

Technology Title: Real Time High-Speed 3 Dimensional Modeling (RTH3M)

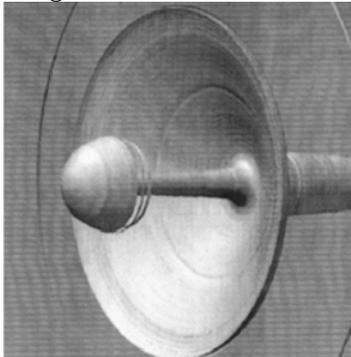
Contact information:

Naval Surface Warfare Center
Technology Engagement Office/ORTA
NSWC Crane Division
300 Highway 361
Crane, IN 47522
POC: John Dement
Ph: 812-854-4164
john.dement@navy.mil
Crane_CTO@navy.mil

SYSCOM: NAVSEA

TRL: 3

Image:



ABSTRACT

Abstract #: Modeling, ballistic, projectile, 3D, high-speed, moving object rendering, visualization, capture

Capable of supporting the high speeds required to capture ballistic events, this Real Time High-Speed 3D Modeling (RTH3M) method accurately and expediently models projectiles in 3D. Current projectile modeling methods such as orthogonal X-ray are inaccurate, and often subjective. The RTH3M approach can capture information on an object moving as fast as 10,000 fps, allows 3D modeling to take place as the event is happening, automatically determines the shape, size, and speed of the projectile, and provides a complete 360 view including cavities and surface features. This proven method is applicable to a variety of applications including use with research and testing organizations as well as universities who want a more advanced and accurate method for capturing high-speed projectile test data. [NSWC Crane]

THUMBNAIL

The RTH3M method improves the ability to model ballistic events in 3D. Objects moving as fast as 10,000 fps can be captured, 3D modeling occurs as the event is happening, automatically determines projectile shape/size/speed, and a complete 360-view is provided.