KEY TOPIC-#001: FUNDAMENTAL CONCEPTS:

001A- What is the fundamental concept of the GMDSS?

- a) It is intended to automate and improve emergency communications in the maritime industry.
- b) It is intended to automate and improve existing digital selective calling procedures and techniques.
- c) It is intended to provide more effective but lower cost commercial communications.
- d) It is intended to provide compulsory vessels with a collision avoidance system when they are operating in waters that are also occupied by non-compulsory vessels.

001B- The primary purpose of the GMDSS is?

- a) Allow more effective control of SAR situations by vessels.
- b) Provide additional shipboard systems for more effective company communications.
- c) Automate and improve emergency communications for the world's shipping industry.
- d) Effective and inexpensive communications.

001C- What is the basic concept of GMDSS?

- a) Search and rescue authorities ashore can be alerted to a Distress situation.
- b) Shipping in the immediate vicinity of a ship in Distress will be rapidly alerted.
- c) Shoreside authorities and vessels can assist in a coordinated SAR operation with minimum delay.
- d) All of these

001D- GMDSS is primarily a system based on?

- a) Ship-to-ship Distress communications using MF or HF radiotelephony.
- b) VHF digital selective calling from ship to shore.
- c) Distress, Urgency and Safety communications carried out by the use of narrow-band direct printing telegraphy.
- d) The linking of search and rescue authorities ashore with shipping in the immediate vicinity of a ship in Distress or in need of assistance.

001E- What is the responsibility of vessels under GMDSS?

- a) Vessels over 300 gross tons may be required to render assistance if such assistance does not adversely affect their port schedule.
- b) Only that vessel, regardless of size, closest to a vessel in Distress, is required to render assistance.
- c) Every ship is able to perform those communications functions that are essential for the Safety of the ship itself and of other ships.
- d) Vessels operating under GMDSS, outside of areas effectively serviced by shoreside authorities, operating in sea areas A2, and A4 may be required to render assistance in Distress situations.

001F- GMDSS is required for which of the following?

- a) All vessels capable of international voyages.
- b) Vessels operating outside of the range of VHF coastal radio stations.
- c) SOLAS Convention ships of 300 gross tonnage or more.
- d) Coastal vessels of less than 300 gross tons.

Key Topic #001 Answer Key: A: a) B: c) C: d) D: d) E: c) F: c)

KEY TOPIC-#002: EQUIPMENT SYSTEMS:

002A-	What e	quipment is	associated	with the	land or	terrestrial s	systems?
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- a) EPIRB
- b) VHF-MF-HF
- c) Inmarsat-C
- d) GPS

002B- What equipment is associated with the space systems?

- a) VHF-MF-HF
- b) Inmarsat-C
- c) NAVTEX
- d) SART

002C- What equipment is used in or near the survival craft?

- a) NAVTEX
- b) Fathometer
- c) COSPAS-SARSAT
- d) EPIRB

002D- What equipment is programmed to initiate transmission of Distress alerts and calls to individual stations?

- a) NAVTEX
- b) GPS
- c) DSC controller
- d) Scanning Watch Receiver

002E- What system provides accurate vessel position information to the GMDSS equipment?

- a) GPS
- b) COSPAS-SARSAT
- c) EPIRB
- d) Inmarsat-B

002F- What is the primary equipment for receiving MSI?

- a) SART
- b) EPIRB
- c) NAVTEX
- d) Inmarsat-B

Key Topic #002 Answer Key: A: b) B: b) C: d) D: c) E: a) F: c).

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<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC-#003: SEA AREAS:

003A- The Sea Area you are in is determined by:

- a) The vessel's distance from shore.
- b) Whether the ship station is in range of a VHF-DSC, MF-DSC, HF-DSC Coast Station or Inmarsat coverage.
- c) The types of maintenance available to your vessel.
- d) None of the above

003B- If a vessel is on a voyage from Miami, Florida to Houston, Texas what Sea Areas may it transit through?

- a) Sea area A3
- b) Sea area A2 or A3 if it is not within range of a VHF-DSC equipped coast station.
- c) Sea area A1 only if within range of a VHF-DSC equipped coast station.
- d) All of the above may be correct.

003C- If a vessel is engaged in local trade and at no point in its voyage travels outside of the range of a VHF shore station with continuous DSC alerting then the vessel is operating in what area?

- a) Coastal and international zones
- b) Inland and coastal waters
- c) Sea areas A1 and A2
- d) Sea area A1

003D- For a vessel to be in GMDSS Sea Area A-1:

- a) The vessel must be within VHF range of a Public Correspondence Station.
- b) The vessel must be within range of a coast station equipped with continuous VHF-DSC capability.
- c) The vessel must be within VHF range of a U. S. C. G. communication station.
- d) The vessel must be within VHF range of either a U. S. C. G. or a Public Correspondence Station.

003E- A vessel is on a coastwise voyage that results in a distance off shore of 10 to 40 nm and therefore:

- a) The vessel may not be in Sea Area A-1 at all times.
- b) The vessel will always be in Sea Area A-1.
- c) For the vessel to be within Sea Area A-1 it must be within range of a coast station equipped with continuous VHF-DSC capability.
- d) Answers a) and c) may both be true.

003F- 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?

- a) Sea Area A1
- b) Ocean Area Regions AOR-E, AOR-W, POR or IOR
- c) Sea Area A2
- d) Coastal and Inland Waters

Key Topic #003 Answer Key: A: b) B: d) C: d) D: b) E: d) F: a).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC-#004: FUNCTIONAL REQUIREMENTS:

004A- Which of the following is a functional or carriage requirement for compulsory vessels?

- a) A compulsory vessel must carry at least two (2) FCC licensed GMDSS Radio Operators.
- b) A compulsory vessel must satisfy certain equipment carriage requirements that are determined by where the vessel sails.
- c) A compulsory vessel must be able to transmit and respond to Distress alerts.
- d) All of the above

004B- Which communications functions must all vessels be capable of performing under GMDSS as defined by the International Maritime Organization?

- a) Radio Direction Finding.
- b) Distress alerting to and from vessels, search and rescue coordination, on-scene communications, signals for locating, Maritime Safety Information, general and bridge-to-bridge communications.
- c) Communications in each of the operational ocean areas.
- d) All communications possible within the International Safety-Net service.

004C- GMDSS-equipped ships will be required to perform which of the following communications functions?

- a) Distress alerting and Maritime Safety Information.
- b) Search and Rescue coordination and on-scene communications.
- c) Bridge-to-bridge and general radio communications.
- d) All of these

004D- What equipment can be used to receive Maritime Safety Information?

- a) NAVTEX
- b) EGC receiver
- c) HF NBDP
- d) All of the above

004E- Which of the following is a required GMDSS function?

- a) Bridge-to-Bridge communications.
- b) Reception of weather map facsimile broadcasts.
- c) Both of the above
- d) None of the above

004F- Which of the following is a required GMDSS function?

- a) Transmit and receive locating signals.
- b) Transmit and receive general communications.
- c) Both of the above
- d) None of the above

Key Topic #004 Answer Key: A: d) B: b) C: d) D: d) E: a) F: c).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC-#005: EQUIPMENT CARRIAGE REQUIREMENTS:

005A- Which statement is true regarding a vessel equipped with GMDSS equipment that will remain in Sea Area A1 at all times?

