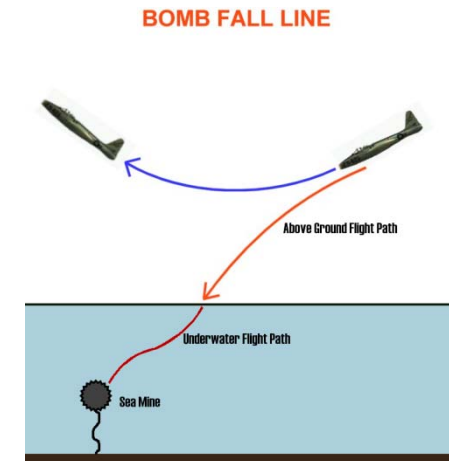# Implementation of 3D Underwater Bomb Trajectory Model (STRIKE35) into Technical Decision Aid for Rapid Clearance of Large Areas of Mines
FY14-FY15

Peter C. Chu
Naval Postgraduate School

Objectives

- Implementation of STRIKE35 into tactical decision aid through the expert system for operational use.

STRIKE35 for prediction of underwater bomb trajectory for mine neutralization

Technical Approach

- On the base of 6 DOF model, STRIKE35 has been established with realistic ocean surface condition, Reynolds number dependent drag and lift coefficients. The model was verified thoroughly with exercise and experimental data.
- This project is a multi-institutional efforts among NPS (Chu, and students), NRL-SSC (Holland, and Calantoni), and Naval Oceanographic Office (Bestch and Frischer).

Accomplishments

- User-friendly STRIKE35 package has been implemented into NRL-SSC bomb strike expert system for MCM operations.

- Two thesis students has been graduated in September 2014.

September 2014