



Gmdss

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What is defined as an area, excluding sea areas A1 and A2, within the coverage of an Inmarsat geostationary satellite in which continuous alerting is available?

Sea Area A3

Illustrations: GMDSSSEAAREAS

What is defined as the area within the radiotelephone coverage area of at least one VHF coast station in which continuous DSC alerting is available as defined by the IMO regulation for GMDSS?

Sea Area A1

Illustrations: GMDSSSEAAREAS

See REF2553

Vessels operating in which sea area(s) are required to carry either Inmarsat or HF equipment or a combination thereof under GMDSS?

A3

Illustrations: GMDSSSEAAREAS

See REF2553

Which of the following regions lie outside Sea Areas A1, A2, and A3?

Sea Area A4

Illustrations: GMDSSSEAAREAS

The U.S. Coast Guard communications station providing HF MSI broadcast coverage for NAVAREA IV is:

NMF (Boston)

Illustrations: NAVAREAS

See REF1002

The U.S. Coast Guard communications station providing HF MSI (Maritime Safety Information) broadcast coverage for NAVAREA XII is:

NMO (Honolulu)

Illustrations: NAVAREAS

See REF1002

Which NAVAREA is associated with the western North Atlantic and the Caribbean Sea?

NAVAREA IV

Illustrations: NAVAREAS

See REF1002

Which sequence is associated with the 5 new Arctic Ocean NAVAREAs?

NAVAREA XVIII, NAVAREA XX, NAVAREA XXI

Illustrations: NAVAREAS

See REF1002

What sea area is defined as being within range of a shore-based MF station that provides for continuous DSC alerting?

Sea area A2

What is the equipment carriage requirement for survival craft under GMDSS?

At least three SCT units and two SARTs on every passenger ship and cargo ships of 500 gross tons and upwards.

Which of the following systems is least susceptible to atmospheric disturbances?

Inmarsat

What is the channel spacing for authorized F1B/J2B frequencies?

500 Hz

Where can GMDSS regulations pertaining specifically to U.S.-flag vessels be found?

These are located in 47 CFR Part 80.

See REF293

Which of the following are personnel, functional, or equipment FCC requirements of the GMDSS?

Equipment carriage based on intended sea area of operations, distress alerting and response and two FCC licensed GMDSS radio operators.

What are the mandatory DSC watchkeeping bands/channels?

8 MHz HF DSC, 1 other HF DSC, 2 MHz MF DSC and VHF Ch-70.

What is the MID?

Maritime Identification Digits

Which of the following would indicate an Inmarsat-B terminal?

366632824

What does the DSC control unit do if the GMDSS Radio Operator fails to insert updated information when initiating a DSC Distress alert?

It will initiate the DSC Distress alert and default information will automatically be transmitted.

If a VHF-DSC Distress alert is transmitted what channel is used for follow-on voice transmission?

Ch-16

Transmission of a Distress alert by a station on behalf of another vessel actually in Distress should not occur:

When communications between the Distress vessel and a Coast station are already in progress.

Which of the following situations would not properly use the Urgency priority?

Abandoning the vessel just before sinking.

Which of the following steps should be taken, if possible, when the vessel must be abandoned because of a Distress situation?

Secure the EPIRB to the survival craft and mount the SART in a position to maximize its elevation.

How can vessel personnel detect the operation of a SART in its vicinity?

A unique 3-cm signal consisting of a 12-dot pattern radiating outward from a SART's position along its line of bearing.

What statement is true regarding 406 MHz EPIRB transmissions?

Transmits a unique hexadecimal identification number.

Which of the following has been designated for "On-scene" communications in GMDSS?

Ch-16

What are the best resources for researching and planning equipment setups and updates prior to any potential Distress situation?

Inmarsat handbook, NGA Pub, 117 or ITU List of Coast stations.

What should a GMDSS Radio Operator do if a NAVTEX warning message is received but it contains too many errors to be usable?

Do nothing. Vital NAVTEX messages will be repeated on the next scheduled broadcast.

Where NAVTEX cannot be feasibly established, what system can be implemented to provide an automated service in coastal waters to receive MSI?

SafetyNETTM

What services are available through Enhanced Group Calls?

Maritime Safety Information and messages to pre-defined groups of subscribers.

With most Inmarsat-C systems what should the indicator lamps do when powering up?

All lamps should illuminate in a particular sequence, as per the operator's manual.

What is the primary function of an NCS?

To monitor and control communications through the Inmarsat satellite for which it is responsible.

Why is the automatic answerback request (WRU) first used by the LES after an Inmarsat-B TELEX call has been placed from a ship?

Identify the SES making the request.

Which statement concerning Inmarsat-B and Inmarsat-C terminals is correct?

Inmarsat-B terminals require AZ/EL setup and gyro input, in order to enable automatic satellite tracking.

Which key is used to indicate the end of a selection in a TELEX call via an Inmarsat-B SES?

+

If your vessel is in the IOR, which of the following is a correctly formatted Inmarsat-C address book entry for sending communications to a shoreside TELEX terminal number 77829 in the Philippines (TELEX country code 758)?

(75877829

How is an Inmarsat Distress priority message ordinarily initiated on board the vessel?

By pressing one or more dedicated "Distress key" controls on the equipment.

A vessel with an 18-hour ETA to the Panama Canal on a voyage from Miami loses the ability to communicate via Inmarsat. The most likely cause is?

An equipment fault resulting in a loss of signal from the satellite.

To set-up the MF/HF Transceiver for a TELEX call to a coast station, the operator must:

Select F1B mode or J2B mode, depending on the equipment manufacturer.

Which statement regarding channel spacing and bandwidth is true?

Both TELEX bandwidth and channel spacing values are less than voice bandwidth and channel spacing values.

Which of these is not a primary purpose of the MF/HF DSC controller?

It provides the scanning watch receiver capability on the 6 MF/HF DSC frequencies.

The purpose of "parity" in SITOR (NBDP) communications is?

Error correction in HF BFEC MSI broadcasts, NAVTEX broadcasts and two-way ARQ exchanges.

What sequence of ARQ codes matches the following: Send synoptic weather, switch control from a station currently transmitting over to the receiving station, terminate phasing with coast station.

OBS+, +?, BRK+

Which of the following statements concerning SITOR (NBDP) communications is true?

Two-way communication with the coast radio station using FEC is not necessary to be able to receive the broadcasts.

Which statement concerning frequency band selection and propagation most corresponds with standard practice.

Propagation "rules of thumb" are usually sufficient for routine operations.

What is a gel cell battery and how is it maintained & cared for?

Gel cell batteries are typically sealed; special charging rates and voltages may be required.

If a vessel is engaged in local trade and at no point in its voyage travels outside the range of a VHF shore station with continuous DSC alerting then the vessel is operating in what area?

Sea area A1

Which of the following statements concerning maintenance requirements is false?

If shore-based maintenance is used, maintenance services do not have to be completed or performance verified unless the vessel will be sailing to a non-US port.

Which of the following frequency bands would most likely provide reliable communications between two stations that are 100 miles (160 km) apart?

The Medium Frequency (MF) band.

You look up a frequency table and all the listings end in either .0 or .5 kHz. What kind of emission is used with these frequencies?

F1B/J2B SITOR (NBDP)

Which of the following references should be consulted for information on the proper setup and use of GMDSS equipment?

The manufacturer's operating manuals.

How many GMDSS radio maintainers must be carried aboard a compulsory vessel if the At-Sea maintenance method is used?

One regardless of sea area of operation.

Proper watchkeeping includes the following:

After silencing an alarm all displays and/or printouts are read, monitoring all required frequencies in the proper mode, notifying the Master of any Distress alerts.

How many digits are in the MID (Maritime Identification Digits)?

3

Which of the following would indicate an F77 terminal?

A 9 digit number always starting with 76.

A DSC Distress alert:

Will always be sent on one or more of the DSC Distress frequencies.

If a MF-DSC Distress alert is transmitted what frequency is used for follow-on voice transmission?

2182.0 kHz

DSC Relays of DSC Distress alerts received from other ships should be done?

Only when the original DSC call is not acknowledged and no follow-on Distress traffic has been heard.

Which of the following situations would normally use the Urgency priority?

A serious medical situation involving a crewmember.

Which action is the most appropriate action for a GMDSS radio Operator to take in a Distress situation where immediate help is needed, but the vessel is not sinking nor needs to be abandoned?

Transmit Distress calls by HF/MF/VHF DSC or Inmarsat.

What is not an advantage of an AIS SART signal when compared to a radar-based SART signal?

The AIS SART can be detected much farther away than radar SART models.

Which of the following is normally part of 406 MHz satellite EPIRBs?

A 5-watt 406-MHz alert beacon, Automatic Hydrostatic Release (ARM), strobe light.

Which of the following channels is designated as the VHF follow-on communications channel and is required in all portable survival craft equipment?

Ch-16

Which statement is true regarding Inmarsat "hot-key" Distress Alerts?

The LES programmed by the watch officers into the Distress Alert Update menu determines which RCC will receive your initial Distress Alert.

Which of these cannot happen when a paper model NAVTEX receiver runs out of paper?

The system will automatically change from receiving MSI by NAVTEX to receiving it by SafetyNET™ so that no messages will be lost.

What action should a GMDSS Radio Operator take when SafetyNET™ Distress or Urgency messages are received by the vessel's EGC receiver?

Aural and/or visual alarms are activated and require manual deactivation.

What messages originate from registered information providers anywhere in the world and are broadcast to the appropriate ocean region via a LES?

SafetyNET™ messages

What is the importance of a successful log in indication, after power-up, on an Inmarsat-C terminal?

The terminal is enabled for routine incoming and outbound traffic.

What is the primary function of a LES?

To provide direct communications between the Inmarsat station placing a call and the station receiving the call.

When engaging in voice communications via an Inmarsat-B or F77 terminal, what procedures are used?

CODECs are used to digitize the voice signal.

When Inmarsat-B and Inmarsat-C terminals are compared:

Inmarsat-C antennas are smaller, with passive non-parabolic antennas but no rewind capability.

Which number, if typed at an Inmarsat-B SES by a vessel in the Western Atlantic, would result in placing an automatic TELEX call to a subscriber number of 123456?

00230123456+

If your vessel is in the AOR-E, which of the following is a correctly formatted Inmarsat-C address book entry for sending communications to a shoreside TELEX terminal number 776424 in Canada via the TWX system (TELEX country code 26)?

(26776424

What must be done to disconnect an incoming TELEX message when voice Distress communications is desired via Inmarsat-B?

Depressing the "Distress" button automatically disconnects incoming messages.

A vessel, before transiting the Panama Canal, on a voyage from San Diego to Miami, loses the ability to communicate via Inmarsat. The most likely cause is:

The vessel has sailed beyond the coverage area of the Pacific satellite.