- a) 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.
- b) VHF DSC alerting may be the sole means of Distress alerting.
- c) HF or MF DSC may satisfy the equipment requirement.
- d) HF SSB with 2182 kHz automatic alarm generator may satisfy the equipment requirement.

005B- What statement is true regarding the additional equipment carriage requirement imposed for the survival craft of vessels over 500 gross tons?

- a) Additional carriage of two radio equipped lifeboats aft.
- b) A second radar transponder is required.
- c) Four additional portable VHF radios are required.
- d) The ability to communicate in all modes with any shore station.

005C- All passenger vessels must have what additional equipment?

- a) Inmarsat-B terminal
- b) Inmarsat-C terminal
- c) Aircraft Transceiver with 121.5 MHz
- d) MF-HF SSB Transceiver

005D- Within a single sea area, what is the primary reason GMDSS imposes carriage requirements for different radio subsystems?

- a) Redundancy in duplicating all operational functions in the event of a system failure.
- b) Each subsystem has a specific purpose and capabilities that generally cannot be duplicated by other subsystems.
- c) Different radio systems may be used by the various authorities.
- d) The ability to communicate in all modes with any of the shore stations.

005E- If operating within Ocean Area A1, and outside of NAVTEX coverage, a GMDSS-equipped vessel must carry?

- a) An Inmarsat-B terminal
- b) A GPS receiver
- c) Equipment capable of maintaining a continuous DSC watch on 2187.5 kHz.
- d) Equipment capable of reception of Maritime Safety Information by the Inmarsat enhanced group call system, or HF NBDP.

005F- What is the equipment carriage requirement for survival craft under GMDSS?

- a) At least three approved two-way VHF radiotelephones on every passenger ship and cargo ships of 500 gross tons and upwards.
- b) At least two approved two-way VHF radiotelephones on every cargo ship between 300-500 gross tons.
- c) At least one radar transponder must be carried on every cargo ship of 300-500 gross tons and two transponders (one for each side) of every passenger ship and every cargo ship of 500 gross tons and upward.
- d) All of these

Key Topic #005 Answer Key: A: a) B: b) C: c) D: b) E: d) F: d).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC-#006: MAINTENANCE OPTIONS:

006A- Which of the following statements concerning maintenance requirements is false?

- a) Compulsory vessels sailing in Sea Areas A1 and A2 must provide any one of the three maintenance options which are duplication of equipment, shore-based, or at-sea maintenance capability.
- b) Compulsory vessels sailing in Sea Areas A3 and A4 must provide any two of the three maintenance options which are duplication of equipment, shore-based, or at-sea maintenance capability.
- c) 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.
- d) Equipment warranties do not satisfy GMDSS maintenance requirements.

006B- Which of the following statements concerning maintenance requirements is true?

- a) The options are duplication of equipment, at-sea maintenance, and shore-based maintenance.
- b) Compulsory vessels between 300-500 gross tons are required only to provide one maintenance option, while compulsory vessels larger than 500 gross tons and all passenger vessels are required to provide any two of the three maintenance options.
- c) The "at-sea" maintenance may be waived if the compulsory vessel carries at least three licensed GMDSS Radio Operators.
- d) Compulsory vessels operating in Sea Area A4 are required to carry at least one licensed GMDSS Radio Maintainer.

006C- Which of the following is a requirement, under GMDSS, for all vessels over 300 gross tons operating within range of a MF-DSC equipped shore station?

- a) Ship's Master or radio officer must be on duty at all times.
- b) At least 2nd class Telegraphy license or GMDSS Element 9 is required for the radio officer.
- c) Spare parts and maintenance kit for repairs.
- d) Only one of the three maintenance options is required.

006D- What statement is generally correct regarding the maintenance requirements for ships under GMDSS?

- a) Redundancy of functions of certain equipment will partially meet this requirement.
- b) On-board maintenance provided by a person holding a GMDSS Maintainer's license will partially meet the requirements.
- c) Shoreside maintenance and scheduled tests and inspections will partially meet this requirement.
- d) All of the above

006E- A ship operating in sea area A-1 must have the following provisions for maintenance

- a) Carry an on-board maintainer plus duplication of equipment.
- b) Only one option for maintenance is necessary.
- c) Shore maintenance may not be selected.
- d) None of the above

006F- A ship operating in sea area A-1 must have the following provisions for maintenance:

- a) Shore maintenance
- b) Duplication of equipment
- c) At Sea Maintenance
- d) Any one of the above

Key Topic #006 Answer Key: A: c) B: a) C: d) D: d) E: b) F: d).

KEY TOPIC #007: RADIO SPECTRUM:

007A- What is the frequency range for Medium Frequency?

- a) 30-300 kHz
- b) 300-3,000 kHz
- c) 1,000-10,000 kHz
- d) 10-30 MHz

007B- What is the frequency range for High Frequency?

- a) 3-30 MHz
- b) 300-3,000 kHz
- c) 30-300 MHz
- d) 10-30 MHz

007C- What is the frequency range for Very High Frequency?

- a) 3-30 MHz
- b) 300-3,000 kHz
- c) 30-300 MHz
- d) 10-30 MHz

007D- What is the frequency range for Ultra High Frequency?

- a) 3-30 MHz
- b) 300-3,000 MHz
- c) 30-300 MHz
- d) 10-30 MHz

007E- What is the frequency range for Super High Frequency?

- a) 30-300 GHz
- b) 300-3,000 MHz
- c) 30-300 MHz
- d) 3-30 GHz

007F- What is the frequency range for Maritime VHF operations?

- a) 3-30 MHz
- b) 88-108 MHz
- c) 156-164 MHz
- d) 540-1640 kHz

Key Topic #007 Answer Key: A: b) B: a) C: c) D: b) E: d) F: c).

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<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #008: INSPECTIONS AND EXEMPTIONS:

008A- How often must a compulsory vessel's GMDSS radio station be inspected?

- a) Annually, by the U.S. Coast Guard.
- b) Annually, by the FCC or designated authority.
- c) Annually, by the FCC, and every six months if the vessel sails outside of Sea Areas A1 and A2.
- d) The FCC's annual inspection may be waived if and only if monthly inspections are performed by the vessel's on-board GMDSS Radio Maintainer.

008B- What periodic inspection is required in order to remain in compliance with the regulations regarding GMDSS ship radio station inspections?

- a) U.S. Coast Guard annual inspection.
- b) An inspection at least once every 12 months by the FCC or a holder of a GMDSS Maintainers license.
- c) FCC inspection every five years.
- d) Periodic inspections not required if on board maintainers perform routine preventive maintenance.

008C- Which statement is false regarding a GMDSS-equipped ship?

- a) A conditional or partial exemption may be granted, in exceptional circumstances, for a single voyage outside the sea area for which the vessel is equipped.
- b) Ships must have the required equipment inspected at least once every five years.
- c) The regulations apply to all passenger ships regardless of size and cargo ships of 300 gross tons and upwards.
- d) Ships must carry at least two persons holding a GMDSS Radio Operator's license for Distress and Safety radio-communications purposes.

