

AIS Messages

John Collins, USCGAux SBOS ADSO-PE

The U.S. Coast Guard and other authorized agencies and organizations have begun transmitting Automated Identification System (AIS) aids to navigation (ATON) messages and marine safety information via AIS.

Unlike regular aids to navigation, the new "AIS ATON" may appear to be coming from an aid to navigation - but that ATON may or may not be physically present. To assist you, NOAA will add new symbols to upcoming affected NOAA nautical charts, depending on which variant of AIS ATON is used.

Three variants of the new "AIS ATON"

Real AIS ATON: AIS signal is transmitted from a physical aid to navigation.

NOAA charts will depict the AIS signal with a magenta radio circle centered on the position circle of the aid.



Because NOAA ENC are primarily used in conjunction with systems that are integrated with both radar and AIS, there is no specific ENC depiction.

Synthetic AIS ATON: Signal is from an AIS base station from another location, but broadcasts the AIS ATON where a physical AID exists.










NOAA charts will depict the AIS signal with a magenta radio circle centered on the position circle of the aid.



Because NOAA ENC are primarily used in conjunction with systems that are integrated with both radar and AIS, there is no specific ENC depiction.

Virtual AIS ATON: Depending on the purpose of the virtual aid, NOAA charts and Electronic Chart Display and Information System (ECDIS) displays of ENC will use the depictions shown below. Non-ECDIS chart displays may present ENC data differently.

Purpose of Virtual Aid	Definition	ECDIS Portrayal	Paper Chart
------------------------	------------	-----------------	-------------

			Portrayal
North Cardinal	A virtual object that indicates navigable water lies northwards	 VAS	
East Cardinal	A virtual object that indicates navigable water lies eastwards	 VAS	
South Cardinal	A virtual object that indicates navigable water lies southwards	 VAS	
West Cardinal	A virtual object that indicates navigable water lies westwards	 VAS	
Port lateral (IALA A)	A virtual object marking the port side of a channel	 VAS	
Starboard Lateral (IALA A)	A virtual object marking the starboard side of a channel	 VAS	
Port lateral (IALA B)	A virtual object marking the port side of a channel	 VAS	
Starboard Lateral (IALA B)	A virtual object marking the starboard side of a channel	 VAS	
Isolated Danger	A virtual object marking an isolated danger	 VAS	
Safe Water	A virtual object marking safe water	 VAS	
Special Purpose	A virtual object used to mark an area or feature referred to in nautical documents	 VAS	
Emergency Wreck Marking	A virtual object marking a wreck	 VAS	

The Coast Guard announced that AIS ATON stations will broadcast their presence, identity (9-digit Marine Mobile Service Identity (MMSI) number), position, and status at least every three minutes or as needed. Local Notices to Mariners will announce the exact content, location, and times of these broadcasts. NOAA charts will add the AIS ATON locations as the charts move through normal rotations for updates.