To set-up the MF/HF Transceiver for a voice call to a coast station, the operator must:

Select J3E mode for proper voice operations.

The proper sequence of channel spacing from narrow to widest is:

SITOR (NBDP), SSB-voice, VHF-FM voice.

A "Distress Hot Key" MF/HF DSC Distress alert:

Will be transmitted on 2187.5 kHz or another DSC frequency, depending on the manufacturer.

"SITOR (NBDP)" communications are based on a digital code system:

Consisting of 7 bits, with four zeros and three ones.

A manual ship-ship ARQ message would typically begin with what sequence of ARQ procedures?

Initiate call with ship selcal, enter "HERE IS" then "WRU" commands and send message.

Which of the following is true of SITOR (NBDP) Mode B (FEC), in the presence of static crashes.

FEC reduces the error rate by transmitting each character twice.

To ensure effective HF communications, GMDSS operators should:

Employ the short rules of propagation selection or rely on previous successful communications as a guide.

What will cause an individual battery cell to reverse polarity.

When discharging the battery string if a cell becomes weaker than the remaining cells, the discharge current will effectively charge the weaker cell in reverse polarity.

Which of the following statements concerning GMDSS maintenance requirements is true?

The options are duplication of equipment, at-sea maintenance, and shore-based maintenance.

Which system has the least effective radius of operation?

VHF DSC

How many SITOR (NBDP) signals can occupy the space of one voice signal?

6

What publications should the GMDSS Radio Operator consult to review the proper procedures to be followed in Distress situations under GMDSS?

47 CFR Part 80 Subpart W.

Which statement is false regarding the GMDSS requirement for ship sources of energy?

The reserve sources of energy need to supply independent MF and HF radio installations at the same time.

Proper watchkeeping includes the following:

Maintaining a proper GMDSS radio station log, understanding normal operational indicators, responding to and comprehending alarms.

What does the MID (Maritime Identification Digits) signify?

Nationality

You receive a TELEX with the sender's I.D. of 433863491. What type of terminal sent this message to your vessel?

Inmarsat-C

In all cases, the transmit frequency of a MF/HF console DSC Distress alert:
Depends upon operator DSC Call set up entries or manufacturer's defaults.

If a HF-DSC Distress alert is transmitted what frequency is used for follow-on voice transmission?
8291.0 kHz

What action should you take after sending a false Distress alert on VHF?
Make a voice announcement to cancel the alert on Ch-16.

The Urgency Priority should be used for:
Messages containing information concerning the Safety of a mobile unit or person.

DSC is used primarily to:
Transmit and receive Distress, Urgency and Safety alerts and routine calls to and from other ships and coast radio stations.

Which of the following statements concerning testing and maintenance of SARTs is true?
Testing a SART should be done in a consistent manner & location to ensure a baseline history of proper results.

Which of the following statements concerning EPIRBs is false?
The Inmarsat system provides worldwide coverage for Distress alerts.

Which of the following frequencies have been designated for "On-scene" communications in the Global Maritime Distress and Safety System?
VHF Ch-16 and SITOR (NBDP) on 2174.5 kHz.

Which of the following control selections may result in limited receiving range?
Setting the squelch control to its maximum level.

Which of the following is the primary frequency that is used exclusively for NAVTEX broadcasts internationally?
518 kHz

What system can provide an automated service in coastal waters where it may not be feasible to establish the NAVTEX service or where shipping density is too low to warrant its implementation?
SafetyNETTM

Which HF SITOR (NBDP) mode would be selected to receive MSI broadcasts from high seas shore stations?
FEC

On an Inmarsat-C system, what is the importance of a successful "SYNC" indication after power up?
Sufficient signal strength on the NCS common channel is being received.

Messages are transmitted by an Inmarsat LES according to what criteria?
Priority

Which mode of communications is NOT possible through an Inmarsat-C SES?
Shore-to-ship Facsimile

Which statement concerning Inmarsat-B and Inmarsat-C terminals is correct?
Both Inmarsat-B and Inmarsat-C units are subject to shadowing effects, but Inmarsat-B units have directional antennas.

Which of the following numbers is appropriate for an Inmarsat-B terminal placing a TELEX call via Southbury to another ship logged-in to the AOR-E?

001+ 00581436824246+

Which of the following are correctly formatted Inmarsat-C address book entries for sending communications to two fax machines on vessels in the AOR-W? First is an F77 terminal and second an Inmarsat-B terminal.

(870768790319 and then 870334600340

Why is the correct selection of the LES in the Distress Alert Setup menu so crucial?

The LES choice determines the nationality of the RCC which will handle the Distress traffic and perform SAR duties or that will pass the particulars to the RCC with jurisdiction to coordinate the SAR situation.

What can be the visual observation of a condition whereby it may be possible to initiate a reliable Inmarsat TELEX transmission but a voice transmission may not be possible?

An indication on a meter or on the terminal of low receiver signal strength.

How are paired SITOR (NBDP) frequencies normally used?

These are normally used for ARQ communications with coast radio stations.

Communications with an emission of F1B/J2B would typically have a channel spacing of:

0.5 kHz

A Distress Priority DSC call may be formatted and transmitted specifying and requesting:

Nature of Distress or alternate frequency but not both in a single call, vessel position or alternate frequency/emission but not both in a single call, voice or TELEX follow-up communications.

Which of the following would be a valid SELCAL for use in ARQ communications?

1106

What sequence of ARQ codes matches the following: shore station indicates it is awaiting instructions from the vessel, vessel requests a live connection to a land telex number, vessel indicates it is done with the coast station?

GA+?, DIRTLX, BRK+

Which of the following statements concerning SITOR (NBDP) communications is true?

FEC mode broadcasts can be passively received without the transmitter being active.

A ship has been communicating effectively on 16 MHz during daylight hours with a shore station at a distance of 3500 miles. Toward late afternoon and evening what effect would be noticed?

Communications should gradually deteriorate and become impossible on this frequency at night.

What is the effect of temperature on the specific gravity of lead acid batteries?

Higher temperature results in a lower specific gravity reading.

What is the fundamental concept of the GMDSS?

GMDSS utilizes automated systems and satellite technology to improve emergency communications for the world's shipping industry.

SITOR (NBDP) equipment is a partial or alternate carriage requirement under GMDSS for vessels operating in which sea area(s)?

A3 and A4

Which of the following is a GMDSS requirement for all vessels over 300 gross tons operating within range of a MF-DSC equipped shore station?

Only one of the three maintenance options is required.

What statement best describes modulation?

Imposing intelligence onto a radio carrier signal.

Which emission mode occupies the most bandwidth?

F3E

Which of the following documents or publications are required by the FCC for GMDSS vessels on international voyages (other than the Great Lakes)?

Part 80 FCC rules, station logs, station licenses, ITU publications, ITU manual for Maritime Mobile stations.

What is the meaning of "Reserve Source of Energy"?

Power to operate the radio installation and conduct Distress and Safety communications in the event of failure of the ship's main and emergency sources of electrical power.

Which is true concerning a required watch on VHF Ch-16?

When a vessel is in an A1 sea area and subject to the Bridge-to-Bridge act and in a VTS system, a watch is not required on Ch-16 provided the vessel monitors both Ch-13 and the VTS channel.

Which of the following numbers indicates a U.S. flag ship station?

338426791

You receive a TELEX with the sender's I.D. of 436640927. What type of terminal sent this message to your vessel?

Inmarsat-C

DSC relays of Distress alerts by vessels:

Should be avoided; unless an acknowledgement has not been heard.

What is the proper format for a Distress follow on voice transmission? (3x is three times),

Mayday 3x, this is Ship's Name/Call Sign 3x, Ship's position, nature of distress and assistance requested.

What action should you take after sending a false Distress alert on MF?

Make a voice announcement to cancel the alert on 2182.0 kHz.

If the Watch Officer hears "PAN PAN" spoken 3 times it means:

None of these answers is correct.

GMDSS vessels equipped for Sea Areas A2, A3 or A4 must maintain a continuous DSC watch on 2187.5 kHz.

At all times when underway.

Why is it important to limit the duration of testing a SART?

Testing in port or even at sea may cause interference to other radars or a test signal may be misinterpreted as a genuine Distress situation.

Which of the following EPIRBs is most likely to be used to transmit a Distress alert signal?

406 MHz EPIRBs

Which of the following frequencies have NOT been designated for GMDSS "On-scene" or SAR communications?

SITOR (NBDP) on 2182.0 kHz

At mid-day, what would be the best choice in attempting to communicate with a shore station 15 miles distant?

156-164 MHz band

What is the transmitting range of most NAVTEX stations?

Typically 200-400 nautical miles (360-720 km).

Aboard ship, SafetyNET™ messages can be received by which equipment/methods?
EGC receiver of the vessel's Inmarsat-C SES.

On an Inmarsat-C system an incoming EGC alarm sounds:
To draw the operator's attention to an unscheduled Distress or Urgency message.

How is maximum coverage provided by satellites in the maritime satellite service?
Four satellites in geo-stationary orbit approximately 22,184 miles above the equator.

What is the average length of time required for a TELEX sent by Inmarsat-C to be delivered to the addressee?
The average delivery time for a message sent by Inmarsat-C is about 10 minutes.

When Inmarsat-B and Inmarsat-C terminals are compared:
Inmarsat-B units provide greater communications capabilities, with the trade-offs of greater size, weight, installation expense and initial cost.

You are on a ship in the Pacific ocean. What keyboard entry would you make on an Inmarsat-B terminal to obtain a TELEX connection via Santa Paula to another ship that is 300 miles west of San Francisco?
001+ 00582336657450+

Which of the following is a correctly formatted Inmarsat-C address book entry for sending communications to a fax machine number 516-229-4339 in Long Beach, CA, U.S.?
(15162294339

If an Inmarsat Distress Alert Setup menu contains an incorrect or unavailable LES code what happens to the Distress Alert transmission?
The NCS will step in and route the Distress Alert transmission to an RCC.

What maintenance function may the holder of a GMDSS Radio Operator license perform, or supervise the performance of, on an Inmarsat-C SES?
Remove stack deposits and other debris from the antenna to prevent degraded performance. D. Adjust a reference oscillator or synthesizer to tune the unit to the NCS CC.

How are paired SSB frequencies normally used?
These are normally used for J3E communications with coast radio stations.

Communications with an emission of J3E would typically have a channel spacing of:
3.0 kHz

Which of these statements regarding a multi-frequency MF/HF DSC Distress alert is false?
May be transmitted in any order programmed by the GMDSS operator.