008D- Which statement is false regarding a GMDSS equipped ship?

- a) 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.
- b) Ships must have the required equipment inspected at least once every 12 months.
- c) The regulations apply to all passenger ships regardless of size and cargo ships of 300 gross tons and upwards.
- d) Ships must carry at least two persons holding a GMDSS Radio Operator's license for Distress and Safety radio-communications purposes.

008E- During an annual FCC inspection:

- a) All required documents and publications might have to be produced.
- b) Licensed GMDSS operators may be required to demonstrate equipment competencies.
- c) All required equipment must be fully operational.
- d) All of the above

008F- Foreign governments or administrations may inspect the radio installation:

- a) When the ship's station license cannot be produced without delay.
- b) When irregularities are observed.
- c) Both of the above
- d) None of the above

Key Topic #008 Answer Key: A: b) B: b) C: b) D: a) E: d) F: c).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #009: REQUIRED DOCUMENTS AND PUBLICATIONS:

009A- Which of the following references should the GMDSS Radio Operator consult for information on the proper operation of equipment?

- a) ITU List of Equipment Operations.
- b) The manufacturer's operator manuals.
- c) 47 CFR Part 80
- d) Information is available through SafetyNETTM channels.

009B- Where can GMDSS regulations pertaining specifically to U.S.-flag vessels be found?

- a) These are located in CCIR #476.
- b) These are located in FCC Part 83.
- c) These are published only by the U.S. Coast Guard.
- d) These are located in 47 CFR Part 80.

009C- What should the GMDSS Radio Operator consult to review the proper procedures to be followed in Distress situations under GMDSS?

- a) IMO Recommendations.
- b) The manufacturer's instruction manuals.
- c) Part 90 of the FCC Rules and Regulations.
- d) Part 80, Subpart W of the FCC Rules and Regulations.

009D- Which of the following documents are required by GMDSS for vessels on international voyages (other than the Great Lakes)?

- a) A copy of the IMO master plan of shore-based facilities.
- b) Station logs
- c) 47 CFR Part 80 FCC rules and regulations.
- d) All of these

009E- Which of the following documents are required by Part 80 of the FCC rules for vessels on international voyages (other than the Great Lakes)?

- a) Appropriate Safety Convention Certificate.
- b) List of Call Signs and Numerical Identities. (ITU List VII-A)
- c) List of Radiodetermination and Special Service Stations. (ITU List VI)
- d) All of these

009F- What publication/s should a GMDSS Operator consult regarding the proper set-up and operation of vessel equipment?

- a) ITU Publications
- b) The manufacturer's instruction manuals.
- c) Part 90 of the FCC Rules and Regulations.
- d) Code of Federal Regulations, Title 47, Part 80, Subpart W.

Key Topic #009 Answer Key: A: b) B: d) C: d) D: d) E: d) F: b).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #010: MAINTENANCE:

010A- Which of the following maintenance functions is not the responsibility of the GMDSS Radio Operator?

- a) Visual inspection of equipment, including the antenna and associated components.
- b) Perform on-the-air verification checks.
- c) Perform scheduled testing of the battery's charged condition.
- d) Aligning the power output stage for maximum power.

010B- When may a compulsory vessel not be allowed to leave port?

- a) When the vessel is in an over-carriage condition.
- b) When the vessel has arranged for both duplication of equipment AND shore-based maintenance.
- c) When the vessel has replaced a required piece of GMDSS-related equipment but its performance has not been verified or logged.
- d) When the vessel is carrying only two licensed GMDSS Radio Operators and is capable of performing all required functions.

010C- Which statement is false regarding the maintenance of GMDSS equipment at sea?

- a) The GMDSS maintainer may not be the person designated to have primary responsibility for radiocommunications during Distress incidents even if licensed as an operator.
- b) Ships must carry at least one person who qualifies as a GMDSS maintainer for the maintenance and repair of equipment if the at-sea maintenance option is selected.
- c) All at-sea maintenance and repairs must be performed by, or under the supervision of a person holding a GMDSS Maintainer license.
- d) The GMDSS maintainer may be the person responsible for ensuring that the watches are properly maintained and that the proper guard channels and the vessel's position are entered into the DSC equipment.

010D- Which of the following service or maintenance functions may NOT be performed by the holder of a GMDSS Radio Operator License?

- a) Reset tripped circuit breakers or replace defective fuses.
- b) Routine battery maintenance if used as part of the GMDSS station.
- c) Any adjustments or maintenance that may affect the proper operation of the station.
- d) Replacement of consumable items such as paper, ribbons, etc.

010E- What are the conditions, under GMDSS, whereby a ship is NOT allowed to depart from any port?

- a) The vessel is not capable of performing all required Distress and Safety functions.
- b) The vessel is carrying more than the required number of qualified GMDSS radio operators.
- c) The vessel has a temporary waiver of its radio license and Safety Certificate.
- d) The vessel is not carrying a GMDSS radio maintainer, but has provided for shoreside maintenance plus duplication of equipment if required.

010F- What determines the spares and maintenance materials requirements for the VHF-DSC equipment under GMDSS?

- a) The recommendations of the manufacturer.
- b) 47 CFR Part 80
- c) IMO Circular "Equipment Spares".
- d) The GMDSS Maintainer's requirements.

Key Topic #010 Answer Key: A: d) B: c) C: a) D: c) E: a) F: a).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #011: LICENSE AND PERSONNEL REQUIREMENTS:

011A- Which of the following is the minimum license requirement of a GMDSS Radio Operator?

- a) Holding the Marine Radio Operator Permit is a pre-requisite before the GMDSS Radio Operator Endorsement can be obtained.
- b) Holding the General Radiotelephone Operator License with RADAR endorsement is sufficient.
- c) Holding a valid GMDSS Radio Operator license is sufficient.
- d) Holding either the General Radiotelephone Operator License or the First or Second Class Radiotelegraph license with GMDSS Radio Maintainer's endorsement is sufficient.

011B- Which of the following statements concerning GMDSS Radio Operator requirements is false?

- a) Each compulsory vessel must carry at least two licensed GMDSS Radio Operators at all times while at sea.
- b) Each compulsory vessel must carry at least two licensed GMDSS Radio Operators at all times while at sea and may elect to carry a GMDSS Radio Maintainer as well.
- c) Communications involving Safety of life at sea do not have to be logged as long as the compulsory vessel was not involved in such communications.
- d) While at sea, adjustments to, and the maintaining of, GMDSS equipment may be performed by the GMDSS Radio Operator as long as the work is supervised by an on-board licensed GMDSS Radio Maintainer.

011C- What is the minimum operator license required to perform or supervise the performance of at-sea adjustments, servicing or maintenance which may affect the proper operation of the GMDSS station?

- a) Marine Radio Operator Permit.
- b) General Radiotelephone Operator license and Radar endorsement.
- c) Designated maintainer possessing a GMDSS Radio Operator license.
- d) GMDSS Radio Maintainer's license.

011D- Which statement is false regarding the radio operator requirements for a GMDSS-equipped ship station?

