
United States Coast Guard Office of Navigation Systems



"We Help Mariners Get There"

New AIS Rules and Requirements

Jorge Arroyo | Navigation Systems | U.S. Coast Guard | Washington, DC

- **New AIS Rule**

- **Timeline**

- **Noteworthy Changes**

- **Because of Comments Received**

- **New AIS Requirements**



AIS Rulemaking Timeline [NPRM Proposed Changes in **Bold-type**]

- ✓ 07/01/03 published Temporary Interim Rule and Request for Comments
- ✓ 10/23/03 current AIS requirement (33 CFR 164.46)
- ✓ 07/01/03-01/09/04 sought AIS expansion comment
- ✓ 10/31/05 notice expansion of AIS to **all** waters
- ✓ 12/16/08 NPRM ... 4/15/09 comment deadline
 - Commercial self-propelled vessels of ≥ 65 feet
 - No exclusions, i.e. fishing and small passenger vessels**
 - Towing vessels ≥ 26 feet & >600 hp
 - Vessels with ≥ 50 passengers (vice 150 for hire)
 - **Hi-speed passenger vessels (≥ 12 pax)**
 - **Certain dredges & floating plants, &**
 - **Vessel moving certain dangerous cargoes**

AIS Meetings & Comment Period...

- **Public Meetings**

- **Washington, DC – March 5th, 2009**

- **30+ attendees, 11 commenters**

- **Seattle, WA – March 25th, 2009**

- **30+ attendees, 12 commenters**

- **Comment period closed: April 15th, 2009**

- **80+ submissions, 300+ comments regarding AIS**

Noteworthy AIS Provisions...

- **Applies to all navigable waters, no exceptions.**
- **Spells out ‘effective operating conditions’ which now includes the:**
 - **ability to reinitialize the AIS**
 - **ability to access AIS from conning position**
 - **accurate broadcast of an official MMSI**
 - **accurate input, upkeep, and updating**

No changes to what was proposed

Noteworthy AIS Provisions...

- **AIS does not relieve you of sound, lights or shapes nor radiotelephone requirements**
- **AIS (& assoc. sensors) shall remain on when:**
 - **Underway, at anchor, and at least 15 min. prior to unmooring**
 - **Except if it compromises safety or security**
 - **Securing it must be logged & reported to USCG**
- **Inoperative AIS is now a reportable deficiency**

No changes to what was proposed

Noteworthy AIS Rule Changes...

- **AIS is primarily for the person controlling the vessel, who must maintain a periodic watch**
 - **Use of AIS mobiles from ashore or on unmanned vessels is prohibited**
- **AIS messaging must be in English & solely for navigation safety information**
 - **Allows the use of Application Specific Messaging, that have been adopted by IMO/IALA, but, only one/min.**

Noteworthy AIS Rule Changes...

- **Type-approved Class B** be allowed, but, not recommended on vessels that are:
 - highly maneuverable
 - navigate at high speed
 - routinely operate in congested waters, or
 - operate in close-quarter situations

Allows the use of lower cost AIS Class B devices on: dredges, fishing boats, and vessels certificated <150 passengers that do not operate in a Vessel Traffic Service or at speeds of >30 kts



Noteworthy AIS Rule Changes...

- **Individual yearly deviations/waivers permissible, but, only for vessels:**
 - **that solely operate within a very confined area**
e.g. shipyard, fleeting area, etc.
 - **on short & fixed schedules**
e.g. a bank-to-bank river ferry service
 - **otherwise not likely to encounter other AIS users**

Extends the deviation period to 5-years and broadens it to vessels on which AIS would be impractical, i.e. lack of power, open exposed conning position, display requirement on vessels allowed to use AIS Class B

Effective March 2nd, 2015*, these commercially self-propelled vessels, operating on U.S. navigable waters, must have a properly installed, operational Automatic Identification System (AIS) no later than March 1st, 2016

- vessels of 65 feet or more in length
- towing vessels of 26 feet or more in length and more than 600 hp
- vessels certificated to carry more than 150 passengers
- dredges that operate near a channel
- vessels engaged in the movement of certain dangerous cargo, flammable or combustible liquid cargo in bulk



