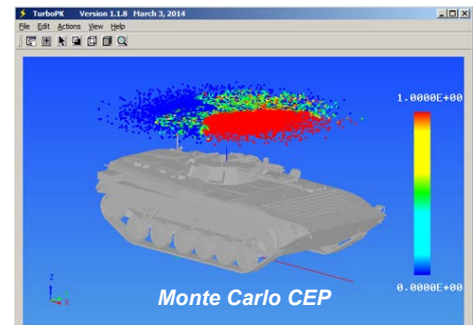
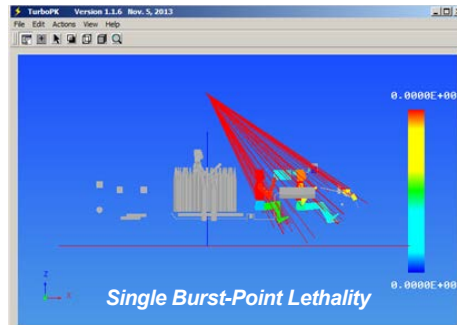
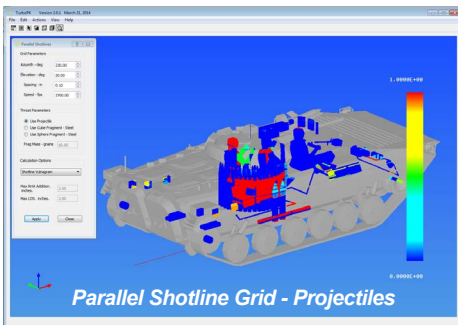


## TURBOPK – SURVIVABILITY ANALYSIS FOR DESIGN AND ENGINEERING



### BACKGROUND

TurboPK is a fast, powerful computer survivability/vulnerability analysis program that is used to simulate and analyze kinetic energy (KE) weapons effects, including armor-piercing projectiles, fragments from exploding munitions, and air blast. The program runs on both Windows and Linux platforms and features a clean and easy-to-use interface, enabling most new users to be performing full analysis work with less than an hour of instruction.

From the ground up, TurboPK was built for speed. Calculations that once took hours can now be performed in mere minutes or even seconds, providing analysts and decision-makers with the flexibility to explore many “what if” scenarios. To find out more about TurboPK, or to get your free trial copy, visit [www.turbopk.survice.com](http://www.turbopk.survice.com).

### PRINCIPAL USERS:

TurboPK puts survivability analysis into the hands of a wide variety of users, including:

- Equipment designers
- Field test engineers
- Warhead designers
- Government Program Managers
- Safety analysts

### KEY FEATURES AND OPTIONS:

Using probability of kill ( $P_K$ ) as a design parameter, TurboPK can accommodate thousands of scenarios with interactive response times. Key features, options, and applications of the program include:

- Optimization of warheads and armor
- ActiveX automation interface (e.g., for use with MATLAB)
- Single-shot fragment or projectile fields for:
  - »  $P_K$
  - » Required amount of rolled homogeneous armor (RHA)
  - » Impact speed or mass on vulnerable components

- Single-shot analysis
- Point-burst studies
  - » Rayleigh distributions (circular error probable [CEP])
  - » Fixed height-of-burst (HOB)
  - » Burst-point grid (mean area of effectiveness)
  - » Single point-burst analysis
  - » Batch operations
- Blast overpressure estimation with  $P_K$
- Personnel injury  $P_K$
- Shaped charge  $P_K$ .