- a) One of the qualified GMDSS radio operators must be designated to have primary responsibility for radiocommunications during Distress incidents.
- b) A qualified GMDSS radio operator, and a qualified backup, must be designated to perform Distress, Urgency and Safety communications.
- c) 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.
- d) While at sea, all adjustments or radio installations, servicing or maintenance of such installations that may affect the proper operation of the GMDSS station must be performed by, or under the supervision of, a qualified GMDSS radio maintainer.

011E- What are the vessel equipment and personnel requirements of GMDSS?

- a) Two licensed GMDSS radio operators.
- b) Equipment carriage requirements.
- c) Distress alerting and response.
- d) All of these

011F- What is the minimum requirement of a GMDSS radio operator?

- a) Marine Radio Operator Permit and GMDSS Endorsement.
- b) General Radiotelephone Operator license and Radar endorsement.
- c) GMDSS Radio Operator license.
- d) General Radiotelephone license or First or Second Class Radiotelegraph license with GMDSS Radio Maintainer's endorsement.

Key Topic #011 Answer Key: A: c) B: c) C: d) D: c) E: d) F: c).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #012: RESERVE ENERGY & EQUIPMENT TESTING:

012A- Under GMDSS, a compulsory VHF-DSC radiotelephone installation must be tested at what minimum intervals at sea?

- a) Daily
- b) Annually, by a representative of the FCC.
- c) At the annual SOLAS inspection.
- d) Monthly

012B- What is the meaning of "Reserve Source of Energy"?

- a) The supply of electrical energy sufficient to operate the radio installations for the purpose of conducting Distress and Safety communications in the event of failure of the ship's main and emergency sources of electrical power.
- b) High caloric value items for lifeboat, per SOLAS regulations.
- c) Diesel fuel stored for the purpose of operating the powered survival craft for a period equal to or exceeding the U.S.C.G. and SOLAS requirements.
- d) None of these

012C- In the event of failure of the main and emergency sources of electrical power -- what is the term for the source required to supply the GMDSS console with power for conducting Distress and other radio-communications?

- a) Emergency power
- b) Reserve source of energy
- c) Ship's emergency diesel generator
- d) Ship's standby generator

012D- What is the requirement for emergency and reserve power in GMDSS radio installations?

- a) An emergency power source for radio communications is not required if a vessel has proper reserve power (batteries).
- b) A reserve power source is not required for radio communications.
- c) Only one of the above is required if a vessel is equipped with a second 406 EPIRB as a backup means of sending a Distress alert.
- d) All newly constructed ships under GMDSS must have both emergency and reserve power sources for radio communications.

012E- While underway, how frequently is the DSC controller required to be tested?

- a) Once a day
- b) Once a week
- c) Twice a week
- d) Once a month

012F- At sea, all required equipment (other than Survival Craft Equipment) must be proven operational by?

- a) Daily testing
- b) By either a) or c)
- c) Operational use of the equipment.
- d) Testing at least every 48 hours.

KEY TOPIC #013: WATCH and LOG KEEPING REQUIREMENTS:

013A- Proper watchkeeping includes the following:

- a) All required frequencies are being monitored in the proper mode.
- b) After silencing an alarm all displays and/or printouts are read.
- c) Notifying the Master of any Distress alerts.
- d) All of the above

013B- Proper watchkeeping includes the following:

- a) Understanding the GMDSS console's normal operational indicators.
- b) Maintaining a proper GMDSS radio station log.
- c) Responding to and comprehending alarms.
- d) All of the above

013C- Which is true concerning a required watch on VHF Ch-16.

- a) It is compulsory at all times while at sea until further notice, unless the vessel is in a VTS system.
- b) 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 VTS channel.
- c) It is always compulsory in sea areas A2, A3 and A4.
- d) All of the above

013D-Which of the following statements are true?

- a) GMDSS Radio Logs are required to contain entries pertaining to all incidents connected with the radio-communications service that appear to be of importance to the Safety of life at sea.
- b) All Distress communications must be entered in the GMDSS radio log.
- c) Both of the above
- d) None of the above

013E- How long must the radio log be retained on board before sending it to the shoreside licensee?

- a) At least one year after the last entry.
- b) At least two years after the last entry.
- c) At least 90 days after the last entry.
- d) At least 30 days after the last entry.

013F- How long must the radio log be archived by the licensee?

- a) Two years if there is no Distress or Urgency entries.
- b) Three years if there are any Distress or Urgency entries.
- c) Both of the above
- d) None of the above

Key Topic #013 Answer Key: A: d) B: d) C: d) D: c) E: d) F: c).

KEY TOPIC #014: MMSI: MID and SHIP I.D. NUMBERS:

- a) Mobile Identification Number
- b) Maritime Identification Digits
- c) Marine Indemnity Directory
- d) Mobile Interference Digits

014B- How many digits are in the MID (Maritime Identification Digits)?

- a) 7
- b) 9
- c) 3
- d) 10

014C- What does the MID (Maritime Identification Digits) signify?

- a) Port of registry
- b) Nationality
- c) Gross tonnage
- d) Passenger vessel

014D- Which of the following numbers indicates a U.S. flag ship station?

- a) 036627934
- b) 243537672
- c) 338426791
- d) 003382315

014E- Which of the following MMSI numbers indicates a U.S. flag ship station?

- a) 430326890
- b) 303236824
- c) 033609991
- d) 257326819

014F- Which of the following numbers indicates a ship station MMSI?

- a) 003372694
- b) 623944326
- c) 030356328
- d) 3384672

Key Topic #014 Answer Key: A: b) B: c) C: b) D: c) E: b) F: b).

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<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #015: MMSI: GROUP and COAST STATION I.D. NUMBERS:

015A- A DSC call is received from a station with a MMSI number of 003669991. Which of the following types of stations is it from?

- a) A vessel operating in Sea Area A3.
- b) A group ship station
- c) A U.S. coast station
- d) An Intercoastal vessel

015B- A valid MMSI number for a DSC call to a specific group of vessels is:

- a) 003664523
- b) 030327931
- c) 338462941
- d) 003036483

015C- MMSI 030346239 indicates what?

- a) Inmarsat-C I.D. number.
- b) Coast station.
- c) Group MMSI.
- d) Ship station.

015D- Which of the following statements concerning MMSI is true?

- a) Coast station MMSI numbers have 9 digits starting with 4.
- b) All MMSI numbers are 9 digits and contain an MID.
- c) Ship station MMSI numbers can be 7 digits or 9 digits depending on the Inmarsat terminal.
- d) Group MMSI numbers must begin with 2 zeros.

015E- Which of the following statements concerning MMSI is true?

- a) All Coast Station MMSI must begin with 2 zeros.
- b) The first 3 digits of a ship MMSI comprise the MID.
- c) A group call must begin with a single zero followed by the MID.
- d) All of the above

015F- Which of the following statements concerning MMSI is true?

- a) All ship station MMSI must begin with a single zero and include the MID.
- b) All group station MMSI must begin with the MID.
- c) All Coast Station MMSI must be 9 digits and begin with 2 zeros followed by the MID.
- d) None of the above

Key Topic #015 Answer Key: A: c) B: b) C: c) D: b) E: d) F: c).

