Fog Horn Activation

John Collins FSO 43-MS

Previously, fog signals were usually activated by local sensors. The standard VM-100 fog detector uses the principle of atmospheric backscatter of light to measure the visibility for a given optical path. It consists of a light projector, a receiver, amplifiers, and support circuitry to. The existing VM-100 fog detection system is antiquated, unreliable and inefficient. Spare parts are also extremely limited and no longer being manufactured. There can be false activations caused by cob webs. The VM-100 is shown below.

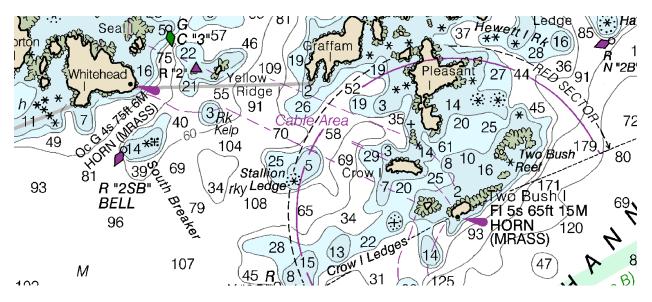


A new system is being implemented that is activated by the mariner's radio, called the Mariner Radio Activated Sound Signal (MRASS). This is similar to the system that pilots use to turn on runway lights at small airports.

To activate a fog signal, click the mic five times and be relatively near the signal. All of the MRASS installations in New England operate on Channel 83A. In other parts of the country Channel 81A is often used. You have to check the local Light List for the Channel outside of New England. The sound signal should activate in less than 10 seconds and stay on for at least 30 minutes.

Currently, most of the MRASS installations are on the East Coast. Eventually most fog signal on US navigable waters will be converted.

The piece of chart 13302, below, shows a couple of MRASS activated stations in Penobscot Bay, Maine. Per the Light List Volume 1, the activation channel is 83A.



The installation of the MRASS system is an on-going project. Many lighthouses around the country already have MRASS installed including the entire Great Lakes region, portions of the west coast and New England. Updates will be shown in the Notices to Mariners.

Massachusetts;

(LLNR 350) Bakers Island Light

(LLNR 295) Cape Ann Light

(LLNR 11440) Gallops Island Light 7

(LLNR 12545) Plymouth Light

(LLNR 11650) Windmill Point Light WP

Rhode Island;

(LLNR 17780) Beavertail Light

Connecticut;

(LLNR 21400) Great Captains Island Light

(LLNR 21340) Greens Ledge Light

(LLNR 21825) New London Ledge Light

(LLNR 20145) North Dumpling Light

(LLNR 21095) Orient Point Light

(LLNR 21290) Penfield Reef Light

(LLNR 21115) Saybrook Breakwater Light

(LLNR 21210) Southwest Ledge Light

New York (Long Island Sound);

(LLNR 26530) Huntington Harbor Light

(LLNR 660) Montauk Point Light

(LLNR 19815) Race Rock Light

A Broadcast Notice to Mariners (BNM) will be issued for each change completed and will be broadcast until the issuance of a chart and Light List correction appears in the current Local Notice to Mariners