



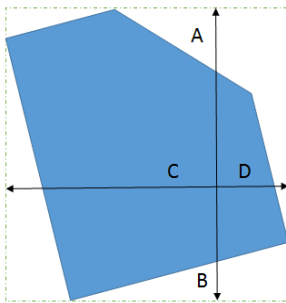
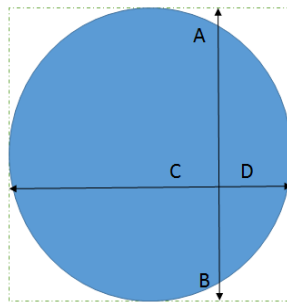
USCG Electronic Aids-to-Navigation (eATON) Station Addendum

Details of the eATON Station

If synthetic or virtual, denote the MMSI's of the source eATON transmissions.

Parameter	Values	Description & Default Values
Make & Model: FCC Approval #: Retailer:		Provide the make, model, FCC approval number (denoted on the backside label), and, the retailer of the device.
AIS Station Type		Denote AIS AtoN station type & whether dual or single channel (see IALA A-126).
Power Main: Source Back-up:		Denote main & back-up power source (i.e. electric utility, on-site generator, solar panels, rechargeable battery, universal power supply, back-up generator).
Transmit Power		Denote transmit power if defined by manufacturer. Default: 12.5 W.
TxCapability		Denote whether the station can transmit on other channels, other than AIS1/2.
Receive On-times		Denote receiver on times. Default: Not Applicable (N/A).
Type of Electronic Position Fixing Device (EPFS)		Denote the EPFS used for the transmitted position. Default: Not Acceptable Fixed, synthetic or virtual AtoN shall provide a position that is either published (e.g. Light List); survey derived, or, at minimum the mean of of at least 500 RAIM GPS position reports spread across a 24-hour sampling period.
RAIM Capability		Denote whether the EPFS has Receiver Autonomous Integrity Monitoring (RAIM) capability. Default=0=RAIM Not Used.
UTC Synchronization		Denote direct, indirect or semaphore time synchronization. Default: Direct.
Assigned Mode Flag		Denote station operating mode: 0=Station operating in autonomous & continuous mode; 1=Station operating in assigned mode. Default=Autonomous & Continuous.
Access Scheme		Denote the AIS access scheme used by this station. If using FATDMA denote the slot used. Note, the USCG does not reserve FATDMA slots in the USA.

eATON Encoding and Position

USCG AtoN Light List Name & Nr.		Denote the AtoN Name and Number as it does/will appear in USCG Light List.
Type of AtoN		Denote the nature & type of AtoN (Codes 0-31, see IALA A-126). Note, not the same as AIS ATON Station Type 1-3. Default=Type Not Specified.
AtoN Status		Denote status indicators supported; default=0000000=Not Specified. For status pages, see IALA A-126.
Latitude & Longitude of the Broadcast Location	LATITUDE: LONGITUDE:	The latitude & longitude WGS84 position of the station broadcast antenna; expressed in 1/10 000 of a minute of arc (i.e. 31.00001'N, 121.00001'W). * For Virtual or Synthetic AIS ATON, provide additional position(s), type & name(s) in the 'Additional Details' section.
Dimension / Reference for Position of Broadcast Antenna	A= B= C= D= = Always True North	  Default: A=B=C=D=0 used only for a Reference Point; for others ABCD>0, and should denote the rectangular area of the physical ATON or the obstruction the eATON is marking.
Msg 21 Report Rate & Channel		Denote the msg 21 report rate and the channels. If this AIS ATON station is solely deployed for eMSI/virtual/synthetic ATONs broadcasts, thence just 1/day.
Off-Position Threshold		The off-position monitoring threshold for a floating AIS ATON should be set to: = $(\sqrt{(\text{Chain Length}^2 - \text{Water Depth}^2)} * 110\%)$ meters.
Transmit Antenna Height (ASL)		The height of the broadcast antenna in meters above sea level (ASL).

Other Transmitted Messages

List other AIS messages (msg) to be transmitted, their details, report rate(s), and additional comments. 'Other' entries should be explained in the CONOPS. Application Specific Messages (AIS messages 6, 8, 25 or 26) shall include their designated area code (DAC), function identifier (FI), and, version number (denoted at www.e-navigation.nl/asm); and, their report rate (that preferably alternates on AIS 1&2), but, not more than once/minute or less than once every 6 min. Message 12 or 14 may only be used for unique safety related purposes, using pre-formatted text (include text in the 'Additional Details' section).

Msg#	DAC#	FI#	Ver.	Report Rate	Channel(s)	Msg Name and Additional Comments.

Additional Details | Concept of Operations (CONOPS)

How & who will be configuring, deploying, monitoring, maintaining & using the station, i.e. (1) standard presentation interface (PI) sentences (i.e. IEC 61162 series); (2) standard AIS AtoN configuration messages; and/or (3) proprietary sentences or binary configuration messages; & whether via the AIS VHF Data-Link (VDL) and/or by other means. Its concept & period of operation, etc. Whether the station will also broadcast Virtual ATONs, and, the total number and position(s) of each one.

USCG RDC ASMs						
MSG #	DAC#	FI#	Ver.	Rpt Rate	Channel(s)	Msg Name
8	367	33	3	1 min	AIS 1 & 2 Simul	Environmental Message
8	367	22	2	3 min	AIS 1 & 2 Alt	Geographic Notice
8	367	29	1	3 min	AIS 1 & 2 Alt	Linked Text
IMO ASMs						
MSG #	DAC#	FI#	Ver.	Rpt Rate	Channel(s)	Msg Name
6	1	23		3 min	AIS 1 & 2 Alt	Area Notice
6	1	30		3 min	AIS 1 & 2 Alt	Text Description
8	1	22		3 min	AIS 1 & 2 Alt	Area Notice
8	1	31		3 min	AIS 1 & 2 Alt	Met and Hydro Data
8	1	26		1 min	AIS 1 & 2 Simul	Environmental
8	1	29		3 min	AIS 1 & 2 Alt	Text Description
EU ASMs						
MSG #	DAC#	FI#	Ver.	Rpt Rate	Channel(s)	Msg Name
6	200	42	0	3 min	AIS 1 & 2 Alt	Geographic Notice
8	200	24		3 min	AIS 1 & 2 Alt	Water Level Message
8	200	25	0	3 min	AIS 1 & 2 Alt	Present Bridge Clearance
SLSDC ASMs						
MSG #	DAC#	FI#	Ver.	Rpt Rate	Channel(s)	Msg Name
6	316	1		1 min	AIS 1 & 2 Alt	Weather Station Message
6	366	1		1 min	AIS 1 & 2 Alt	Weather Station Message
6	316	1		1 min	AIS 1 & 2 Alt	Wind Information Message
6	366	1		1 min	AIS 1 & 2 Alt	Wind Information Message
6	316	1		3 min	AIS 1 & 2 Alt	Water Level Message
6	366	1		3 min	AIS 1 & 2 Alt	Water Level Message

Final approval is conditional upon (VHF-FM 161.975 MHz and 162.025 MHz) proper licensing or authorization by either the Federal Communications Commission (FCC) or National Telecommunications Information Agency (NTIA)

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AIS ATON operations shall be ceased immediately whenever this station(s) is not operating as stated in this addendum; and, the approving official and cgnav@uscg.mil shall be notified.