KEY TOPIC #016: DSC FORMAT, INFO SENT:

016A- When making a routine DSC call to another vessel what information should be included?

- a) Time of transmission.
- b) Suggested working channel.
- c) Your own vessel's position.
- d) Subject matter of the call.

016B- A "Distress Hot Key" alert will include what information?

- a) The nature of Distress.
- b) The vessel's current position, course and speed from the GPS.
- c) Answers a) and b) are correct
- d) None of the above

016C- When sending a DSC call:

- a) Vessel's position will automatically be sent.
- b) Vessel's position will automatically be sent if the vessel is sending a "Distress Hot Key" alert.
- c) Vessel's MMSI will indicate its ocean region.
- d) None of the above

016D- A "Distress Hot Key" VHF DSC Distress alert:

- a) May go out on Ch-70 or Ch-16 depending on the manufacturer.
- b) Must go out on Ch-16 and Ch-70 to indicate "MAYDAY" traffic will follow.
- c) Must go out on Ch-16 to alert the nearest vessels and coast stations of imminent "MAYDAY" traffic.
- d) None of the above

016E- Which statement is true regarding vessel position when sending a "Distress Hot Key" alert?

- a) The operator must choose to include the position.
- b) The vessel's position will always be correct if taken from the connected GPS.
- c) The position will either be the current Lat/Long from the connected GPS or the updated manual position.
- d) All of the above

016F- A "Distress Hot Key" alert will always include what information?

- a) The vessel's current position, course and speed from the GPS.
- b) Distress priority, vessel's position if available and the vessel's MMSI number.
- c) The vessel's MMSI number and category of Distress.
- d) None of the above

Key Topic #016 Answer Key: A: b) B: d) C: b) D: d) E: c) F: b).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #017: DSC OPERATIONS:

017A- A DSC Distress alert is received. What action should be taken?

- a) Silence the alarm
- b) Review the incoming message information.
- c) Both a) and b)
- d) Acknowledge by DSC

017B- Which of the following statements on DSC acknowledgement and relay of DSC Distress alerts is true?

- a) Operators cannot initiate acknowledgements or relays.
- b) Some equipment was designed to allow for DSC acknowledgements and ALL SHIPS relays but under the most recent recommendations these options should not be used.
- c) The equipment was designed to allow for DSC acknowledgements and relays and the operator should follow the software menu structure accordingly.
- d) None of the above

017C- What does the DSC control unit do if the GMDSS Radio Operator fails to insert updated information when initiating a DSC Distress alert?

- a) It will abort the transmission and set off an audible alarm that must be manually reset.
- b) It will initiate the DSC Distress alert but, as no information will be transmitted, rescue personnel will not be able to identify the vessel, its position, or its situation.
- c) It will initiate the DSC Distress alert, and default information will automatically be transmitted.
- d) It will initiate the DSC Distress alert, but any station receiving it will have to establish contact with the distressed vessel to determine its identity, position, and situation.

017D- A DSC Distress alert is received. What action should be taken?

- a) Advise the Master.
- b) Transmit a DSC acknowledgement.
- c) Call the nearest Coast Guard Station.
- d) No action is necessary.

017E- What is the quickest method of transmitting a DSC Distress alert?

- a) Make a "MAYDAY" call on Ch-70.
- b) Press the "Distress Hot Key".
- c) Make a "MAYDAY" call on Ch-16.
- d) Select "Distress" priority from the menu.

017F- DSC relays of Distress alerts by vessels:

- a) Should be done for all Distress alerts.
- b) Should be transmitted to ships involved in Distress traffic.
- c) Should be avoided, however after repeated alerts, should be relayed to a Coast Station nearest the Distress incident.
- d) Are the best means to provide for a relay of Distress communications.

Key Topic #017 Answer Key: A: c) B: b) C: c) D: a) E: b) F: c).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #018: SENDING A DISTRESS ALERT:

018A- A VHF-DSC "Distress Hot Key" alert always transmits what information if connected to GPS?

- a) Distress designation and follow on communications channel.
- b) Position, Time of position update, MMSI number programmed and Distress format specifier.
- c) A "Nature of Distress" category.
- d) All of the above

018B- Which of the following statements is true regarding Distress alerting under GMDSS?

- a) The Distress alert must identify the station in Distress and its position and may additionally include information regarding the nature of the Distress.
- b) Ship to shore Distress alerts are used to alert other ships in port of navigational hazards.
- c) Ship-to-ship Distress alerts are used to alert other ships in the vicinity of navigational hazards and bad weather.
- d) The vessel nearest to the emergency must notify the Coast Guard before leaving the vicinity.

018C- If a GMDSS Radio Operator initiates a DSC Distress transmission but does not insert a message, what happens?

- a) The transmission is aborted and an alarm sounds to indicate this data must be provided by the operator.
- b) The transmission is not initiated and "ERROR" is indicated on the display readout.
- c) The transmission will be made with "default" information provided automatically.
- d) The receiving station will poll the DSC unit of the vessel in Distress to download the necessary information.

018D- Repetition of a DSC Distress call is normally automatic if not acknowledged after a delay of:

- a) 1 2 minutes
- b) 2 5 minutes
- c) 3.5 4.5 minutes
- d) Not at all

018E- A VHF-DSC Distress alert call:

- a) Will send the minimal information using the "Distress Button" or "Distress Hot Key".
- b) Contains information on the vessel's course and speed.
- c) Will send a more detailed Distress format if time permits and operator data entries are correctly performed.
- d) Both answers a) & c) are true

018F- A VHF-DSC Distress alert will always be transmitted on what channel?

- a) Ch-16
- b) Ch-22A
- c) Ch-70
- d) Ch-6

Key Topic #018 Answer Key: A: b) B: a) C: c) D: c) E: d) F: c).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEYTOPIC #019: FOLLOW-ON VOICE TRANSMISSION:

019A- You send a VHF-DSC Distress alert. What channel do	you use for the follow-on voice transmission?
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- a) Ch-12
- b) Ch-70
- c) Ch-13
- d) Ch-16

019B- Why should you always follow on with a voice transmission after sending a DSC Distress alert?

- a) A voice follow on transmission is not necessary.
- b) To provide more information than is contained in the DSC message.
- c) To confirm for coast stations and other mariners that the Distress is genuine.
- d) Answers b) and c) are correct

019C- You receive a VHF-DSC Distress alert. What Channel should you monitor for further information?

- a) Ch-06
- b) Ch-22A
- c) Ch-16
- d) Ch-70

019D- What is the proper format for a Distress follow on voice transmission? (3x is three times),

- a) All Ships 3x, this is Ship's Name/Call Sign 3x, Mayday, Position.
- b) Mayday 3x, this is Ship's Name/Call Sign 3x, Distress category.
- c) Both of the above.
- d) None of the above.

019E- What information should be included in a Distress follow on voice transmission?

- a) Ship's Name and Call Sign.
- b) Ship's position.
- c) Ship's MMSI number.
- d) All of the above.

019F- What information should be included in a Distress follow on voice transmission?

- a) Follow on working frequency.
- b) ETA at next port.
- c) None of the above.
- d) Both of the above.

Key Topic #019 Answer Key: A: d) B: d) C: c) D: d) E: d) F: c).