Effected Vessels by Type	2003		2015	Total Vessels
	SOLAS	Domestic		
Foreign ship >65'<300GT		1,119		1119
<i>Fishing</i>	1	-	2,906	2907
<i>Towing</i>	13	2,212	1,429	3654
<i>Passenger</i>	81	171	288	540
<i>Cargo</i>	154	77	247	478
<i>OSV</i>	55	432	151	638
<i>MODU</i>	1	-	31	32
<i>Industrial</i>	21	11	220	252
<i>Research</i>	10	11	54	75
<i>School</i>		5	10	15
<i>Tank Ships</i>	102	15	35	152
<i>Unknown</i>		16	134	150
<i>Unclassified</i>		13	326	339
<i>Dredges</i>		-	17	17
U.S. Total	438	2,963	5,848	9,249
Total	4,520		5,848	10,368

Current AIS Prices



Furuno FA150 AIS Transponder
 Product ID: FU1150-15 MFG ID: FA150

Furuno FA150 is a shipborne Universal AIS (Automatic Identification System) Transponder capable of exchanging navigation and ship data between own ship and other ships or coastal stations.

Availability: Usually ships within 24 hours

List Price ~~\$4,495.00~~ **Our Price \$3,999.95**

Qty: 1 **ADD TO CART**

100% CERTIFIED BRAND NEW

Class B: \$499 – \$1,700
Class A: 2,900 – \$3,990

Milltech Marine Online Store



ACR Nauticast2 Class A AIS Transponder

The ACR Nauticast2 AIS Transponder is specifically designed to fulfill non-ferrous vessels. This product is packaged in an AIS transponder, VHF & GPS antenna kit. An ECDIS port adapter is included with your ECDIS display or marine plotter can be ordered for use with 12 or 24

ACR-2609 **\$2,999.00** **Add to Cart**



ComNav Voyager X3 Class A AIS Transceiver

SKU: 48523 MPN: 21410002 Weight: 9.30 LBS

RETAIL: ~~\$2,649.00~~ (YOU SAVE \$574.50)
 Sale Price **\$2,074.45**

ONLY 1 LEFT

ADD TO CART

Free UPS Ground Shipping
 No Sales Tax (outside of NJ)
 Easy 30 Day Returns



AIS-1000 Class B "Send and Receive" AIS Transponder

WEST MARINE **NEW!**

\$699.99 USD

Add To Cart >>

+ Add AIS-1000 Class B "Send and Receive" AIS Transponder To Project List



FURUNO FA30 BLACK BOX AIS

List Price: ~~\$1,102.50~~
Our Price: \$805.00
 You Save: **\$297.50 (27%)**

Humminbird TX AIS Class B Receiver

RRP: ~~\$559.99~~
Your Price: \$448.82
 (You save \$111.17)

SKU: 409310-1
 Brand: **Humminbird**
 Condition: New
 Weight: 5.00 LBS

* **Extended Warranty:**
 No Extended Warranty
 2 Year Warranty 39.99
 3 Year Warranty 59.99



Simrad AI50 AIS Identification

Product ID: SM1139-00

Simrad AI50 AIS Automatic Identification System (AIS) Transponder and be seen. Be in control. Simrad AI50 AIS transmits a digital signal that conveys your boat's identity, speed, heading, and position to other vessels in your area. Has now received FCC approval for the US.

Availability: Usually ships within 24 hours

List Price ~~\$1,627.00~~ **Our Price \$1,248.95**

Qty: 1 **ADD TO CART**

100% CERTIFIED BRAND NEW

Total AIS Costs	2003		2015	
	Class A	Class B	Class A	Class B
Unit	\$7,000	\$700	\$3,230	\$700
Installation	\$2,000	\$210	\$969	\$210
Operation & Maintenance	\$250	\$250	\$250	\$250
Training	\$110	\$110	\$110	\$110
Individual Cost	\$9,250	\$1,160	\$4,449	\$1,160
Total Costs	\$49.2 M		\$20.5 M	



Automatic Identification System

- What is AIS?
- How AIS Works
- Types of AIS
- AIS Messages
 - AIS Base Station Report
 - Class A Position Report
 - Class A Static & Voyage Data
 - Class B Reports
 - AIS ATON Report
 - Long Range AIS Report
- Nationwide AIS (NAIS)
- AIS Requirements
- Reference Information
 - AIS Encoding Guide & LOCODES
 - Frequently Asked Questions

