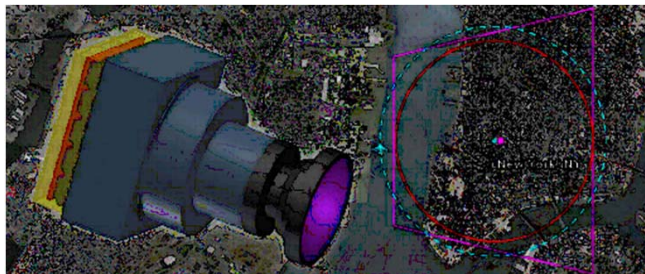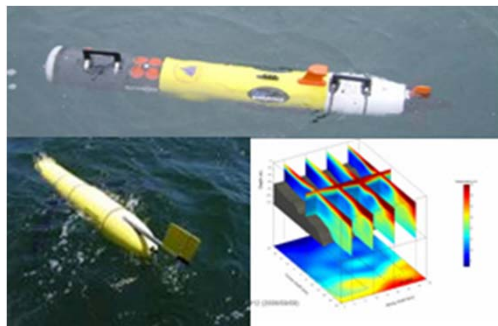# Mine Detection and Localization

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Sensing and sampling are two important aspects in detection and surveillance. Up until now, these two actions are usually taken **_separately and independently_**

Approaches

(1) Integration of ocean and search models
(2) Joint optimization of sensing (mine detection/localization) and sampling (ocean environment)
(3) New algorithm development (e.g., bi-dimensional empirical mode decomposition)

NPS Theses

Yau, J., Localization of surface or near-surface drifting mines in the Persian Gulf, MS in PO/OR, June 2012.

Colpo, K.M., Empirical mode decomposition for the detection and classification of moored mines, MS in METOC, September 2012.

Gipson, J., Joint optimization of UUV sensing and sampling for mine detection, MS in METOC, September 2012.