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<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEYTOPIC #020: RESPONSE TO A DISTRESS ALERT:

020A- Which statement is true regarding the receipt and acknowledgement of Distress alerts by ship stations?

- a) A ship station that receives a Distress alert must, as soon as possible, inform the Master or person responsible for the ship of the contents of the Distress alert.
- b) Ship stations in receipt of a Distress alert should acknowledge it immediately to assist the coast station in responding to the Distress alert.
- c) Ship stations operating in areas where reliable communications with a coast station are not practicable, that receive a Distress alert from a vessel in their vicinity, must either acknowledge by DSC or send a DSC relay to inform the RCC.
- d) Alerts concerning navigational hazards are second only to Safety traffic.

020B- What does the acronym "EOS" indicate in the received message?

- a) Error Of Sequence
- b) End Of Sequence
- c) End Of Signals
- d) Equal Operating Signals

020C- What is the proper procedure to be followed upon receipt of a Distress alert transmitted by use of Digital Selective Calling techniques?

- a) Set watch on the DSC alerting frequency in the band of frequencies the alert was received.
- b) Set watch on the radiotelephone Distress and Safety frequency associated with the Distress and Safety calling frequency on which the Distress alert was received.
- c) Set a continuous watch on VHF-FM Channel 13, 16 and DSC on Channel 70.
- d) Ship stations equipped with narrow-band direct-printing equipment should respond to the Distress alert as soon as practicable by this means.

020D- What does the acronym "ECC" indicate in the received message?

- a) Every Cipher Counted
- b) Error Cannot Confirm
- c) Error Check Character
- d) Even Characters Counted

020E- What action should be taken on receipt of a Distress alert?

- a) Read the display screen and/or printout.
- b) Silence the alarm.
- c) Listen for any follow on voice transmission on the appropriate frequency.
- d) All of the above

020F- What precautions should be taken when reviewing an incoming Distress alert message?

- a) If the message is not clear make a DSC call to all ships requesting clarification.
- b) Be careful not to activate a DSC acknowledgement or relay.
- c) No precautions are necessary.
- d) None of the above

Key Topic #020 Answer Key: A: a) B: b) C: b) D: c) E: d) F: b).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEYTOPIC #021: DISTRESS RELAYS:

021A- A DSC Distress Relay should always be made under the following circumstances:

- a) When the MMSI of the vessel in Distress cannot be determined.
- b) After there is an acknowledgement from a coast station.
- c) Both of the above
- d) None of the above

021B- Your ship received a Distress relay on DSC VHF channel 70, on what channel would you reply?

- a) Ch-70
- b) Ch-06
- c) Ch-13
- d) Ch-16

021C- Under what conditions would you relay a DSC Distress alert?

- a) If the mobile unit in Distress is incapable of further Distress alert communications.
- b) If no Coast Station/Mobile Unit acknowledgement is observed.
- c) Answers a) and b) are both possible.
- d) You should never relay such an alert -- the Coast Station & RCC will do that.

021D- The relay of DSC Distress alerts:

- a) Has completely overburdened the GMDSS system with improperly formatted or inappropriately relayed DSC calls.
- b) Was originally an intended function of the GMDSS system.
- c) Is no longer the preferred method for passing Distress message traffic to an RCC or Coast Station.
- d) All of the above

021E- Transmission of a Distress alert by a station not in itself in Distress should occur:

- a) When the mobile unit actually in Distress is not itself in a position to transmit the Distress alert.
- b) When the Master or responsible person on the mobile unit not in Distress so decides.
- c) When the responsible person at the Coast Station determines further help is necessary.
- d) In some cases, all of the preceding situations may justify a Distress alert relay.

021F- You are in voice communication on Ch-16 with a vessel in Distress that advises you they are unable to contact a Coast Station. What action would you take?

- a) Send a DSC Distress Relay transmission.
- b) Make an all ships call with Urgency priority.
- c) Attempt to contact a Coast Station using voice on Ch-16. If no response initiate a DSC call to the nearest Coast Station.
- d) None of the above

Topic #021 Answer Key: A: d) B: d) C: c) D: d) E: d) F: c).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEYTOPIC #022: ACTION TO TAKE AFTER SENDING A FALSE DISTRESS ALERT:

022A-What action should you take after sending a false Distress alert on VHF?

- a) Send a DSC cancellation message on Ch-70.
- b) Make a voice announcement to cancel the alert on Ch-16.
- c) Make a voice announcement to cancel the alert on Ch-13.
- d) Make a voice announcement to cancel the alert on Ch-22A.

022B- A crewmember has accidentally transmitted a VHF-DSC Distress alert. What action should be taken?

- a) Turn off the power to the unit to stop the DSC call then turn power back on and make a voice announcement to cancel the alert on Ch-16.
- b) Send a DSC call canceling the Distress alert.
- c) No specific action is necessary.
- d) Turn off the power and make a voice announcement to cancel the alert on Ch-70.

022C- What actions should be taken to prevent the transmissions of false Distress alerts?

- a) Proper watch officer instruction in training.
- b) Insure that the protective cover over the "Distress Hot Key" is secure.
- c) Do not use DSC for relaying "ALL SHIPS" Distress alerts.
- d) All of the above

022D- The EPIRB on the bridge wing is observed with the strobe light flashing and the control switch in the "ON" position. What action should be taken?

- a) Disable the EPIRB
- b) Contact the nearest USCG Coast Station, give them your EPIRB's I.D. number and advise that your unit was inadvertently activated.
- c) Both of the above
- d) None of the above

022E- You have been monitoring your 3-cm radar screen and a series of 12 concentric circles suddenly appears centered on the screen. What is the most likely cause of this situation?

- a) There is a survival craft within 3 nm distance.
- b) Your own vessel's SART has been activated.
- c) There is a fault in the radar.
- d) None of the above

022F- The EPIRB on the bridge wing is observed with the strobe light flashing and the control switch in the "OFF" position. What action should be taken?

- a) Place the control switch in the "OFF" position.
- b) Assume the unit is transmitting and disable the EPIRB.
- c) Contact the nearest USCG Coast Station, give them your EPIRB's I.D. number and advise that your unit was inadvertently activated.
- d) Both b) and c) are correct

Key Topic #022 Answer Key: A: b) B: a) C: d) D: c) E: b) F: d).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #023: RADIO SILENCE & RESUMPTION OF NORMAL TRAFFIC:

023A- What is the fundamental purpose for imposing radio silence?

- a) To ensure that interference to proprietary communications is minimized.
- b) To ensure that only voice communications can be effected on the Distress frequency or channel.
- c) To ensure that a Distressed vessel will have a "window" twice each hour for transmitting routine messages.
- d) To ensure that interference on a particular frequency or channel for communications concerning emergency traffic is minimized.

023B- When can routine communications be resumed when radio silence has been imposed?

- a) After determining that the frequency or channel appears to be no longer in use.
- b) After determining that geographic distance from the Distress situation will prohibit any other signal from interfering with emergency communications.
- c) 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.
- d) If, in the master's opinion, communications on that frequency will interfere with emergency communications.

023C- What is meant by the term "radio silence"?