Once ARQ communication with the coast radio station has been established, which of the following events will most likely take place?
After exchanging answer-backs (WRU-AAB) with the vessel, the coast radio station transmits GA+?.

All country codes which are transmitted by MF/HF SITOR (NBDP) are preceded by which character(s)?
O

The sequence ARQ, FEC, SFEC best corresponds to which of the following sequences?
Two way communications, one-way communications to all stations, one-way communications to a single station.

A ship at anchor has been communicating with a shore station approximately 200 miles distant on a frequency in the 4 MHz band through mid-morning. Toward the late afternoon and evening, what effect should be noticed?

Communications should gradually improve and peak at night and early morning.

What would be an indication of a malfunction on a GMDSS station with a 24 VDC battery system?

A constant 30 volt reading on the GMDSS console voltmeter.

The primary purpose of the GMDSS is:

Automate and improve emergency communications for the world's shipping industry.

What statement is correct regarding the maintenance requirements for A3 ships under GMDSS?

Redundancy of functions of certain equipment and on-board maintenance provided by a person holding a GMDSS Maintainer's license will partially meet this requirement.

What statement best describes demodulation?

Extracting intelligence from the radio carrier signal.

Which mode occupies the least bandwidth?

J2B

Which of the following documents or publications are required by Part 80 of the FCC rules for vessels on international voyages (other than the Great Lakes)?

ITU List IV & List V, Appropriate Safety Convention Certificate & ITU manual for Maritime Mobile stations.

Which term describes the source of energy required to supply the GMDSS console with power if the ship's source of main or emergency energy fails?

Reserve Source of Energy

Which of the following statements meets requirements for 47 CFR 80 Subpart-W?

GMDSS Radio Logs must contain entries of all Distress and Urgency communications affecting your own ship.

Which of the following MMSI numbers indicates a U.S. flag ship station?

303236824

Which of the following would indicate an Inmarsat-C terminal?

436682433

Which of the following is not a DSC watch frequency?

2182.0 kHz

What information should be included in a Distress follow on voice transmission after a DSC Alert?

Ship's Name and Call Sign, MMSI number & position, the nature of distress and assistance requested.

What action should you take after sending a false Distress alert on MF?

Make a voice announcement to cancel the alert on 2182.0 kHz.

When the GMDSS Radio Operator on watch hears "Securite" spoken three times, he can expect to receive the following information:

A message concerning the Safety of navigation.

See REF297

Which statement is true regarding Distress communications under GMDSS?

The Rescue Coordination Center (RCC) is responsible for controlling a search and rescue operation, will coordinate the Distress traffic relating to the incident and may appoint another station to manage the Distress traffic.

What statement is true regarding tests and maintenance that could be provided for the SART?

Extreme care should be exercised because testing of the SART may be received by other vessels, may be interpreted as a Distress condition, or it may interfere with other vessels' safe navigation.

Which of the following would best be used for visual detection of a distressed vessel?

An EPIRB's strobe light.

"On-scene" communications would best be represented by?

SITOR (NBDP) on 2174.5 kHz

Which of the following factors does not normally affect the range of VHF transmissions?

Ionospheric refraction.

How is a NAVTEX receiver programmed to reject certain messages?

By choosing a message category's single letter (A-Z) identifier and then deselecting or deactivating.

SafetyNET™ messages can be received by which of the following shipboard equipment?

Inmarsat-C EGC receiver

Which satellite(s) would most likely be selected for use when the vessel is operating off the eastern shore of the United States?

AOR-W

What is meant by the characters GA+ on an Inmarsat terminal?

Go ahead for live telex operations.

How is a signal radiated from an Inmarsat-C system's antenna?

It is radiated in an omni-directional pattern.

Which Inmarsat Earth stations would be available for Inmarsat-C traffic if the vessel is off the Pacific Coast of the United States but logged-in to the AOR-W satellite?

Southbury (USA), Burum (Netherlands), or EIK (Norway).

What keyboard entry would you make on an Inmarsat-B terminal for an automatic TELEX connection to 882419 in Nebraska, USA (TELEX country code 230)?

00230882419+

Which of the following is a correctly formatted Inmarsat-C address book entry for sending communications to a fax machine on a vessel's Inmarsat-B terminal in the AOR-E?

(870323972514

What action would be the swiftest and most certain way to notify a RCC of a Distress situation aboard your vessel?

Confirm the information in the Distress Alert Message setup menu is correct and use the "hot-key" or Distress Message Generator function on your satellite terminal.

What maintenance function may the holder of a GMDSS Radio Operator license perform, or supervise the performance of, on an Inmarsat-C SES?

Adjust any front panel controls.

For general communications purposes, paired frequencies are:

Normally used with public coast stations.

For RF communications, "modulation" is best defined as:

The combination of information or intelligence on to a radio carrier frequency.

To make a call to another vessel requesting voice communications regarding important company business, the GMDSS operator should:

None of these answers is correct.

Which of the following methods will give a GMDSS Radio Operator the best indication of whether ARQ communication can be established with a coast radio station?

Monitor the coast radio station's "free signals" and call on the frequency on which the loudest and most consistent signals are heard.

Which of the following statements concerning SITOR (NBDP) communications is true?

In ARQ, the "information sending station" will transmit a block of three characters that the receiving station will subsequently acknowledge or request be retransmitted.

The sequence BFEC, SFEC, ARQ best corresponds to which of the following sequences?

One-way communications to all stations, one-way communications to a single station, two way communications.

At mid-day in the summer, what would be the best choice in attempting to communicate, using SITOR (NBDP) with a shore station some 1800 miles distant?

Higher HF bands

Which of the following conditions would be a symptom of malfunction in a 2182 kHz radiotelephone system which must be reported to the Master?

No indication of power output when speaking into the microphone.

What is the basic concept of GMDSS?

SAR authorities ashore can be alerted to a Distress situation & shipping in the vicinity can be requested to participate in SAR operations.

Which of the following is a functional or carriage requirement for compulsory vessels?

A compulsory vessel must satisfy certain equipment carriage requirements based on the intended sea area of operation.

A ship operating in sea area A-3 must have the following provisions for maintenance:

Any two of these are required.

Which statement best describes amplitude modulation?

The amplitudes in the sideband(s) changes but the radio carrier frequency remains constant.

A vertical (whip) antenna has a radiation pattern best described by?

A circle

Which of the following references should be consulted to identify the name of a vessel based on its Maritime Mobile Service Identity?

ITU List of Ship Stations and Maritime Mobile Service Identity Assignments.

What characteristics describe the GMDSS Reserve Source of Energy (RSE)?

Must be independent of the ship's electrical system when the RSE is needed to supply power to the GMDSS equipment.

Which of the following statements is false?

Distress communications heard do not require entries if the vessel did not participate in SAR activity.

Which of the following numbers indicates a ship station MMSI?

623944326

Which of the following would indicate an Inmarsat-C terminal?

430346275

Which of the following channels and modes should be used when initiating a Distress alert transmission?

Ch-70 DSC

What information is not vital in a Distress follow on voice transmission after a DSC Alert?

Company emergency contact information.

What action should you take after sending a false Distress alert on 8 MHz?

Make an "ALL STATIONS" call on 8291.0 kHz canceling the alert.

Which of the following situations would normally use the Voice designation "Securite"?

Messages detailing important navigational warnings.

When operating in coastal waters (sea area A1), a GMDSS-equipped vessel must:

Maintain a continuous DSC watch on VHF channel 70.

Why should functional testing of a SART be minimized?

Potential interference with safe navigation, possible misinterpretation of an actual Distress, minimizes draining the battery.

Which piece of required GMDSS equipment is the primary source of transmitting locating signals?

An EPIRB transmitting on 406 MHz.

For "On-scene" communications, vessels in Distress and SAR Aircraft should use?

VHF Ch-16, 4125 kHz J3E, 3023 kHz J3E

Much longer than normal VHF communications distances are typically caused by:

Atmospheric ducting or tropospheric propagation.

How can reception of certain NAVTEX broadcasts be prevented?

The receiver can be programmed to reject certain stations and message categories.

Maritime Safety Information is promulgated via satellite through which system?

SafetyNETTM

Frequencies for receiving HF MSI (Maritime Safety Information) are:

Specified HF SITOR (NBDP) frequencies

Which satellite should be chosen when operating in the Eastern Gulf of Mexico?

AOR-W

What is the purpose of a CODEC?

To convert analog voice signals to digital transmissions.

What statement is true regarding Inmarsat-C?

This is a store and forward network, with an intermediate step that means there is no direct connection between ship and shore users.

Which Inmarsat Earth stations would be available for Inmarsat-B traffic if the vessel is off the Atlantic Coast of the United States and tracking the AOR-E satellite?

Southbury (USA), Burum (Netherlands), or EIK (Norway).

Which of the following is a correctly formatted Inmarsat-B address for sending communications to a shoreside TELEX terminal number 440122 in the United Kingdom (TELEX country code 51)?

51440122+

Which of the following is a correctly formatted Inmarsat-C address book entry for sending communications to a fax machine number 1424-8821-902 in the United Kingdom (voice country code 44)?

(4414248821902

What information should be sent in a detailed satellite Distress message that was not included in the initial "hot-key" Distress Alert?

Name/Call sign of vessel, POB, vessel description, all vessel 1.D. numbers and shore contact numbers.

Which functions may the holder of a GMDSS Radio Operator License NOT perform on the Inmarsat-C equipment?

Optimize performance by adjusting the transmitter EIRP.

For general communications purposes, simplex frequencies are:

Normally used between ship stations and private coast stations or for ship-ship communications.

For RF communications, "bandwidth" is best defined as:

The portion of the radio spectrum consumed by a particular emission selection and modulation technique.

To make a call to another vessel requesting TELEX communications regarding important company business, the GMDSS operator should:

Select Routine priority, enter other vessel's MMSI, specify legal alternate frequency, F1B emission and transmit the properly formatted DSC call.

When placing a TELEX call to a Coast Station, you should always:

Make sure the frequency is not occupied with normal traffic.

What statement is true regarding the exchange between two parties engaged in SITOR (NBDP) communications?

In ARQ, the ISS transmits a block of 3 characters and the IRS checks for parity. If the received block is correct a one-character control signal is sent notifying the ISS to proceed with the next block. If the parity check fails the block must be resent.

Selective FEC communications (SFEC) are employed when:

An individual station must receive communications without using any transmitters (Radio Silence).

At mid-night, what would be the best choice in attempting to communicate, using SITOR (NBDP) with a shore station some 800 miles distant?

HF bands

Which would indicate a malfunction in a 2182 kHz radiotelephone system?

Failure to contact another station 60 miles distant during daytime operation.

GMDSS is primarily a system based on?

The linking of search and rescue authorities ashore with shipping in the immediate vicinity of a ship in Distress or in need of assistance.

