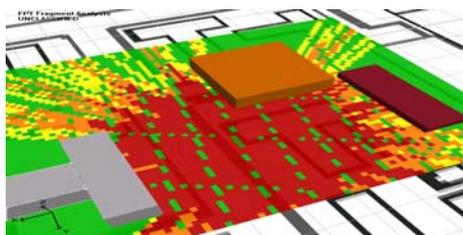
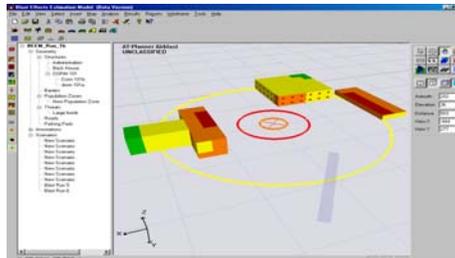


## Blast Effects Estimation Model (BEEM)

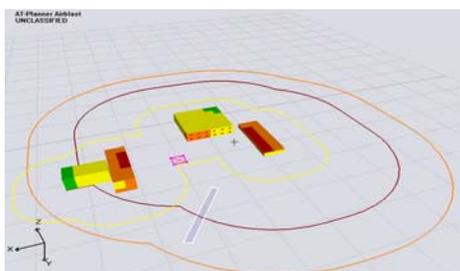
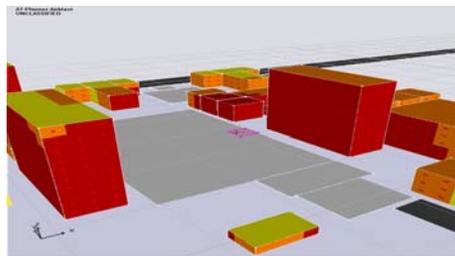
BEEM is a program that models the effects of various types of explosive devices and shows the degree of damage to personnel and buildings nearby. BEEM is based on simplified engineering models that allow for quick analysis of several different explosive threat scenarios.

BEEM is a Windows program with an easy to use and intuitive 2D/3D graphical user interface. This allows users to build a 3D mission scene quickly and efficiently. The user is then able to perform threat analyses of a facility or site to determine the effects of explosives and shrapnel on people and buildings.



BEEM is able to perform a fragment hazard analysis for population zones. This is useful in determining the effects of an improvised explosive device such as a pipe bomb.

BEEM is able to estimate the explosive effects on building component, windows and personnel injury from an air blast caused by a terrorist weapon. This enables the user to determine the damage that a building or individual would sustain from a specified threat.



A particularly useful feature of BEEM is the ability to automatically draw multiple perimeters clearly showing the levels of damage from a specified threat. BEEM can also create custom perimeters to illustrate the requirements of DoD minimum construction standards.

BEEM was designed in such a way that new plug-in program components could be added easily, and it is thus well suited to incorporate the latest available research and development. These upgrades could include improved modeling of new and current threats, updated terrorist methodologies, improved damage estimation, and building component retrofit design. This provides security planners and building designers with improved tools to help them plan the best location and design to protect people and buildings from terrorist threats.

BEEM version 1.0 is targeted for release April 2003. It has demonstrated itself as a stable program through out alpha and beta testing and has received good reviews from beta testers. The BEEM Program is limited distribution, critical technology.



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