- a) Stations not directly involved with the on-going Distress communications may not transmit on the Distress frequency or channel.
- b) Stations remaining off the air to safeguard proprietary information.
- c) Two three-minute silent periods, at 15 and 45 minutes after the hour, that provide a transmitting "window" for distressed vessels to transmit Distress alerts using J3E.
- d) Communications on a Distress frequency or channel is banned for 24 hours following the cessation of the Distress traffic.

023D- How is "radio silence" imposed?

- a) By the On Scene Coordinator (OSC).
- b) By the Coast Earth Station (CES) controlling the Distress communications on that frequency.
- c) By the nearest Public Correspondence Coast Station.
- d) By the vessel first responding to the Distress call.

023E- What is the reason for imposing radio silence?

- a) To keep a clear channel open for Safety broadcasts.
- b) To prevent interference to Distress communications.
- c) To allow individual vessels to carry out direct communications.
- d) All of the above

023F- How are normal working conditions restored after radio silence has been imposed?

- a) The Rescue Coordination Center (RCC) that imposed the radio silence must transmit a voice message on the Distress frequency stating "SEELONCE FEENEE".
- b) The Coast Earth Station (CES) that imposed the radio silence must transmit a voice message on the Distress frequency stating "SILENCE FINI".
- c) The Public Correspondence Station (PCS) that imposed the radio silence must transmit a voice message on the Distress frequency stating "SILENCE FINI".
- d) None of the above

Key Topic #023 Answer Key: A: d) B: c) C: a) D: a) E: b) F: a).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #024- URGENCY TRAFFIC:

024A- The Radiotelephone Urgency signal is:

- a) Mayday
- b) Pan Pan
- c) Securite
- d) Seelonce Feenee

024B- Which of the following situations would normally use the Urgency priority?

- a) A crewmember over the side.
- b) A serious medical situation involving a crewmember.
- c) A cargo shift or weather situation considered to be of greater hazard than would justify a Safety priority designation.
- d) Answers b) and c)

024C- Which of the following situations would normally use the Urgency priority?

- a) Leaking oil from a minor tank fracture.
- b) Treatment of crewmember breaking a leg in a cargo hold.
- c) A fire in the generator flat/spaces.
- d) Answers a) and b) are both possible.

024D- Which of the following situations would normally use the Urgency priority?

- a) A crewmember over the side.
- b) A serious medical situation involving a crewmember.
- c) Both a) and b)
- d) Scenarios concerning the Safety of navigation or important meteorological warnings.

024E- The Urgency Priority should be used for:

- a) Messages concerning the Safety of Life At Sea (SOLAS).
- b) Messages detailing important navigational warnings.
- c) Messages containing information concerning the Safety of a mobile unit or person.
- d) Messages concerning On-scene communications .

024F- If the Watch Officer hears "PAN PAN" spoken 3 times it means:

- a) A navigation or important meteorological warning should follow.
- b) The station is preparing to transmit an Urgency message possibly concerning the Safety of a mobile unit or person.
- c) A mobile unit is in need of immediate assistance.
- d) None of the above

Key Topic #024 Answer Key: A: b) B: d) C: b) D: b) E: c) F: b).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #025- SAFETY TRAFFIC:

025A- 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 or important meteorological warnings.
- b) Safety of vessel or person is in jeopardy.
- c) Vessel in need of immediate assistance.
- d) Coast Station Traffic list.

025B- Which of the following situations would normally use the Voice designation "Securite"?

- a) Messages concerning the Safety of Life At Sea (SOLAS).
- b) Messages detailing important navigational warnings.
- c) Messages containing information concerning the Safety of a mobile unit or person.
- d) Messages concerning On-scene communications .

025C- Which of the following situations would normally use the Safety priority?

- a) Loss of 5 containers with lashing gear over the side.
- b) Treatment of crewmember breaking a leg in a cargo hold.
- c) A fire in the generator flat/spaces.
- d) Answers a) and b) are both possible.

025D- Which of the following situations would normally use the Safety priority?

- a) A crewmember over the side.
- b) A serious medical situation involving a crewmember.
- c) Both a) and b)
- d) Scenarios concerning the Safety of navigation or important meteorological warnings.

025E- The Radiotelephone Safety signal is:

- a) "Securite" repeated 3 times.
- b) "Safety Safety Safety".
- c) "Pan Pan" repeated 3 times.
- d) "Securite Securite" repeated 3 times.

025F- Which of the following situations would normally use the Safety priority?

- a) A crewmember over the side.
- b) A serious medical situation involving a crewmember.
- c) A scenario concerning an important navigational or meteorological warning.
- d) All of the above

Key Topic #025 Answer Key: A: a) B: b) C: a) D: d) E: a) F: c).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #026- OTHER PROCEDURES:

026A- Which of the following steps should be taken, if possible, when the vessel must be abandoned because of a Distress situation?

- a) Alert the U.S. Coast Guard by using the survival craft's portable INMARSAT unit.
- b) Program the SART and EPIRB to transmit the vessel's location and situation.
- c) Place the SART and EPIRB in the "on" position and secure them to the survival craft.
- d) No additional steps are needed as the SART and EPIRB will both automatically float free and operate properly.

026B- If your vessel has suffered a casualty severe enough to disable both ship's power and the GMDSS console RSE you should:

- a) Use UHF Transceivers to contact other vessels.
- b) Activate the EPIRB.
- c) Make a "Mayday" call on Ch-16 using the Survival Craft Portable Transceiver.
- d) Answers b) and c) are both correct

026C- DSC is used primarily to:

- a) Receive weather warnings, navigational notices and other Maritime Safety Information.
- b) Provide routine communications with the ship owner.
- c) Transmit and receive Distress, Urgency and Safety alerts to and from other ships and shore stations via radio.
- d) Report ship's position to search-and-rescue authorities via satellite.

026D- The vessel's GMDSS operator fails to properly record the particulars of an incoming DSC Distress alert. Which statement is true?

- a) The details of the DSC alert are obtainable from the DSC address book.
- b) The details of the DSC alert should be obtainable by accessing the DSC call data directory.
- c) The details of the DSC Distress alert are irrevocably lost.
- d) None of the above

026E- What action should be taken when abandoning ship?

- a) Send a VHF-DSC Distress alert.
- b) Activate the EPIRB.
- c) Take EPIRB, SARTs and Survival Craft Portable Transceivers to the survival craft.
- d) All of the above depending on the circumstances.

026F- What is the best method of determining whether a Distress situation is genuine?

- a) Check your 3-cm radar for a SART signal from the Distress vessel.
- b) Monitor the follow on frequency for actual voice Distress communications.
- c) Monitor the 406 MHz EPIRB signal to locate the vessel in Distress.
- d) Check the NAVTEX for U.S.C.G. confirmation of the Distress from the RCC.

Key Topic #026 Answer Key: A: c) B: d) C: c) D: b) E: d) F: b).

KEY TOPIC #027: SART: ACTIVATION & SURVIVAL CRAFT OPERATIONS:

027A- What is the purpose of the SART's audible tone alarm?

- a) It informs survivors that assistance may be nearby.
- b) It informs survivors when the battery's charge condition has weakened.
- c) It informs survivors when the SART switches to the "standby" mode.
- d) It informs survivors that a nearby vessel is signaling on DSC.