Which GMDSS communication functions must all compulsory vessels be capable of performing to meet International Maritime Organization requirements?

Distress alerting, general communications and receipt of Maritime Safety Information in the vessel's intended area of operation.

A ship operating in sea area A-1 must have the following provisions for maintenance:

Shore maintenance.

Duplication of equipment.

At Sea Maintenance.

Any one of these is sufficient.

What is the emission designation for MF-HF voice signals?

J3E

Why is an antenna tuner required for MF-HF transmissions?

The length of the physically-fixed antenna must be electrically matched to the intended frequency of operation.

Which of the following maintenance functions is not the responsibility of the GMDSS Radio Operator?

Aligning the power output stage for maximum power.

What is the requirement for emergency and reserve power in GMDSS radio installations?

Compulsory ships must have emergency and reserve power sources for radio communications.

Where should the GMDSS radio log be kept on board ship?

At the GMDSS operating position.

A DSC call is received from a station with a MMSI number of 003669991. What type of station made the call?

A U.S. coast station

Which of the following would indicate an Inmarsat-C terminal?

436682011

How many total frequencies are available for DSC Distress alerting?

Seven

Which statement is true regarding the receipt and acknowledgement of actual Distress follow-on communications by GMDSS ship stations?

A ship station that receives a Distress call from another vessel must, as soon as possible, inform the Master or person responsible for the ship of the contents of the Distress communications received.

What action should you take after sending a false Distress alert on 12577.0 kHz?

Make an "ALL STATIONS" call on the associated 12 MHz J3E frequency canceling the alert.

Which of the following situations would normally use the Safety priority?

Loss of 5 containers with lashing gear over the side.

What indication is given to the personnel in a survival craft of the approach of SAR craft?

The SART may provide a visual or audible indication of interrogation by a 3-cm radar.

Which is NOT a valid maintenance and testing function for a SART?

Operational test with several vessels to determine effective transmitting range.

What may be used as a homing signal by the search and rescue vessels in the immediate vicinity of the ship in Distress?

A 121.5 MHz emergency transmitter in a satellite EPIRB.

Which action should the GMDSS radio operator take in a Distress situation when embarking in survival craft?

Switch on EPIRB and SART immediately and leave on.

Describing VHF transmissions as "line of sight" does not mean:

VHF communications are effective only with nearby stations within visual range of the bridge.

Which of the following statements is true?

A GMDSS Radio Operator may choose to program certain NAVTEX receivers to reject category A, B, D and L messages if they are being received by another MSI system.

SafetyNETTM promulgates what type of information?

MSI

Which frequency/mode is authorized for use internationally for Maritime Safety Information transmissions?

4209.5 kHz using FEC mode

Which longitude corresponds to the AOR-W satellite for Inmarsat-B/C communications?

54W

What is an MRN?

Message Reference Number, provided by the LES.

With an Inmarsat-C LES, how are messages routed to receiving stations?

All messages are forwarded via a store and forward network.

Which LES should a GMDSS Radio Operator select to update a Distress alert message if the vessel is in the southern Pacific Ocean near the Dateline?

Auckland (New Zealand) or Santa Paula (USA) would be the best choice depending on SAR jurisdiction.

From an Inmarsat-C terminal, which of the following are correctly formatted address for sending TELEX messages to two vessels in the AOR-W? First to an Inmarsat-B and second to an Inmarsat-C.

(584366719020 first and 584436671929 second.

Which of the following is a correctly formatted Inmarsat-C address book entry for sending communications to a fax machine on a vessel's F77 terminal in the IOR?

(870763240864

What actions should be taken to transmit a detailed satellite Distress message to a RCC handling your vessel's initial "hot-key" Distress Alert?

Call up and edit a pre-saved detailed Distress message, use the Transmit or SEND/REC menu, select Distress priority and choose the best LES for the situation.

What immediate remedy can be used to correct shadowing of the satellite signal by a shipboard obstruction?

Change the ship's course.

An ITU simplex channel frequency assignment is defined as:

Transmit and receive frequencies must be identical.

In an AM broadcast signal using voice:

There is a carrier with constant amplitude and frequency with complex upper and lower sidebands varying in amplitude and frequency.

What is meant by describing a Coast Station with the acronym ATOR?

The station's ARQ operations are computerized and a rigid operating sequence must be followed correctly.

What is the best method for a GMDSS Radio Operator to determine which SITOR (NBDP) station to contact for the purpose of sending a chargeable message or cable?

Listen to each station's "free signals" and call the strongest station.

Of the following, which is true of SITOR (NBDP) ARQ mode?

Each data block consists of three characters.

If the vessel is within range of NAVTEX broadcasts and both the Inmarsat-C and the NAVTEX receiver are inoperative the GMDSS operator should:

Select 518 kHz FEC TELEX on the MF/HF console to receive MSI.

At mid-day, what would be the best choice in attempting to communicate with a shore station some 75 miles distant?

MF

Which would indicate proper operation of a SSB transmitter rated at 60 Watt PEP output in J3E mode?

In SSB (J3E) voice mode, with the transmitter keyed but without speaking into the microphone, no power output is indicated.

What is the responsibility of compulsory GMDSS vessels?

Every vessel must be able to perform communications functions essential for its own safety and the safety of other vessels.

GMDSS-equipped ships will be required to perform which of the following communications functions?

Transmit distress alerts, SAR and on-scene communications, MSI, Bridge-to-Bridge and general radio communications.

What is the frequency range for Medium Frequency?

300-3,000 kHz

Which statement best describes frequency modulation?

The information signal changes the radio carrier frequency but the amplitude remains constant.

A vertical quarter wave antenna with a good ground connection will:

Radiate omni-directionally.

When may a compulsory vessel not be allowed to leave port?

When the vessel has replaced a required piece of GMDSS-related equipment but its performance has not been verified or logged.

Which of the following terms is defined as a back-up power source that provides power to radio installations for the purpose of conducting Distress and Safety communications when the vessel's main and emergency generators cannot?

Reserve Source of Energy (RSE)

How long must the radio log be retained on board before sending it to the shoreside licensee?

At least 30 days after the last entry.

A valid MMSI number for a DSC call to a specific group of vessels is:

030327931

Which of the following would indicate an Inmarsat-C terminal?

A 9 digit number always starting with 4.

Which of the following watches must a compulsory Sea Area A1 vessel maintain?

A continuous DSC watch on Ch-70.

What is meant by the acronym "EOS" in a DSC message?

End of Sequence

What action should you take after sending a false or accidental Distress alert on Inmarsat-C?

Select "Transmit" or "SEND/REC" menu and send a cancellation message via the LES used for the Distress alert.

Which of the following situations would normally use the Safety priority?

Important navigational or meteorological warnings.

Which of the following would most likely not prevent a SART's signal from being detected?

The SART was properly mounted in the lifeboat and rescue personnel were monitoring the 3-cM radar.

The SART is required to have sufficient battery capacity to operate in the stand-by mode for what period of time?

Four days

What part of a satellite EPIRB may function as a visual aid to rescue vessels?

Strobe light

Which of these would be vital to a GMDSS SAR situation in polar regions?

COSPAS/SARSAT satellites to receive Distress Alerts and HF Voice for follow-on and SAR activity.

The effectiveness of VHF communications is maximized by:

Appropriate setting of the transmitter power, selecting an appropriate channel & adjustment of squelch for maximum receiver sensitivity.

What means are used to prevent the reception of unwanted broadcasts by vessels utilizing the NAVTEX system?

Programming the receiver to reject certain stations and message categories.

What kind(s) of broadcasts are not available through SafetyNET™?

Vessel traffic lists

How many frequencies are assigned specifically for HF MSI broadcasts?

8

Which longitude corresponds to the AOR-E satellite for Inmarsat-B/C communications?

15.5W

To keep the Inmarsat-B or F77 antenna pointing at the desired satellite, regardless of the ship's position and course, it has an input from the vessel's:

Gyrocompass

What are the directional characteristics of the Inmarsat-C SES antenna?

Omni-directional.

Which Inmarsat Earth stations could a GMDSS Radio Operator select for routine Inmarsat-C traffic if the vessel is in the Sea of Japan and logged-in to the POR satellite?

Beijing (PRC), Santa Paula (USA), Auckland (New Zealand) or Sentosa (Singapore).

Which of the following is a correctly formatted Inmarsat-C address book entry for sending TELEX communications to a vessel in the AOR-E?

(581323500120

Which of the following is a correctly formatted Inmarsat-C address book entry for sending communications to a fax machine number (045) 334-5678 in Japan (voice country code 81)?

(810453345678

What is your vessel's obligation upon receipt of a Distress priority EGC message requesting that vessels report in response to a SAR situation?

Silence the alarm, notify the master and send a message to the RCC with your vessel's position and capabilities.

A vessel loses Inmarsat-B SES operation after a large course change. Which of the following could most likely cause this?

System loses gyro follow-up or a gyro system malfunction.

An ITU duplex channel frequency is defined as:

Transmit and receive frequencies must be different.

In FM communications, the information is applied to the carrier by:

Varying the frequency of the carrier to convey the information to other stations.

Which of the following acronyms refers to a communications system that does not use ARQ and/or FEC modes?

SART

Which statement is correct regarding HF SITOR (NBDP) under GMDSS?

Safety communications by direct-printing telegraphy should be in the ARQ mode when communicating with the U.S. Coast Guard or other coast stations on channels that they normally guard.

Which of the following is true of SITOR (NBDP) ARQ mode?

This is an interactive mode.

If the vessel is beyond range of NAVTEX broadcasts and the Inmarsat-C system fails, the GMDSS operator must:

Select an HF MSI frequency and FEC TELEX mode to receive MSI.

How can a GMDSS operator determine the best frequency band to choose for a SITOR (NBDP) transmission to a shore station?

Listen to shore station "free signals" and choose the band with the strongest signal.

Which would be an indication of proper operation of a SSB transmitter rated at 60 watt PEP output?

In SITOR (NBDP) communications, the power meter can be seen fluctuating regularly from zero to the 60 watt relative output reading.

See REF2556

GMDSS is required for which of the following?

SOIAS Convention ships of 300 gross tonnage or more.

What equipment can be used to receive Maritime Safety Information?

NAVTEX, EGC receiver or HF SITOR (NBDP).

See REF2554

What is the frequency range for High Frequency?

3-30 MHz

What is the emission designation for VHF-FM?

F3E

What is the most common type of antenna for GMDSS MF-HF?

Vertically polarized whip antenna

Which statement is false regarding the maintenance of GMDSS equipment at sea?

The GMDSS maintainer may not be the person designated to have primary responsibility for radio-communications during Distress incidents even if licensed as an operator.