Mission Areas

- Global Positioning System
- Nationwide DGPS
- Nationwide AIS (NAIS)
- AIS (Overview, Messages, etc.)
- Long Range Identification and Tracking
- Local Notice to Mariners
- Light Lists
- Civil GPS Service Interface Committee
- LORAN C (archive)

Subscribe / Report (free)

- Local Notice to Mariners (Weekly)
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AIS FREQUENTLY ASKED QUESTIONS

1. What is AIS?
2. What is an MMSI, how do I get one, and how do I program my AIS?
3. What is the AIS rule and are there alternatives to the rule for small businesses?
4. Do AIS Class B devices meet current USCG AIS carriage requirements?
5. How does AIS help to increase security (and what is NAIS)?
6. When must AIS be in operation?
7. Does the installation of the AIS require additional equipment in order for the AIS to operate properly?
8. Will it be necessary to have electronic navigational charts for use with the AIS?
9. Are fishing vessels subject to AIS carriage, and, is onboard Vessel Monitoring System (VMS) an acceptable substitute for the AIS?
10. Why have some AIS units stopped broadcasting valid position reports?
11. Why am I unable to see an AIS vessels' name or other static information (dimensions, call sign, etc.)?
12. Why do I sometimes see more than one vessel with the same MMSI or vessel name (i.e. NAUT)?
13. I just purchased and installed an AIS Class B, will AIS Class A user 'see' me?
14. Do AIS Class B devices meet current USCG AIS carriage requirements?
15. Is the USCG considering expanding AIS carriage to other vessels or outside of VTS areas?
16. How can I get a copy of an AIS presentation I saw (or heard about it) that was given at...
17. Where can I get AIS data?
18. Reserved for future use.
19. What is AIS Channel Management?
20. Can I use my AIS in an emergency or for distress messaging?
21. Is the Coast Guard broadcasting AIS Aids to Navigation Reports?
22. Have an AIS question not answered here?

**Class A/B
Comparison
Table**

1. What is AIS? Per 47 CFR §80.5, AIS is a maritime navigation safety communications system standardized by the International Telecommunication Union (ITU) and adopted by the International Maritime Organization (IMO) that provides vessel information, including the vessel's identity, type, position, course, speed, navigational status and other safety-related information automatically to appropriately equipped shore stations, other ships, and aircraft; receives automatically such information from similarly fitted ships; monitors and tracks ships; and exchanges data with shore-based facilities. [Read more](#) on what it is, how it works, what it broadcasts, and, the messages it uses, etc.



Comparison Table of AIS mobile devices

Shipboard AIS	Class A	Class B/SO	Class B/CS
Transmit Power (Watts)	12.5 W / 2 W (low-power)	5 W / 2 W (low-power)	2 W
Primary Access Scheme	Self-organizing Time-Division Multiple Access (SOTDMA)	SOTDMA	Carrier-sense TDMA non-competing with SOTDMA units
Position Reporting Rate	Either every 2, 3 ½, 6 or 10 s based on speed and course change. Every 3 min. when ≤ 3 kts.	Either every 5, 15 or 30 s based on speed (2-14, 14-23, >23 kts) Every 3 min. when ≤ 2 kts.	Every 30 s Every 3 min. when ≤ 2 kts.
Static Data Reporting Rate	Every 6 min	Every 6 min	Every 6 min
Frequency Range	25 kHz bandwidth between 156.025 MHz to 162.025 MHz	25 kHz bandwidth between 156.025 MHz to 162.025 MHz	25 kHz bandwidth at minimum between 161.500 MHz to 162.025 MHz
Dedicated DSC Receiver for Channel Management	Yes	Yes	Time-shared
Position Source / WGS-84 to 1/10,000 of minute of arc	Internal Global Navigation Satellite System & connection to an External Electronic Positioning System (EPFS)	Internal GNSS	Internal GNSS
Digital Interfaces	2 Input-Output & Multiple Presentation Outputs	Optional	Optional
Display	Multiple Keyboard Display (MKD)	MKD	Optional
Safety Text Messaging	Receive & Transmit	Receive & Transmit	Transmit Optional, and only with non-alterable pre-configured messages
Application Specific Messaging	Receive & Transmit	Receive & Transmit (up to 3 slots)	Receive Optional, cannot Transmit
Transmit Data	All	No Rate of Turn, Navigation Status, Destination, ETA, Draft, or IMO#	No Rate of Turn, Navigation Status, Destination, ETA, Draft, or IMO#
International Electrotechnical Commission (IEC) Certification Standard	IEC 61993-2	IEC 62287-2	IEC 62287-1





