

# RCMSAR Station 31

## Standard Operating Procedure for AIS Search Beacon, updated March 2020

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**Background:** The Nautilus AIS Beacon can be used on our Datum Marker Buoy (DMB) during searches. The beacon will transmit its location via AIS and this will show up on our plotter. By recording the initial deployment point of the DMB, the drift trajectory can be estimated. Our initial tests indicated the range of the AIS beacon is approximately 2 nautical miles.

### General Operation:

1. Each crew member should be checked out on the AIS Beacon before using. The check-out will consist of reviewing the manual, demonstrating the use in the Practice Mode and describing the use/procedures in the Rescue mode.
2. **Practice Mode:** this is the mode to use while practicing. In this mode, the AIS beacon will transmit for 30 minutes and then stop transmitting. It must be restarted each 30 minutes. To activate in Practice Mode, press and hold the **Yellow Test Button** for 5 seconds until Yellow Indicator button flashes.
3. **Rescue Mode:** this is the mode to use in an actual rescue event. In this mode, the AIS beacon will transmit continuously until the beacon is turned off. As part of the transmission, the AIS will indicate there is a “man-overboard” on all DSC radios within range.

### Specific Operations:

1. Tape the AIS beacon securely onto the top of the DMB.
2. Press the **Blue Button** (listen or feel click of button) to activate GPS searching.
3. Remove the protective cover (as per manual) and deploy the antenna.
4. Press the **Red Button** (listen for an audible click) and hold for 5 seconds.
  - a. For practice hold the **Yellow Button** for 5 seconds.
5. Deploy the DBM, not the lat/lon in the log, add a way point to the plotter and notify CCG radio via Ch 4a that DBM is deployed with AIS beacon.
  - a. During practice it may not be necessary to notify CCG.
6. Broadcast a Sécurité Message on Ch 16 that (a) a search is commencing and (b) nearby vessels may be receiving a MOB message on their DSC radio.
  - a. Do not broadcast a Sécurité message during practice.
7. Once the search is complete, retrieve the DMB, record the lat/lon and shut off the AIS Beacon by holding down the **Red** or **Blue** Button for 5 seconds.
8. Detach AIS beacon from DMB, flush w fresh water, carefully rewind antenna, secure antenna cover and snap close AIS beacon.

(See reverse for AIS beacon schematic)

## Nautilus GPS Components