Under GMDSS, a compulsory VHF-DSC radiotelephone installation must be tested at what minimum intervals at sea?
Daily

Which statement concerning radio log archival by the station licensee is false?
Retain for one year unless there are Distress or Urgency entries.

A MMSI 030346239 indicates what?
Group MMSI

What sequence best describes an MF-HF DSC Distress menu transmission?
A string of dots to stop the DSC scanner, Distress priority code, vessel position & time, emission for follow-on communications, DSC frequency.

Which of the following are the MF/HF DSC Distress watch frequencies
2187.5, 4207.5, 6312.0, 8414.5, 12577.0, 16804.5

What is the proper procedure to be followed upon receipt of a Distress alert transmitted by use of Digital Selective Calling techniques?
Set watch on the radiotelephone Distress and Safety frequency associated with the Distress and Safety calling frequency on which the Distress alert was received.

What is the fundamental purpose for imposing radio silence?
To mitigate the risk of interference on a frequency or channel being used for emergency communications.

The Radiotelephone Safety signal is:
"Securite" repeated 3 times

How can a SART's detection and effective range be maximized?
The SART should be held or mounted as high as possible and in a vertical position.

Which is not a function of a satellite under COSPAS-SARSAT using satellite EPIRBs?
After the EPIRB's position is calculated using the Doppler shift COSPAS-SARSAT satellites provide follow-on SAR communications.

What is an example of a locating signal?
A float-free EPIRB

Which statement is not true regarding the COSPAS-SARSAT system?
The position of the EPIRB is always transmitted in the outgoing transmission (unless the unit is a GPIRB).

A VHF frequency channel pair of TX 157.200 MHz and RX 161.800 MHz would most likely be:
A duplex Public Correspondence Coast Radio Station frequency.

What statement is true regarding the control the operator can exercise over the NAVTEX receiver's operation?
The operator can set most units to reject all messages except navigation, meteorological warnings, and search and rescue messages. If the unit will reject such messages it may be unsafe to do so.

Which satellite system promulgates Maritime Safety Information?
Inmarsat-C SafetyNETTM

Which longitude corresponds to the POR's satellite location for Inmarsat-B/C communications?
178E

The Inmarsat telephone and TELEX communications channel usage scheme is:
One ship per telephone channel and many ships per TELEX channel.

Which of the following best describes Inmarsat-C operation?

1s a digital store-and-forward system that also provides Enhanced Group Call, data reporting, polling and Distress alerting capabilities.

Which Inmarsat Earth Stations could a vessel utilize for Inmarsat-B traffic if operating off the Pacific Coast of the United States and tracking the POR satellite?

Santa Paula (USA), Auckland (New Zealand) or Yamaguchi (Japan).

Which of the following is a correctly formatted Inmarsat-C address book entry for sending TELEX communications to a vessel in the POR?

(582436559121

How may an Inmarsat-C unit be used to send text communications to an Internet destination?

Compose a text file, use the SEND/REC or TRANSMIT menu & specify the recipient using the address book function (or by manual entry) for e-mail.

What statement is true regarding LES codes and Inmarsat "hot-key" alert default menus?

The LES code must be updated by the officers depending upon the SAR jurisdictions the vessel transits and current ocean region satellite in use.

Which statement is correct regarding a method that a vessel experiencing problems with shadowing of an Inmarsat-B (or F77) SES antenna by an on-board obstruction could use to attempt reliable communications?

Change course to remove the shadow.

Which of the following defines "ITU Channel 1216"?

Ch-16 in the 12 MHz band.

The proper sequence of emissions corresponding to the sequence AM-Voice DSB, SSB-Voice without carrier, USB-Voice with carrier and FM-Voice, is:

A3E, J3E, H3E, F3E.

What does the term FEC mean in SITOR (NBDP) communications?

Forward Error Correction

Which of the following events will take place immediately after phasing with a Coast Station on an available channel?

After exchanging answer-backs (WRU/AAB) the coast station transmits GA+? and awaits a command.

In ARQ, when the information sending station (ISS) receives a signal that the parity check failed what happens?

The last block will be resent.

If the vessel is experiencing atmospheric interference with NAVTEX broadcasts, especially in the tropics, the GMDSS operator should:

Select one of the 8 HF MSI frequencies and set-up the transceiver in FEC TELEX mode.

The Distress Alarm sounds and the screen readout no longer contains the particulars of the Distress:

Examine the Received Data Directory or the printer to recover the information.

Your antenna tuner becomes totally inoperative. What would you do to obtain operation on 2 HF bands?

Bypass the antenna tuner. Use a straight whip or wire antenna approximately 30 ft long.

Which GMDSS system utilizes terrestrial radio techniques?

VHF-MF-HF-DSC

Which of the following are required GMDSS functions?

Bridge-to-Bridge communications, general communications, SAR communications.

What is the frequency range for Very High Frequency?

30-300 MHz

Which of the following statements describes the carrier?

The carrier is a Radio Frequency (RF) signal that is modulated to carry intelligence.

What is the purpose or function of the antenna coupler?

**Electrically matching the antenna system to the transmit frequency.
changing the overall wavelength of the antenna system (in addition to the fixed length whip.)
Enabling maximum transmitted signal on the band chosen by the operator.
All of these answers are functions of the antenna coupler.**

Which of the following service or maintenance functions may NOT be performed by the holder of a GMDSS Radio Operator License?

Any adjustments or maintenance that may affect the proper operation of the station.

Which statement concerning the testing of a compulsory radiotelephone station is false?

Calling the USCG on VHF CH-16 or 2182.0 kHz is the most effective method.

Which of the following log keeping statements is false?

Entries of all company communications using GMDSS satellite equipment are required.

Which of the following statements concerning MMSI is true?

All MMSI numbers are 9 digits and contain an MID.

MF-HF DSC alerts are transmitted using what emission type?

J2B to ensure compatibility with DSC receivers.

How many HF DSC Distress watch channels must be guarded by a compulsory vessel underway.

2

What is meant by the acronym "ECC" in a DSC message?

Error Check Character

When can routine communications be resumed when radio silence has been imposed?

Routine communications can resume after the Rescue Coordination Center transmits a message on the frequency or channel being used for emergency communications stating that such traffic has concluded.

Which of the following situations would normally use the Safety priority?

A scenario concerning an important navigational or meteorological warning.

Which statement is NOT true regarding the SART?

This is a 6 GHz transponder capable of being received by a vessel's X-band navigational radar system.

Which of the following satellite systems is of particular & dedicated importance to search and rescue missions under GMDSS?

COSPAS/SARSAT

Which device provides the best method to locate a ship in Distress or survival craft in the GMDSS?

Satellite EPIRBs

Which statement is NOT true regarding the COSPAS-SARSAT system?

May be used to transmit public correspondence.

Which channel is utilized for the required Bridge-to-Bridge watch?

VHF-FM on Ch-13 in most areas of the continental United States.

Which messages are mandatory to be received and should not typically be rejected or disabled by the operator of a NAVTEX receiver?

Navigational warnings, meteorological warnings, SAR information.

What information is promulgated by the international SafetyNET™?

MSI

Which longitude corresponds to the IOR's satellite location for Inmarsat-B/C communications?

64E

What is an "Inmarsat Mobile Number"?

This is the Inmarsat number that is assigned to a unit for incoming or outgoing calls.

Which of the following best describes a shipboard Inmarsat-C system?

A small, lightweight terminal capable of providing satellite store-and-forward message communications.

Which Inmarsat Earth Stations could a vessel utilize for Inmarsat-C traffic if operating off the Atlantic Coast of the United States and synched to the AOR-W satellite?

Southbury (USA), Burum (Netherlands), Eik (Norway).

Which of the following is a correctly formatted Inmarsat-C address book entry for sending TELEX communications to a vessel in the IOR?

(583446976519

To send message traffic to an Internet address using an Inmarsat- C terminal -- what action would be required?

Select the recipient using the e-mail code from the address book (or manually select the code.)

Detailed Distress situation report message formats can best be found in?

IAMSAR manual Volume 111.

Which of the following conditions does not typically impair Inmarsat-B communications ?

Normal precipitation from gales and storms.

Which of the following is a valid 22-MHz ITU Channel?

HF Ch-2206

The proper sequence of emissions corresponding to the sequence SSB-Voice without carrier, USB-Voice with carrier, FM-Voice and SITOR (NBDP) TELEX is:

J3E, H3E, F3E, F1B.

A Coast Station that is described as ATOR typically provides what type of services?

ARQ SITOR (NBDP) connections to shoreside terminals.

During SITOR (NBDP) ARQ operations through a coast station, what should the GMDSS operator do during the "Automatic Exchange of Answerbacks"?

Do nothing other than wait for a GA+? prompt and then issue the desired command.

Which of the following is true of SITOR (NBDP) ARQ mode:

The ship station sends a group of 3 characters, the shore station checks for proper parity. If parity is OK, the shore station indicates readiness for transmission of the next 3 characters.

Why must the GMDSS operator be able to set-up FEC & ARQ modes and differentiate between them?

The proper mode must be selected for follow-on TELEX communications in a Distress situation and for the reception of HF MSI.

A DSC Distress call is received by your vessel and your transceiver frequency display reads: Transmit = 4207.5 kHz and Receive = 4207.5 kHz with J3E emission -- what information can you infer from this?

The DSC call requested voice on 4207.5 kHz simplex but the requested alternate frequency is improper.

Your MF-HF whip antenna breaks off and is carried away in a storm. What would you do to regain operation on MF-HF frequencies?

Rig a wire antenna approximately 35-40 ft long per the equipment instruction manual.

What equipment utilizes satellite communications?

Inmarsat-C

Which of the following are required GMDSS functions for vessels?

Transmit and receive locating signals, general communications and SAR communications.

What is the frequency range for Ultra High Frequency?

300-3,000 MHz

On what frequencies would the J3E emission be used for GMDSS Distress communications?

2182.0 kHz, 16420.0 kHz or 8291.0 kHz.

What advantage does a vertical whip have over a long wire?

It radiates equally well in all directions.

What are the conditions, under GMDSS, whereby a ship is NOT allowed to depart from any port?

The vessel is not capable of performing all required Distress and Safety functions.

While underway, how frequently is the DSC controller required to be tested?

Once a day

A typical call sign for a large container ship under U. S. flag would be:

KBZY

Which of the following statements concerning MMSI is false?

All Coast Station MMSI must begin with the MID then 2 zeros.

When sending a DSC call:

Vessel's position will automatically be sent if the vessel is sending a "Distress Hot Key" alert.

What is usually the first step for a GMDSS Radio Operator to take when initiating a Distress priority message via Inmarsat?