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Mission Areas

- Global Positioning System
- Nationwide DGPS
- Nationwide AIS (NAIS)
- AIS (Overview, Messages, etc.)
- Long Range Identification and Tracking
- Local Notice to Mariners
- Light Lists
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**See Our
AIS FAQ #15
For More Info on
AIS Regulations...**

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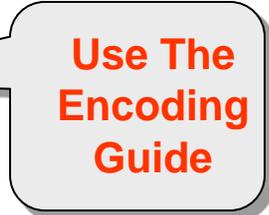
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AUTOMATIC IDENTIFICATION SYSTEM U.S. ENCODING GUIDE



AUTOMATIC IDENTIFICATION SYSTEM is a valuable navigation safety radio communication tool. However, its usefulness is undermined by the broadcast

of inaccurate, improper or outdated data. This Encoding Guide is intended to assist mariners in the proper entry of AIS data. Mariners are reminded that U.S. regulation requires that each AIS be maintained in effective operating condition, which includes accurate input and upkeep of AIS data parameters. Failure to do so may subject a vessel to civil penalties; to avoid such action AIS Users should ensure their system is up-to-date and encoded according to the guidance contained here.

Dynamic Data...should be provided via systems that are type-certified, properly installed, maintained and operational¹

- External Electronic Positioning Fixing System (EPFS), Heading, and Rate of Turn (ROT) data should be integrated into the AIS, per SOLAS Regulation V/19.2, on vessels on international voyage (SOLAS-certificated) of 150 gross tonnage or greater; of 300 gross tonnage or greater, and of 50,000 gross tonnage or greater, respectively. An external EPFS is **not** required on vessels that solely operate domestically.
- Pilot Plug, on vessels required to embark pilots, **must** be readily available and easily accessible from the primary conning position of the vessel and permanently affixed (not an extension cord) and adjacent (within 3 feet) to a 120-volt 50/60 Hz AC power receptacle (NEMA 5-15).

Safety-Related Text Messaging...should be short, concise, and used only to exchange pertinent navigation safety-related information

- AIS safety-related text messages (SRM) must be in English and used solely to exchange navigation safety information.
- Although not prohibited, AIS text messaging **should not** be relied upon as the primary means for distress (MAYDAY) or urgent (PAN PAN) communications.⁴
- Keep SRM concise and as short as possible (less than 90 characters). The use of abbreviations is acceptable and highly encouraged; see the Notice to Mariners, USCG Local Notice to Mariners, Light List, and U.S. Nautical Chart No. 1 for a listing of common abbreviations.
- Testing or repair facilities, when conducting on-air testing, should also periodically broadcast an AIS SRM stating: "TEST BCSY". Repair related testing should be kept to a minimum and **not** exceed one hour per day.

Static Data...should reflect the vessel's official radio license or documentation, be inputted at installation, and be password protected

- Names exceeding 20 characters (the parameter limit) should be truncated, **not** abbreviated, and include all unique distinguishing characters. For example, the tug JOLLY ROGER OF THE SEA 123456 should be inputted as JOLLY ROGER 0-123456. Names **should not** include vessel type precursors, e.g. F/V, M/V, MV, OSV, P/V, REC, S/V, TUG; except public vessels, i.e. CG, CBP, USN, LAPD, NYFD, etc. If your vessel is not officially named, input 'USA#' followed by your state registration number, e.g. USA#NY1234YZ. If unnumbered (e.g. associated craft, tenders), use your parent vessel's name followed by a dash (-) and a numerical designator that distinguishes you amongst others. For example, the first tender for the cruise ship JOLLY ROGER OF THE SEA should be inputted as JOLLY ROGER OF THE-1. Additionally, its AIS message 24B call-sign parameter should reflect the last 6-digits of JOLLY ROGER OF THE SEA's MMSI preceded by an 'A', e.g. A123456.

- Maritime Mobile Service Identity (MMSI) should reflect the MMSI assigned to the vessel by the Federal Communications Commission (FCC) or one of its agents.

- Call-sign should reflect the call-sign assigned to the vessel by the FCC; absent a call-sign, input 0000000.

