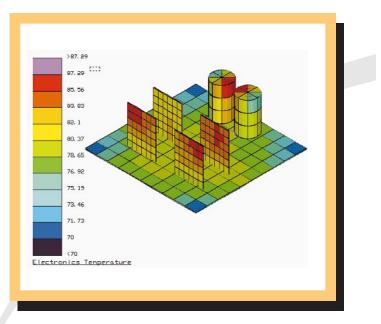
RadCAD®

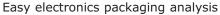


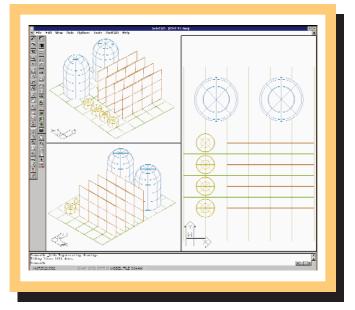
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- Arbitrary symmetries using mirrors.
- Full orbit plotting package includes basic and Keplerian orbit visualization.
- Automatic restart determination.
- Imports and exports TRASYS, TSS, and STEP-TAS geometric and optical property data.
- Imports Nevada<sup>™</sup> files.
- Postprocesses RADKs, heat rates and fluxes, and SINDA temperatures for fast interpretation and impressive presentations.
- Innovative analysis groups offer speed savings and easy model manipulation.
- Optical property aliases help in database management and design comparisons.
- User-defined symbols and expressions for spreadsheet-like parametric modeling.
- Dynamic link to SINDA/FLUINT for on-the-fly recalculations and access to logic, parametrics, optimization, statistical design.
- Easy to use tool bars provide quick access to RadCAD commands.
- Extensive CAD functions make model building fast and effective: 

   Boolean, revolved, extruded surfaces
   Layer management
  - Multiple port views with store/recall
    Snap on entity building Drag and Drop model editing • User-defined light sources
    Wireframe, hidden, and rendered views.
- Multiple undo command.
- Exploits inexpensive PC platforms.
- Incredibly easy to learn and use with the assistance of step-by-step tutorials.
- Also available: FloCAD<sup>™</sup> for convection and flow network models.







Multiple view model generation and post processing

## C&R TECHNOLOGIES

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