By pressing a "Distress Button" or "Distress Hot Key(s)" on the equipment.

What action should be taken on receipt of a DSC Distress alert?

Silence the alarm, read the display screen and/or printout and listen for any follow on transmissions.

What is meant by the term "Seelonce Mayday"?

Stations not directly involved with the on-going Distress communications may not transmit on the Distress frequency or channel.

Which of the following frequencies and modes is allocated for Distress alerting in GMDSS?

406 MHz via EPIRB, 1626.5-1645.5 MHz via Inmarsat and Channel 70 DSC plus six (6) MF/HF DSC frequencies.

At what point does a SART begin transmitting?

If it has been placed in the "on" position, it will respond when it has been interrogated by a 9-GHz radar signal.

Which of the following statements concerning COSPAS-SARSAT is false?

Doppler frequency measurements provide more precise locations than GPIRB signals.

With what other stations may portable survival craft transceivers not communicate?

Communication between the ship and survival craft transceivers ashore.

What information is transmitted by a 406 MHz EPIRB alert?

A unique Hexadecimal I.D. number.

While conducting routine communications using the wheelhouse VHF with a station 1 mile distant, your recommended power setting would be:

1 watt, day or night.

The NAVTEX message header contains the following?

The first letter (from A to Z) indicates the NAVTEX transmitting station.

See REF294

To receive all mandatory MSI using the SafetyNET™ system the vessel must:

Log-in and ensure the position is accurate to receive MSI for the NAVAREA the vessel is currently within.

NAVAREAs referred to in NAVTEX are the same as used in _____.

Inmarsat SafetyNETTM

Which action must be taken to ensure that incoming message traffic of all priority levels will be received through Inmarsat-C?

The GMDSS Radio Operator must log-in to the desired satellite (if the unit did not automatically do so.)

Which of the following statements concerning Inmarsat geostationary satellites is true?

They provide coverage to vessels in nearly all of the world's navigable waters.

Which of the following modes of communications are available when using Inmarsat-C?

TELEX and e-mail

A vessel is tracking the AOR-W satellite. To initiate an automatic ship-to-shore telephone contact to a shoreside party in the U.S. phone # 123-456-7890, via Southbury Earth Station, a valid Inmarsat operations/dialing sequence is?

Select LES 001# then dial 0011234567890#

Which of the following is a correctly formatted Inmarsat-C address book entry for sending TELEX communications to an Inmarsat-B terminal in the AOR-W?

(584331014013

What menu function in Inmarsat-C terminals would typically be used to specify an Internet address destination?

The Address book function (or manual entry) in the SEND/REC or TRANSMIT menu.

Upon receipt of SafetyNET™ messages of the Distress or Urgency category on the ship's EGC receiver, what action is required by the GMDSS Radio Operator?

Manually reset the alarm.

A vessel is experiencing problems tracking the satellite in an Inmarsat-C SES while at sea. The problem is least likely caused by?

Local RF interference by in-port cell phone or other radio systems.

What is meant by the term duplex "ITU channel"?

A standardized series of frequency pairings for common use.

When placing a SSB MF/HF call to a Coast Station, you should always:

Make sure the frequency is not occupied.

The acronym SITOR (NBDP) stands for:

Simplex TELEX Over Radio

Assuming sending a direct TELEX message to a shore-based office, which sequence of events best describes a complete ARQ TELEX exchange with a coast station?

Initiate call, observe phasing, wait for exchange of answer-backs (WRU-AAB), send DIRT LX command with zero, TELEX country code, TELEX number, send message, send KKKK to terminate the TELEX link, receive MRN and time and charges.

Which of the following keystrokes or characters is sent as part of ARQ communications to request a direct TELEX call to a shore-based location?

DIRTLX023123456+

BFEC SITOR (NBDP) transmissions might be used to?

Send and receive Distress TELEX communications and receive HF MSI or NAVTEX.

What are potential dangers of automatic transceiver switching in response to a DSC call?

The transceiver may be switched out of the marine bands or the frequency may not match the requested priority or emission.

What equipment is used in or near the survival craft?

EPIRB

Which statement is true regarding a vessel equipped with GMDSS equipment that will remain in Sea Area A1 at all times?

The vessel must be provided with a radio installation capable of initiating the transmission of ship-to-shore Distress alerting from the position from which the ship is normally navigated.

What is the frequency range for Super High Frequency?

3-30 GHz

How many sidebands are present in the J3E mode?

One upper sideband.

How often must a compulsory vessel's GMDSS radio station be inspected?

Annually, by the FCC or designated authority.

What determines the spares and maintenance materials requirements for the SITOR (NBDP) equipment under GMDSS?

The recommendations of the manufacturer.

At sea, all required equipment (other than Survival Craft Equipment) must be proven operational by:

Daily testing or daily successful use of the equipment.

What would the number 1090 indicate?

A coast station SITOR (NBDP) SELCAL number.

Which of the following statements concerning MMSI is true?

None of these answers are correct.

DSC transmissions are encoded:

Using a ten-bit error detecting code.

Which of the following statements is true regarding Distress alerting under GMDSS?

The Distress alert should identify the station in Distress and its position & time of position update. Also, the alert may include the nature of the Distress, the type of assistance required, or the course and speed of the mobile unit.

What action should be taken if a Distress alert is received on the 12 MHz DSC frequency?

Set the transceiver to 12290.0 kHz simplex J3E emission.

How is "radio silence" imposed?

By the On Scene Coordinator (OSC) or the RCC chosen by the SAR Mission Coordinator.

Which of the following frequencies is designated for On-scene Distress and Safety communications?

2174.5 kHz

A SART's signal cannot be detected:

By a search vessel's 10 cm Radar.

Which of the following statements concerning COSPAS-SARSAT is false?

After initiating a call request and selecting the LES, these satellites may be used for commercial messages.

Equipment for radiotelephony use in survival craft stations under GMDSS must have what capability?

Operation on Ch-16.

Which statement is false regarding the COSPAS-SARSAT system and EPIRB operations?

The EPIRB's position and Hex I.D. is passed instantaneously to the RCC.

The USA-INT control on VHF units:

Changes selected international duplex channels to simplex channels for use in U.S. waters, on the "alpha" channels.

If the Inmarsat-c terminal is inoperative but the vessel remains within NAVTEX coverage -- which of the following message categories should not be disabled by the GMDSS Radio Operator?

Meteorological warnings, Search and Rescue information and Navigational warnings.

In using SafetyNET™ for the receipt of MSI (Maritime Safety Information):

All of these answers are correct.

A vessel operating in the Western Atlantic or along the East coast of North America and Central America from Canada to Venezuela, including the Caribbean and Panama, would be located in which NAVAREA?

IV

When logging into the Inmarsat system using Inmarsat-C, it is necessary to:

Select the Ocean Region.

What is the primary purpose of an Inmarsat LES?

The LES makes the satellite connection between the vessel and the requested destination for all types of services.

Which mode of communication is possible through an Inmarsat-C SES?

TELEX and e-mail

A vessel is tracking the AOR-E satellite. To initiate an operator assisted ship-to-shore telephone contact to a shoreside party in the U.S.A., # 202-456-7890, through a European Earth Station, a valid Inmarsat operations/dialing sequence would be?

Select LES: 012# then dial 1112024567890#

Which of the following is a correctly formatted Inmarsat-C address book entry for sending TELEX communications to two vessels in the POR - the first Inmarsat-C and the second Inmarsat-B?

(582452998777 first and 582323500120 second.

Which of the following is not correct with regard to Inmarsat-C e-mail?

An additional hardware upgrade is required to enable your ship's Inmarsat-C terminal to send and receive e-mails.

What can be defined as the service that allows terrestrial information providers to send general information messages to pre-defined groups of subscribers?

FleetNETTM

Which functions may the holder of a GMDSS Radio Operator License not perform on the Inmarsat-C equipment?

Adjust the azimuth and elevation values.

ITU duplex channel 1604 would mean:

Ch-4 in the 16 MHz band.

How are high seas (HF) radiotelephone communications initially established between a vessel and a public correspondence station?

The vessel calls and establishes voice contact with the public correspondence station on a channel that the station is known to monitor, and the two stations then proceed with their business.

What does the term "ARQ" mean in SITOR (NBDP) operations?

Automatic Repeat Request

For ARQ communications with a Public Correspondence Coast Station, which sequence of events best describes reaching the point in time where the text of TELEX communications should be sent _____.

Transceiver setup, SELCAL selection, Initiate Call, wait for exchange of answer-backs (WRU-AAB), GA+?, enter DIRT LX xy+, MOM, MSG+? and exchange of terminal answerbacks.

The DIRT LX command should be given to a coast station at what point in time?

After receipt of the Go Ahead indication following the automatic exchange of answerbacks.

FEC SITOR (NBDP) transmissions are normally used to?

Receive HF MSI and NAVTEX.

Which of these would not be a bad outcome of an Urgency DSC call to all vessels specifying an alternate TELEX frequency & emission that cause your transceiver to automatically switch?

The DSC controller decoded the contents of the DSC call and the requested frequency is on the DUS table/placard in the J2B emission.

What equipment is programmed to initiate transmission of Distress alerts and calls to individual stations?

DSC Controller

What statement is true regarding the additional equipment carriage requirement imposed for the survival craft of vessels over 500 gross tons?

A second radar transponder is required.

What is the primary frequency range for terrestrial communications using skywave propagation?

3-30 MHz

What is the signal transmitted in H3E mode?

A full carrier and the upper sideband.

What periodic inspection is required in order to remain in compliance with the regulations regarding GMDSS ship radio station inspections?

An inspection at least once every 12 months by the FCC or a holder of a GMDSS Maintainers license.

Which FCC license meets the requirement to serve as a GMDSS operator?

GMDSS Radio Operator's License.

The best way to test the MF-HF SITOR (NBDP) system is:

Initiate an ARQ call to a Coast Station and wait for the automatic exchange of answerbacks.

Which one of the following is a ship station SELCAL?

11243

Which of the following would indicate an Inmarsat-B terminal?

A 9 digit number always starting with 3.

DSC transmissions are received:

Using digital decoding by the DSC controller.

If a GMDSS Radio Operator initiates a DSC Distress transmission but does not insert a message, what happens?

The transmission will be made with "default" information provided automatically.

Your ship received a Distress relay from a coast station on DSC freq. 2187.5 kHz. What action should the watch officer take?

Monitor 2182.0 kHz to determine if there are any genuine Distress communications.

How are normal working conditions restored on a SITOR (NBDP) frequency on which radio silence had been imposed?

The RCC or Coast station that imposed the radio silence must transmit a SITOR (NBDP) message stating "SILENCE FINI".

Which channel is designated for GMDSS Digital Selective Calling?