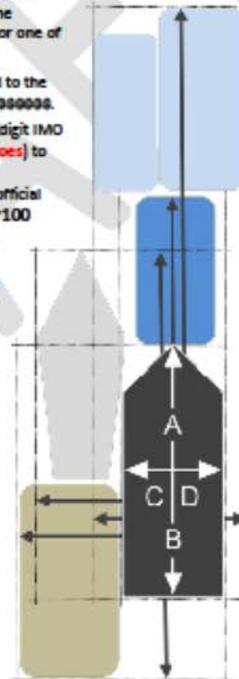
- IMO Number² should reflect the assigned 7-digit IMO number. Use leading zeroes (**not trailing zeroes**) to fill the parameter, e.g. 0001234567. Absent an IMO assignment, input your U.S. official documentation number preceded by either '100' or '1000', e.g. 1001234567, 1000123456.

- Type of positioning source should reflect the actual system in use, i.e. GPS, combined GPS-GLONASS, etc.

- Type of vessel should reflect the appropriate Ship Type (see accompanying table).

- Antenna Position | Vessel Dimensions should be inputted in meters (**not feet**) and reflect the overall dimensions of the vessel, expressed as the distance fore (A), aft (B), to port (C), and to starboard (D) to the positioning-system antenna used by AIS; the intersection of the two white lines in the diagram.

For U.S. Ship Type 37 (see Table) dimensions should reflect the overall rectangular area of the vessel and its **tow**—as portrayed by the extended dark arrows within the rectangles in the diagram.



Know your password, you will need it to encode your AIS

Voyage Related Data...should be inputted as necessary to always indicate up to date conditions

- Navigation Status, i.e. at anchor, underway, engaged in fishing, etc, should always be up-to-date.

Note, vessels engaged in towing should use: Navigation Status '11' when towing astern, or '12' when pushing ahead or alongside.

Remember to change your status when at anchor or moored. Doing so reduces the AIS reporting rate from 2-10 seconds to once every 3 minutes; which mitigates network congestion and improves overall AIS range.

- Static Draft should be inputted in meters (**not feet**) and reflect the vessel's actual or maximum draft.
- Estimated Time of Arrival (ETA) to destination; or voyage departure time, if moored or anchored; or operational termination time (i.e. workboats); should be inputted in Universal Time Coordinated (UTC), **not** local time.

- Destination³ and your origination should be inputted using 3-character UN location codes (UNLOCODE)³ for (per IMO SN/Circ.244) or 4-character U.S. GUID⁴ codes, as follows:

Origination-Destination using UNLOCODE only

USNYC-NLRTM ...one-way voyage New York City to Rotterdam
 USNYC-<USNYC ...a voyage to and fro, e.g. dinner cruise
 USHOU-<USHOU ...operating solely within a well defined area, e.g. fleetmg area, vessel traffic service area, etc.

Origination-Destination using UNLOCODE and USGUID

CNSHA-USA0VCY ...for Shanghai to San Francisco Pier 35

Origination-Destination using USGUID only

USA0Y0P-<0Q6L ...a scheduled route, i.e. Staten Island Ferry
 USA0VCY-<0VCY ...a voyage to and fro, e.g. dinner cruise
 USA0MVR-<< ...anchored, moored, or on station (e.g. MODU, FPSO)

Note, the difference in symbology { ^ | > | < | << | <> }⁵

¹ See <http://wireless.fcc.gov/services/index.htm> (Ship Radio Stations)

² Obtained at www.imo.org/Infocentre/infocentre.aspx

³ Per IMO SN/Circ. 227 & 224 or NMEA 9400 Installation Guidelines

⁴ Any port or offshore place in which a vessel is bound to embark or disembark cargo, crew or passengers; or anchor or maintain station for considerable period of time (i.e. Outer Continental Shelf activity)

⁵ Find Country (ISO 3166) & United Nations Location Codes (UNLOCODE) at: www.unecp.org/cefact/locode/welcome.html

⁶ Find U.S. Geographic Unique Identifiers (USGUID) for ports, places, berths, routes, and waterways at: www.navcen.uscg.gov/?pageName=locode

⁷ If AIS lacks angle brackets (<>) substitute with parenthesis () | X | O | (| () |

