

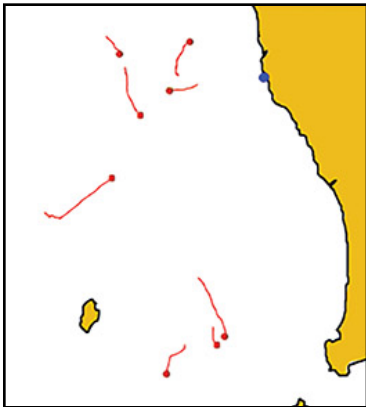
# Augmenting SeaSonde Networks With Ship Detection

**F**rom their inception, SeaSondes have bucked the trend of traditional microwave radar systems. Whereas the latter treat sea echo as clutter and vessel echoes as signal, SeaSonde software for environmental monitoring was designed with the exact opposite in mind.

Now, with SeaSonde real-time vessel detection software, users can have both. Information provided includes real-time vessel position, speed, estimated HF radar cross section and a unique identifier for tracing through time. Detections and position updates are output at user-specified intervals, typically every one to four minutes.



In a network utilizing SHARE™ - enabled frequency sharing, each receiving site running the vessel detection software can provide independent monostatic, bistatic or multistatic detections using transmissions originating from itself and/or other nearby SHARE-enabled SeaSonde Remote Units or bistatic transmitters. With multiple “looks” from different bearings and radial Doppler speeds, multistatic network detections allow for increased vessel position and motion accuracy, larger areas of continuous detections and increased probability of detection during commingling of vessel and sea echoes or changes in vessel speed and aspect. Due to the HF Doppler processing, multiple vessels can be tracked simultaneously, even when in close proximity to one another.



Doppler processing allows multiple vessels to be tracked simultaneously even when in close proximity.

This software package is designed to run in parallel with all other SeaSonde software on the SeaSonde Remote Unit computer and does not affect traditional current or wave measurement processing. Vessel detection software can be used at any SeaSonde operating frequency and performance is subject to local RF noise conditions. Please contact a CODAR representative for more information.