Ch-70

How does the searching vessel's radar interrogate a survival craft SART?

The SART responds automatically and transmits the 12-blip signal when it detects the search craft or other vessels' X-Band radar signal.

Which of the following statements concerning the EPIRB system is true?

The Inmarsat system will not provide alerts and position report for 406 MHz EPIRBs equipped with GPS receivers.

Equipment for radiotelephony use in survival craft stations under GMDSS must have what characteristics?

Operation on Ch-16, watertight, permanently-affixed antenna.

What actions should the GMDSS radio operator take prior to any potential Distress situation?
All of these answers are good operational practice and should be consistently done.

The USA-INT control on VHF units:
Correctly set, will result in simplex operations in U.S. Coastal waters on the "alpha" channels.

How are NAVTEX broadcasts transmitted?
Using FEc techniques.

Over what system are Enhanced Group Calls transmitted?
Inmarsat satellite

A vessel operating in the Eastern Pacific or along the West coast of North and Central America from Alaska to Ecuador, including Panama and Hawaii, would be operating in which NAVAREA?
XII

What action should be taken on changing from one ocean region to another?
Log out of the current satellite and log in to the correct satellite.

How is a signal radiated from an Inmarsat-B or F77 system's antenna?
It is a highly focused directional signal that must be beamed at the desired satellite.

It is possible to transmit all of the following via Inmarsat-C from a vessel except?
Voice

To request medical assistance from Inmarsat via voice (using an Inmarsat-B SES) what would be the correct procedure?
Enter 32# to request the Inmarsat medical advisory system.

Which of the following is a correctly formatted Inmarsat-C address book entry for sending communications to a shoreside TELEX terminal number 45992 in Taiwan (TELEX country code 769)?
(None of these answers is correct.

How would a notification of arrival be sent as a text to a mobile phone number using an Inmarsat-C unit?
Compose a text file, use the SEND/REC or TRANSMIT menu & specify the recipient using the address book function (or by manual entry) for SMS destinations.

What additional equipment provides the maximum availability for receiving SafetyNET™ broadcasts when the associated Inmarsat-C SES is engaged in communications?
A separate EGC receiver.

Which modes could be selected to receive vessel traffic lists from high seas coast radio stations:
SSB and FEC

What is a potential danger of using the manufacturer's database to set up for operations using MF-HF ITU frequency assignments?
Different manufacturers use different database numbering systems to incorporate the ITU assignments into the transceiver and therefore a potential for confusion exists.

What is the best procedure for calling another ship station using HF radiotelephone when the signals are weak but readable?
On a properly selected ITU channel, give the call sign of the ship being called three times using phonetics, then "this is" followed by the call sign of the ship initiating the call three times, using phonetics, and ending with "over."

Which of the following statements concerning SITOR (NBDP) communications is true?
ARQ transmissions are made in data groups consisting of three-character blocks.

During ARQ communications, which of these is least likely to cause a coast station to immediately break the phased radio connection:
If the operator enters "KKKK" at the end of the message.

Which automatic TELEX command should be sent by a ship station during SITOR (NBDP) operations to properly address a weather report to the national weather authority?
OBS+ and then send the weather report.

The "short rules" of propagation necessary to select the appropriate frequency band are:
Shorter distance = Lower Frequency, Daytime = Higher Frequency.

An incoming Distress priority 16 MHz DSC call requesting J3E emission might automatically switch to what frequency?
16420.0 kHz

What system provides accurate vessel position information to the GMDSS equipment?
GPS

Which of the following systems is most susceptible to fading or static interference?
HF SITOR (NBDP)

What is the signal transmitted in J2B mode?
An upper sideband of 2 alternating tones.

Which statement is false regarding a GMDSS-equipped ship?
Ships must have the required equipment inspected at least once every five years.

Which of the following statements concerning GMDSS Radio Operator requirements is false?
All communications involving Safety of life at sea must be logged as long as the compulsory vessel was not involved in such communications.

The best way to test the Inmarsat-C terminal is:
Compose and send a brief message to your own Inmarsat-C terminal.

Which of the following is the call sign for a U.S.C.G. coast station?
NMN

Which of the following would indicate an Inmarsat-B terminal?
325468325

Properly formatted MF-HF DSC transmissions can request which of the following emissions for follow on communications?
J3E/H3E voice emissions

Repetition of a DSC Distress call is normally automatic if not acknowledged after a delay of:
3.5 - 4.5 minutes

Your ship received a Distress relay from a coast station on DSC VHF channel 70. What action should the watch officer take?
Monitor Ch-16 to determine if there are any genuine Distress communications.

How are normal working conditions restored after radio silence has been imposed?
The Rescue Coordination Center (RCC) that imposed the radio silence must transmit a voice message on the Distress frequency stating "SEELONCE FEENEE".

How many MF frequencies are available for DSC Distress related calls?

One

What radar display changes indicate the correct approach to a SART and what care should be taken in a SAR situation?

The line of dots indicate the SART's position, the dots become increasing arcs as the distance to the SART lessens, rescuing vessels should reduce speed as the arcs get greater in degree.

Which of the following statements concerning satellite EPIRBs is true?

Once activated, these EPIRBs transmit a signal for use in identifying the vessel and for determining the position of the beacon.

Which statement is NOT true regarding the requirements of survival craft portable two-way VHF radiotelephone equipment?

Effective radiated power should be a minimum of 2.0 Watts.

What information should be contained in a detailed Distress message that was not transmitted by an initial Distress "hot-key" alert?

Vessel name & call sign, POB and all potential means to communicate with the vessel.

Proper and legal VHF operations require all of these except?

The correct bandwidth must be selected by the operator.

What determines whether a NAVTEX receiver prints a particular type of message content from a programmed NAVTEX station?

The serial number and type of message has not been previously received or the subject indicator has not been programmed for rejection.

How is a MSI (Maritime Safety Information) broadcast received by an Inmarsat-C SES that is engaged in communications?

There is no loss of information since broadcasts of "vital" messages will be repeated.

A vessel on a voyage between Miami and Los Angeles via the Panama Canal would be operating in which NAVAREAS?
IV and XII

What is the primary danger of improperly logging out?

Your company or another ship may accrue significant charges when their traffic is repetitively sent to your unavailable terminal.

Which mode of Inmarsat-B communications may be possible with a lower received signal strength?

TELEX

Which of the following best describes the full range of services provided by the Inmarsat-C Satellite system?

Polling, enhanced group call, one-way position and data reporting via satellite, two-way messaging and data communications on a store-and-forward basis.

Which of the following would be a valid sequence to request an automatically dialed ship-ship call to an F77 terminal on a vessel tracking the IOR satellite?

00870763240864#

Which of the following is a correctly formatted Inmarsat-C address book entry for sending communications to a shoreside TELEX terminal number 440122 in the United Kingdom (TELEX country code 51)?

(51440122

How may Inmarsat-C terminals be used for sending Urgency or Safety priority communications (such as synoptic weather reports)?

Use the appropriate special 2-digit codes selected from the address book or manually enter the correct code into the SEND/REC or TRANSMIT menu.

Which of the following is utilized to transmit Enhanced Group Calls?

Inmarsat satellite

MF/HF Transceiver Power levels should be set _____.

To the lowest level needed to achieve the necessary propagation radius and communications range.

ITU Duplex channels are:

Internationally standardized assignments of frequency pairs for common use.

What is the correct procedure for calling a coast radio station using HF radiotelephone?

On a correct ITU channel, give the call sign of the coast radio station three times using phonetics, the words "this is", followed by the ship's call sign three times using phonetics and ending with "over".

Which of the following statements concerning SITOR (NBDP) communications is true?

FEC transmissions rely upon an error correction technique, which transmits each character twice.

During ARQ communications, which of these is least likely to cause a coast station to break the phased radio connection:

If the operator enters "NNNN" at the end of the message.

Which of the following would be a valid automatic TELEX code and number for a request for a real-time TELEX connection to a shore-based TELEX terminal?

DIRTLX023424998+.

GMDSS operators should learn which of the following propagation "rules of thumb"?

Longer distance = higher frequency, Shorter distance = lower frequency, Daytime = higher frequency, nighttime = lower frequency.

An incoming DSC Distress alert on 8414.5 kHz will have what result?

The DSC controller will emit both an audible and visual alarm.

The particulars of the alert may be printed out.

The Distress information contained in the alert will be sent to the data directory.

All of these answers would typically occur.

Which of these can be used to receive MSI?

NAVTEX

Within a single sea area, what is the primary reason GMDSS imposes carriage requirements for different radio subsystems?

The combined capabilities of redundant subsystems mitigate the risk of a single point of failure.

Which system is most likely to be affected by atmospheric disturbances?

MF/HF radiotelephony

Which of the following statements is true?

There are two tones used in J2B mode.

Which statement is false regarding a GMDSS equipped ship?

A conditional or partial exemption may not be granted, in exceptional circumstances, for a single voyage outside the sea area for which the ship is equipped.

Which FCC license meets the requirements to perform or supervise the performance of at-sea adjustments, servicing, or maintenance which may affect the proper operation of the GMDSS station?

GMDSS Operator's/Maintainer's license or GMDSS Maintainer's license.

A vessel certified for service in Sea Area A3 is required to maintain a watch on:

VHF Channel 70, MF Frequency 2187.5 kHz, HF on 8414.5 kHz and one other HF DSC frequency.

What type of station would be assigned the call sign WAB2174?

Tug boat

Which of the following would indicate an F77 terminal?

766832922

Which of the following statements concerning DSC equipment is true?

The vessel's navigational position must be updated, either automatically or manually, no less often than every four (4) hours.

For a MF/HF DSC Distress call which statement is false?

It always requests J3E Voice follow-on communications so other vessels can hear the Mayday.

Under what condition would you not relay a DSC Distress alert?

A coast station DSC acknowledgment of the original Distress alert was received by your vessel.

The Radiotelephone Urgency signal is:

Pan Pan

How many HF frequencies are available for DSC Distress related calls?

Five

How can rescue personnel detect that a SART is transmitting in the immediate vicinity?

The SART's dots on the PPI will become arcs and then eventually become concentric circles.

What features may be found on GMDSS satellite EPIRB units?

Float-free release bracket, strobe light & Distress alert transmission on 406 MHz.

Which statement is NOT true regarding the requirements of VHF Survival Craft Transceivers?

Operation on Ch-13 is mandatory.

Which GMDSS equipment is best suited to simultaneous long-range communications with an RCC/coast station and OSC vessels or SAR aircraft?

MF-HF SSB transmitters using voice follow-on frequencies.

How is mutual interference on 518 kHz among NAVTEX stations avoided?

Transmissions scheduled on a time-sharing basis, power limited and station assignment codes are geographically separated.