⁸ See 47 CFR Bd. 1100-Distress, urgency, and safety communications

USCG AIS Encoding Guide

*

Minimizes Updates



U.S. DEPARTMENT OF
**Homeland
Security**





AIS Type of Ship parameter is a 2-digit numeric codes composed either from 1st and 2nd digit columns or as defined in columns 3x or 5x. The terms used are as defined in IMO SOLAS, 46 U.S.C. 2101 or 33 CFR 140.10. Blue italic text denotes amplifying text not found in the original source (ITU-R M.1371-5)

1 st digit	2 nd digit	[3x] others "engaged in"	[5x] special craft
0 – Not available	0 – All ships of this type	30 – Fishing <i>industry vessels, including fish processors and fish tenders*</i>	50 – Pilot vessel
1 – Reserved for future use	1 – Carrying DG, HG, or MP, IMO hazard or pollutant category 1 DO NOT USE	31 – Towing <i>astern*</i>	51 – Search and rescue vessels, i.e. USCG boats and cutters, USCG Auxiliary boats, assistance towers
2 – WIG (Wing-in-Ground) craft	2 – Carrying DG, HG, or MP, IMO hazard or pollutant category 1 DO NOT USE	32 – Towing <i>astern</i> and length of the tow exceeds 200 meters (656 ft.) or breadth exceeds 23 m (82 ft.) *	52 – Tugs or workboats, that do not regularly engage in towing
3 – Other vessels engaged in actions denoted in column [3x]	3 – Carrying DG, HG, or MP, IMO hazard or pollutant category 2 DO NOT USE	33 – Engaged in dredging, or underwater operations, or other equipment operations that may obstruct navigation (such as buoy tending, ice breaking, salvaging, sampling, surveying, or other similar activities, but, not diving, fishing, towing or military operations)*	53 – Port tenders, yacht tenders, dive tenders, off-shore supply vessels, etc.
4 – HSC (Hi-speed Craft) or passenger ferries	4 – Carrying DG, HG, or MP, IMO hazard or pollutant category 05 DO NOT USE	34 – Engaged in diving operations or other types of operations with persons in the water*	54 – Vessels with anti-pollution facilities or equipment
5 – Special craft per column [5x]	5 – Reserved for future use	35 – Engaged in military operations or other types of restricted operations*	55 – Law enforcement vessels, i.e. U.S. Customs and Border Protection vessels, Department of Natural Resources/Conservation boats, marine police boats, etc.
6 – Passenger ships other than HSC and passenger ferries; not including tenders or off-shore supply vessels [see 53]	6 – Reserved for future use	36 – Sailing vessels*	56 – Spare—for assignments to local vessels that are engaged in towing ahead or alongside, and whose dimensions (ABCD values) represent the overall dimensions of the vessel not including its tow*
7 – Cargo (freight) ships, including articulated (ATB) and integrated tug-barge (ITB) vessels	7 – Reserved for future use	37 – Pleasure craft	57 – Spare—for assignments to local vessels that are engaged in towing ahead or alongside, and whose dimensions (ABCD values) represent the overall rectangular area of the vessel including its tow*
8 – Tankers, including articulated or integrated tug tank barge vessels	8 – Reserved for future use	38 – Reserved for future use	58 – Medical transports (as defined in the 1949 Geneva Convention and Additional Protocols) or similar public safety vessels
9 – Other types of ship	9 – No additional information	39 – Reserved for future use	59 – Ships according to RR Resolution No. 18 (Mob-83)

**USCG
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*
**Clarifies
Ship
Types**

*Remember to also update your Navigation Status accordingly, i.e. Status: 3=restricted maneuverability; 7=engaged in fishing; 8=under sail; 11=towing astern; 12=pushing ahead/alongside, etc.

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Department of
**Homeland
Security**



Protection vessels, Department of Natural Resources/Conservation boats, marine police boats , etc.

*36 – Spare—for assignments to local vessels that are engaged in towing ahead or alongside, and whose dimensions (ABCD values) represent the overall dimensions of the vessel not including its tow**

*37 – Spare—for assignments to local vessels that are engaged in towing ahead or alongside, and whose dimensions (ABCD values) represent the overall rectangular area of the vessel including its tow**

38 – Medical transports (as defined in the 1949 Geneva Convention

**USCG
AIS
Encoding
Guide
*
Unique
Ship
Types For
Pushboats**



Protection vessels, Department of Natural Resources/Conservation boats, marine police boats , etc.

