WHAT IS THE PURPOSE OF THIS ANTENNA?

This antenna is part of a high frequency (HF) radar system that measures the speed and direction of currents in coastal waters. The continuous observations of surface water flow have several uses. Any floating object will be carried by the currents, which is why U.S. Coast Guard search and rescue operators use HF radar data to make critical decisions when rescuing disabled vessels and people stranded in the water. Scientists use the data for ocean weather forecasts and to understand how water currents transport nutrients as well as pollutants.





Tides, winds, and river flow all play a role in how Chesapeake Bay surface waters move. Maximum flood and ebb tidal currents are typically 1.5 to 2 knots.

