

ROV Target Identification Issues

A. William Evans III, University of Central Florida

The perception and identification of objects in motion has been widely study in the past. In fact, such promising theories as Biederman's Geon Theory for target identification and the Corollary Discharge Theory for perceiving motion have arisen from research in this field. However, much of the research in this area is based on the idea of a stationary viewpoint from an egocentric location.

Unlike soldiers in the past, ROV operators must now locate and make decision about targets based on the images they receive from moving ROVs providing an exocentric viewpoint that lacks some of the natural cues previously provided when viewing an object egocentrically.

To help investigate these new issues, this study will look at the effects ROV motion has on both target acquisition and identification.