Which information determines if a NAVTEX message is to be rejected?

The second letter (from A to Z) in the header indicating the type of message.

Which of the following provides a unique automated system capable of addressing messages to pre-determined groups of ships or all vessels in both fixed and variable geographic areas?

EGC

Which of the following actions should be taken once the vessel is berthed and will not leave port again for several weeks?
The GMDSS Radio Operator may log out of the Inmarsat-C system and turn the power off (unless the vessel decides to leave the unit on during the port stay.)

Which of these can take place on an Inmarsat-C terminal that has synch with the NCS CC but has not yet performed a successful login?
Reception of unscheduled MSI Urgency and Distress messages.

What is the purpose of the second 1.D. in an Inmarsat-B or F77 SES?
To provide an additional number which may be dedicated to computers, fax, etc.

Which statement concerning Inmarsat-B and Inmarsat-C terminals is correct?
Both Inmarsat-B and Inmarsat-C units can send data as well as send messages to fax machines.

If you are tracking the POR satellite and wish to communicate by voice using LES Santa Paula with another ship tracking the AOR-E satellite what is the proper procedure?
Select LES: 001# then dial 00870323972310#

If your vessel is in the POR, which of the following is a correctly formatted Inmarsat-C address book entry for sending communications to a shoreside TELEX terminal number 42267 in Ecuador (TELEX country code 308)?
(30842267

Which statement is false regarding an Inmarsat Distress request?
Any Distress request is automatically switched to an Inmarsat Distress working frequency.

What is the equipment arrangement that provides the maximum availability for reception of MSI broadcasts when using Inmarsat-C for TELEX communications?
Separate EGC receiver.

Which statement regarding GMDSS MF/HF Transceiver frequency set-up is true:
Using the manufacturer's database typically produces a more swift and certain result.

Which statement regarding bandwidth and channel spacing is correct:
Channel spacing values are a function of bandwidth values.

Through which coast radio station(s) may a U.S.-flag merchant vessel communicate?
Any coast radio station in the world that is licensed to provide such communications.

Which statement best defines the SITOR (NBDP) acronym "ARQ"?
Error Correction with 2 stations are in direct & phased TELEX communications with each other.

What sequence of ARQ codes matches the following: manual over, end of message text, end of connection to land destination terminal?
+?, NNNN, KKKK

When requesting a direct TELEX connection to a vessel's Inmarsat-B terminal, (i.e. making a SITOR (NBDP) call to an Inmarsat-B unit) the GMDSS operator must:
DIRTLX, 0, Ocean Area Code, TELEX number, +.

What would be the most appropriate HF bands for communicating from San Francisco to Taiwan or the Philippines?
16 or 22 MHz when daylight at each end and 8 MHz when dark at each end.

What is the normal voltage of a single lead acid battery cell?
2.1 volts

If operating within Ocean Area A1, and outside of NAVTEX coverage, a GMDSS-equipped vessel must carry:
Equipment capable of reception of Maritime Safety Information by the Inmarsat enhanced group call system, or HF SITOR (NBDP).

Which of the following systems is least susceptible to fading or static interference?
Inmarsat

What is the channel spacing for MF-HF voice frequencies?
3.0 kHz

During an annual GMDSS station inspection:
All required documents and publications might have to be produced and GMDSS operators may be required to demonstrate equipment competencies.

Which statement is false regarding the radio operator requirements for a GMDSS-equipped ship station?
Maintaining a record of all incidents connected with the radio-communications service that appear to be of importance to Safety of life at sea is not required.

A vessel certified for service in Sea Area A-2 is required to maintain watch on:
2187.5 kHz

What number will a ship station use to identify itself using SITOR (NBDP)?
Five digit SELCAL or 9 digit SELCAL number identical to MMSI.

Which of the following would indicate an F77 terminal?
765044177

What is the action that a GMDSS Radio Operator should take when a DSC Distress alert is received requesting J3E?
The Operator should immediately set continuous watch on the radiotelephone frequency that is associated with frequency band on which the Distress alert was received.

Which statement regarding an MF/HF DSC Distress call is true:
Follow on communications should be presumed to take place on the voice frequency associated with the specific DSC frequency used.

The relay of DSC Distress alerts:
Can quickly overburden the GMDSS systems in the vicinity with improperly transmitted or inappropriately relayed DSC calls.

Which of the following situations would normally use the Urgency priority?
A cargo shift or weather situation considered to be of greater hazard than would justify a Safety priority designation.

How many frequencies are available under GMDSS for DSC Distress-related calls?
Seven

What signal is detected as originating from an AIS SART and how is the signal displayed?
An AIS SART signal is shown on any AIS receiver as a special MMSI-like coded symbol.

What feature is not a component of a 406 MHz satellite EPIRB?
Aural locator signal.

Which statement is NOT true regarding the requirements of survival craft portable two-way VHF radiotelephone equipment?
Operates simplex on Ch-70 and at least one other channel.

Which statement is NOT true regarding an Inmarsat Distress Alert?

USCG coast stations will receive the alert and immediately notify the correct RCC.

When do NAVTEX broadcasts typically achieve maximum transmitting range?

Middle of the night

See REF294

NAVTEX broadcasts are sent:

In categories of messages indicated by a single letter or identifier.

What system may be useful for messages, such as local storm warnings or a shore-to-ship Distress alert, for which it is inappropriate to alert all ships in the satellite coverage area?

EGC

What action should always be taken before powering down an Inmarsat-C terminal or leaving one satellite footprint for another?

Log out with the current NCS to inform them you are off the air or to enable a proper log in procedure with the new satellite.

Which of the following is not an example of a failure to log-out properly?

A message on the screen or printer from the NCS.

What is the effect of having five periods (e.g.) in the text of a TELEX transmission on an Inmarsat-B SES?

The transmission will automatically terminate after those characters are transmitted.

When Inmarsat-B and Inmarsat-C terminals are compared:

Inmarsat-B antennas are larger, but directional for higher gain, while Inmarsat-C antennas are smaller and non-parabolic, and do not require aiming at the satellite.

Which of the following is a correct dialing sequence for a vessel tracking the AOR-W satellite to send a FAX to a U.S. destination via Southbury LES -- using an Inmarsat-B terminal and charging it to a credit card?

001# 3615036943254#

Which of the following is a correctly formatted Inmarsat-C address book entry for sending communications to a shoreside terminal number 276992 in New Jersey via TRT (TELEX country code 238)?

(238276992

In what way(s) may a Distress message be initiated through Inmarsat?

By pressing dedicated key(s) for this purpose or using menu-driven features to produce a Distress priority message.

Which of the following statements concerning EGC configuration is false?

The originator of MSI information cannot specify receipt only by vessels within a specific geographical area, circular or rectangular.

Which statement regarding GMDSS MF/HF Transceiver frequency set-up is true:

Some consoles allow both manual keypad entry and ITU channel recall from a database or memory.

The purpose of ITU channel spacing is:

To minimize the possibility of interference from adjacent channels.

What is the best source of information to find changes or additions to the routine communications frequencies of a Commercial Radio Station?

ITU List of Coast Stations and Special Service Stations. (List IV)

Which statement best defines the SITOR (NBDP) acronym "BFEC"?

Error correction for one-way TELEX broadcasts of weather or navigation information.

What sequence of ARQ codes matches the following: request establishment of a landline, end radio link after traffic is done, request connection for AMVER messages?

DIRTLX, BRK+, AMV+

To correctly address a SITOR (NBDP) message and transmit it "live" to a shore-based office the GMDSS operator would dial which sequence:

DIRTLX051440344+

GMDSS operators should routinely focus on the factors affecting propagation in what priority?

Distance & time of day, seasonal variations, sunspot cycle, solar flare alerts.

What is the normal specific gravity of a fully charged lead acid battery cell? What device is used to measuring the electrolyte of a lead acid battery?

1.280 Hydrometer

REF1002

NAVAREAs are the maritime geographic areas in which various governments are responsible for navigation and weather warnings.

REF2553

Sea Area A1 An area within the radiotelephone coverage of at least one VHF coast station in which continuous digital selective calling (Ch.70/156.525 MHz) alerting and radiotelephony services are available. Such an area could extend typically 30 nautical miles (56 km) to 40 nautical miles (74 km) from the Coast Station. Sea Area A2 An area, excluding Sea Area A1, within the radiotelephone coverage of at least one MF coast station in which continuous DSC (2187.5 kHz) alerting and radiotelephony services are available. For planning purposes this area typically extends to up to 180 nautical miles (330 km) offshore during daylight hours, but would exclude any A1 designated areas. In practice, satisfactory coverage may often be achieved out to around 400 nautical miles (740 km) offshore during night time... Sea Area A3 An area, excluding sea areas A1 and A2, within the coverage of an INMARSAT geostationary satellite. This area lies between about latitude 76 Degree NORTH and SOUTH, but excludes A1 and/or A2 designated areas. Inmarsat guarantee their system will work between 70 South and 70 North though it will often work to 76 degrees South or North. Sea Area A4 An area outside Sea Areas A1, A2 and A3 is called Sea Area A4. This is essentially the polar regions, north and south of about 76 degrees of latitude, excluding any A1 or A2 areas.

REF2554

The Inmarsat C maritime mobile satellite system has an inherent capability, known as Enhanced Group Call (EGC), which allows broadcast messages to be made to selected groups of ship stations located anywhere within a satellite's coverage.

REF2556

SITOR (Simple Teletype Over Radio) is a system for transmitting text messages. Although it uses the same frequency-shift keying (FSK) modulation used by regular radioteletype (RTTY), SITOR uses error detection, redundancy, and/or retransmission to improve reliability. There are two SITOR modes: SITOR-A is used for point to point links. SITOR-A uses automatic repeat request (ARQ) to gain reliability. If the receiver detects an error, it requests a retransmission. SITOR-B is used for broadcast links. SITOR-B transmits each character in a message twice to gain reliability. If the receiver detects an error in the first character, it uses the copy. If both characters are garbled, the receiver won't know what was sent. SITOR is said to use forward error correction (FEC). SITOR sends 7-bit characters as a bit stream at 100 baud (which, in this case, is 100 bits per second, 10 milliseconds per bit, or 70 milliseconds per character). The bitstream is FSK modulated with a 170Hz frequency shift. The high frequency is a mark, and the low frequency is a space.

REF293

47 CFR Part 80.

REF294

NAVTEX. A medium frequency radio communications system intended for the broadcast of navigational information up to 200 miles at sea, which uses narrow band direct printing technology to print out MSI and safety messages aboard vessels, without operator monitoring.

REF297

SECURITE (Safety) Indicates that the station is about to transmit a message concerning the safety of navigation or giving important meteorological warnings.