

OpenSat



Satellite Training System

The Space-Based Infrared System (SBIRS), part of the United States' national missile defense system, uses two constellations of satellites (called "SBIRS High" and "SBIRS Low") to detect and track adversary missile launches. In order for this system to be most effective, the satellite operators need to know how to respond quickly, efficiently, and - above all - correctly to a variety of operational scenarios.

Cybernet Systems Corporation is developing a distributed, graphical, customizable training simulator to support these objectives. The system incorporates several Cybernet products, including OpenSkies™ networking technology and the CNS Foundation™ 3-D graphics engine. The training system features:

- Tools for instructors to build custom training scenarios,
- A flexible data-driven model for simulating a variety of operational scenarios,
- Immersive 3-D view of satellites, so that students can see the effects of their commands on the simulated satellite,
- Networked, distributed student workstations that allow a team of students to cooperate on the same scenario, even when they are stationed in different cities.
- Training consoles mimic actual operational environment so that lessons learned with the training system are directly applicable to real operations.

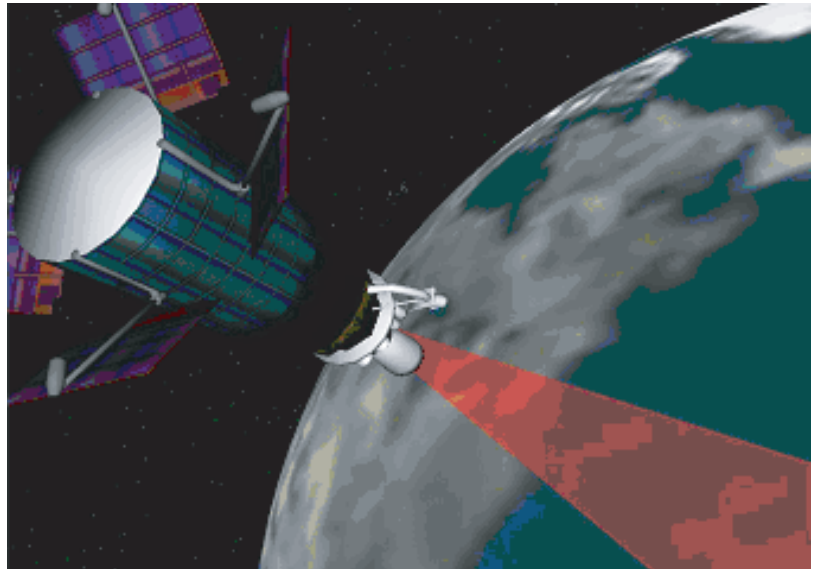


Figure 1: Satellite Trainer Graphical Display