



## Vocabulary: Phased Array



### Vocabulary

- Constructive interference – when two waves add together to yield a wave with larger amplitude than either wave has individually.
  - Waves interact most constructively when they are at the same points in their respective cycles.
- Phased array – a technology that uses several wave emitters to create a beam of constructive interference.
  - Phased array systems typically are used to locate objects (such as with weather radar, aircraft radar, and ultrasound machines) or to strengthen wave signals (such as with TV and radio broadcast signals).
- Phase shift – the time delay between the emission of one wave and another.
- Wave front – a curve drawn on a multi-dimensional wave connecting waves that are at the same point in their respective cycles.
  - For example, a wave front might show the crest or trough of an advancing wave. Each circular crest moving out from a central point source is a wave front. The circles denoting the troughs also are wave fronts.