*36 – Spare—for assignments to local vessels that are engaged in towing ahead or alongside, and whose dimensions (ABCD values) represent the overall dimensions of the vessel not including its tow**

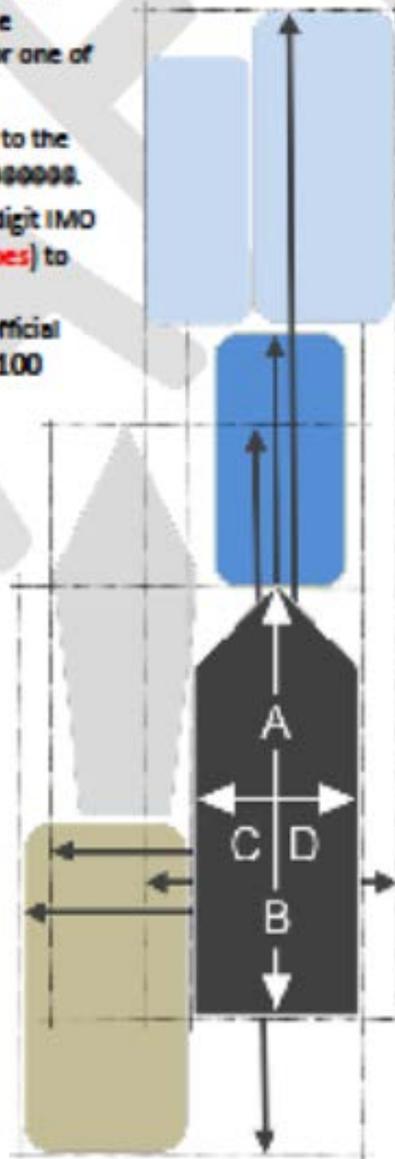
*37 – Spare—for assignments to local vessels that are engaged in towing ahead or alongside, and whose dimensions (ABCD values) represent the overall rectangular area of the vessel including its tow**

38 – Medical transports (as defined in the 1949 Geneva Convention

**USCG
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Unique
Ship
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Pushboats**



- Maritime Mobile Service Identity (MMSI) should reflect the MMSI assigned to the vessel by the Federal Communications Commission (FCC) or one of its agents.
 - Call-sign should reflect the call-sign assigned to the vessel by the FCC; absent a call-sign, input 0000000.
 - IMO Number³ should reflect the assigned 7-digit IMO number. Use leading zeroes (**not trailing zeroes**) to fill the parameter, e.g. 0001234567. Absent an IMO assignment, input your U.S. official documentation number preceded by either '100 or 1000', e.g. 1001234567, 1000123456.
 - Type of positioning source should reflect the actual system in use, i.e. GPS, combined GPS-GLONASS, etc.
 - Type of vessel should reflect the appropriate Ship Type (see accompanying table).
 - Antenna Position | Vessel Dimensions should be inputted in meters (**not feet**) and reflect the overall dimensions of the vessel, expressed as the distance fore (A), aft (B), to port (C), and to starboard (D) to the positioning-system antenna used by AIS; the intersection of the two white lines in the diagram.
- For U.S. Ship Type 37 (see Table) dimensions should reflect the overall rectangular area of the vessel **and its tow**—as portrayed by the extended dark arrows within the rectangles in the diagram.



USCG AIS Encoding Guide

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Vessel/ABCD Dimensions For Vessel or Vessel+Tow





Automatic Identification System

- What is AIS
- How AIS works
- Types of AIS
- AIS Messages
- AIS Base Stations
- Class A AIS
- Class B AIS
- AIS ATIS
- Long Range AIS
- Nationwide AIS
- AIS Requirements
- Reference Documents
- AIS Encodings
- Frequently Asked Questions

AIS FREQUENTLY ASKED QUESTIONS

1. [What is AIS?](#)

15. Is the USCG considering expanding AIS carriage to other vessels or outside of VTS areas? Yes. On January 30th, 2015 the Coast Guard published a Final Rule ([80 FR 5281](#)), which on March 2nd, 2015, expands AIS carriage ([68 FR 60599](#)) to most commercial vessels (see those effected [here](#)) operating on any [U.S. navigable waters](#), and, harmonizes U.S. AIS requirements with Regulation V/19.2.4 of the Safety of Life at Sea Convention and § 102 of the Maritime Transportation Security Act of 2002. The docket containing comments submitted, supporting documents, and the regulatory analysis to this and our proposed rulemaking ([73 FR 76295](#)) can be found at [www.regulations.gov](#) [Search: USCG-2005-21869]. Printer-friendly PDF formats of these [2015 requirements](#), our [2008 proposed rule](#), an [amalgamation](#) of both, our [2003 requirements](#), and, a [chart-comparison](#) of all three.

16. How can I get a copy of an AIS presentation I saw (or heard about it) that was given at... You can download recent presentations given by Coast Guard Office of Navigation Systems personnel [here](#):

Mission Areas

- Global Positioning System
- Nationwide DGPS
- Nationwide AIS (NAIS)
- AIS (Overview, Messages, etc.)
- Long Range Identification and Tracking
- Local Notice to Mariners
- Light Lists
- Civil GPS Service Interface Committee
- LORAN C (archive)

Subscribe / Report (free)

- Local Notice to Mariners (Weekly)
- GPS Operational Summary (Daily)

- 14. [Do my Class B devices meet current USCG AIS carriage requirements?](#)
- 15. [Is the USCG considering expanding AIS carriage to other vessels or outside of VTS areas?](#)
- 16. [How can I get a copy of an AIS presentation I saw \(or heard about it\) that was given at...](#)
- 17. [Where can I get AIS data?](#)
- 18. [Reserved for future use.](#)
- 19. [What is AIS Channel Management?](#)
- 20. [Can I use my AIS in an emergency or for distress messaging?](#)
- 21. [Is the Coast Guard broadcasting AIS Aids to Navigation Reports?](#)
- 22. [Have an AIS question not answered here?](#)

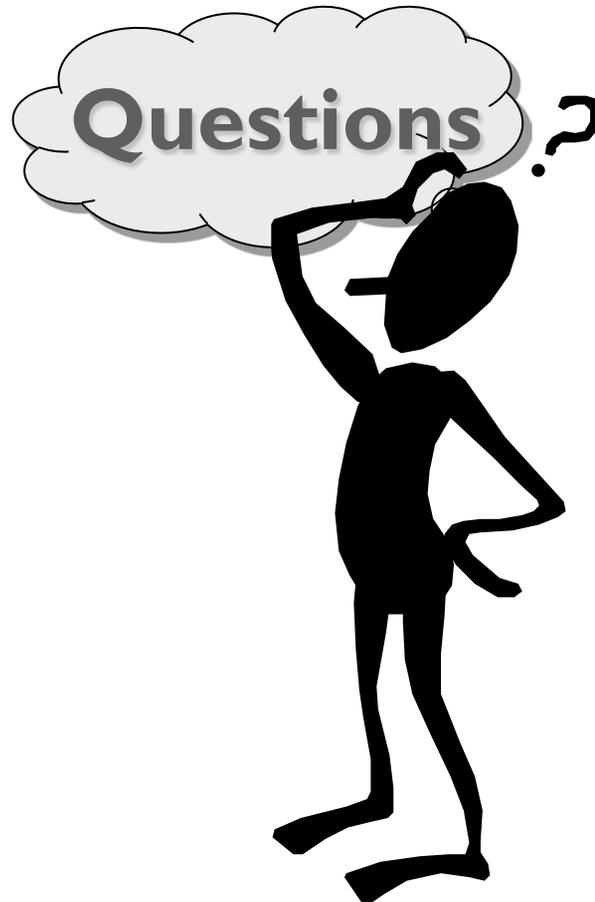
1. What is AIS? Per 47 CFR §80.5, AIS is a maritime navigation safety communications system standardized by the International Telecommunication Union (ITU) and adopted by the International Maritime Organization (IMO) that provides vessel information, including the vessel's identity, type, position, course, speed, navigational status and other safety-related information automatically to appropriately equipped shore stations, other ships, and aircraft; receives automatically such information from similarly fitted ships; monitors and tracks ships; and exchanges data with shore-based facilities. [Read more](#) on what it is, how it works, what it broadcasts, and, the messages it uses, etc.

See
AIS FAQ #16
For Copy of this
Presentation



United States Coast Guard

Office of Navigation Systems



**Thank
You**

Jorge.Arroyo@uscg.mil
www.navcen.uscg.gov
cgnav@uscg.mil
1-202-372-1563

U.S. Coast Guard
Office of Navigation Systems
2100 Second St. SW
Washington, DC 20953



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