027B- What indication is given to the personnel of survival craft of the approach of another vessel?

- a) The SART will provide a visual or audible indication of interrogation by a 3-cm radar.
- b) The Satellite EPIRB will emit an audible signal.
- c) The VHF portable radio will emit an audible alarm signal on Ch-70.
- d) The VHF portable will provide a visual indication.

027C- How can a SART's effective range be maximized?

- a) The SART should be placed in water immediately upon activation.
- b) The SART should be held as high as possible.
- c) Switch the SART into the "high" power position.
- d) If possible, the SART should be mounted horizontally so that its signal matches that of the searching radar signal.

027D- In a lifeboat or liferaft, what is a method of maximizing the effectiveness of an SART?

- a) Place the SART into the sea as soon as possible to begin transmitting.
- b) Hold or mount the unit as high as possible.
- c) Extend the length of the transmitting antenna.
- d) Replace the internal battery with the AC power adapter.

027E- At what point does a SART begin transmitting?

- a) It immediately begins radiating when placed in the "on" position.
- b) It must be manually activated.
- c) If it has been placed in the "on" position, it will respond when it has been interrogated by a 9-GHz radar signal.
- d) If it has been placed in the "on" position, it will begin transmitting immediately upon detecting that it is in water.

027F- What causes the SART to begin a transmission?

- a) When activated manually, it begins radiating immediately.
- b) It is either manually or water activated before radiating.
- c) After being activated the SART responds to radar interrogation.
- d) It begins radiating only when keyed by the operator.

Key Topic #027 Answer Key: A: a) B: a) C: b) D: b) E: c) F: c).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #028: SART: SAR PROCEDURES & RADAR PRESENTATION:

028A- How does the searching vessel's radar interrogate a survival craft SART?

- a) Activate the IFF interrogation system.
- b) The SART responds automatically when it detects the search craft or other vessels' X-Band radar signal.
- c) Maintain watch on VHF-FM Ch-70 for the SART's unique identifier.
- d) The SART responds automatically when it detects the search craft or other vessel's 3.5 GHz radar signal.

028B- What does a SART signal sound or look like?

- a) It transmits "SOS" and the vessel's name and position in slow speed Morse Code.
- b) It will appear on a radar unit's PPI as a line of dots radiating outward, with the innermost dot indicating the SART's position.
- c) It will appear on a radar unit's PPI as a line of dots radiating outward, with the outermost dot indicating the SART's position.
- d) None of the above

028C- How can rescue personnel detect that a SART is transmitting in the immediate vicinity?

- a) The SART's dots on the PPI will become arcs and then eventually become concentric circles.
- b) The DSC unit will react to the SART's signal and respond with the two-tone auto alarm.
- c) The SART can provide an approximate location to within a two nautical mile radius, per IMO standards.
- d) The SART signal appears as a target which comes and goes; the effect of heavy swells on a SART.

028D- What signal is detected as originating from an SART?

- a) The Morse code Distress series S-O-S repeated three times followed by DE and the vessel's call sign.
- b) A line of dots on a radar screen outward from the SART's position along its line of bearing.
- c) A line of dots on a radar screen inward from the SART's position to its own ship along its line of bearing.
- d) None of these

028E- How can vessel personnel detect the operation of a SART in its vicinity?

- a) A unique radar signal consisting of a 12 dots radiating outward from a SART's position along its line of bearing.
- b) A unique two-tone "warbling" signal heard on VHF-FM Ch-70.
- c) A unique two-tone alarm signal heard upon the automatic un-muting of the 2182 kHz radiotelephone automatic watch receiver.
- d) The SART signal appears as a target which comes and goes; the effect of heavy swells on an SART.

028F- How should the signal from a Search And Rescue Radar Transponder appear on a radar display?

- a) A series of dashes.
- b) A series of spirals all originating from the range and bearing of the SART.
- c) A series of 12 equally spaced dots.
- d) A series of twenty dashes.

Key Topic #028 Answer Key: A: b) B: b) C: a) D: b) E: a) F: c).

KEY TOPIC #029: SART: FREQUENCY & OPERATIONS:

029A- In which frequency band does a search and rescue transponder operate?

- a) 3 GHz
- b) 9 GHz
- c) S-band
- d) 406 MHz

029B- Which of the following would most likely prevent a SART's signal from being detected?

- a) Signal absorption by the ionosphere.
- b) Heavy sea swells.
- c) The rescue personnel were monitoring the 10-CM radar.
- d) The rescue personnel were monitoring the 3-CM radar.

029C- Which statement is NOT true regarding the SART?

- a) Responds to interrogations by a vessel's X-Band radar.
- b) Transmits on the 9 GHz band reserved for navigational radar.
- c) Operates in conjunction with a vessel's S-Band radar.
- d) Transmits a distinctive code for easy recognition.

029D- Which statement is true regarding the SART?

- a) This is a performance monitor attached to at least one S-band navigational radar system.
- b) This is a 9 GHz transponder capable of being received by vessel's X-band navigational radar system.
- c) This is a 9 GHz transponder capable of being received by another vessel's S-band navigational radar system.
- d) This is a performance monitor attached to at least one X-band navigational radar system.

029E-Which statement is NOT true regarding the SART?

- a) Responds to interrogations by a vessel's X-Band radar.
- b) This is a 6 GHz transponder capable of being received by a vessel's X-band navigational radar system.
- c) This is a 9 GHz transponder capable of being received by a vessel's X-band navigational radar system.
- d) Transmits a distinctive signal for easy recognition.

029F- A SART's signal cannot be detected:

- a) In poor visibility, or at night.
- b) In heavy seas
- c) By a search vessel's 10 cm Radar.
- d) By a search vessel's 3 cm Radar.

Key Topic #029 Answer Key: A: b) B: c) C: c) D: b) E: b) F: c).

KEY TOPIC #030: SART: TESTING PROCEDURES & BATTERY PARAMETERS:

030A- Which of the following statements concerning testing and maintenance of SARTs is true?

- a) An at-sea GMDSS maintainer is not able to test a SART as it is hermetically sealed.
- b) Testing a SART should be performed only in controlled environment as a test signal may be misinterpreted as a genuine Distress situation.
- c) A SART's battery must be replaced within ninety (90) days after the expiration date imprinted on the unit.
- d) All of the above.

030B- Why is it important to limit the duration of testing a SART?

- a) Excessive testing causes "burn in" on the vessel's radar PPI.
- b) Testing a SART should be performed only in a controlled environment, as a test signal may be misinterpreted as a genuine Distress situation.
- c) To prevent overheating, a SART requires sufficient ventilation that is significantly reduced when the SART is being tested.
- d) If another SART is testing at the same time, the two signals will cause damage to the unit that transmitted them.

030C- What statement is true regarding tests and maintenance that could be provided for the SART?

- a) To fully verify operation within manufacturer's specifications would require measuring equipment to generate 9 GHz signals; generally beyond the scope of on-board maintenance.
- b) Extreme care should be exercised because testing of the SART may be received by other vessels, and may be interpreted as a Distress condition, or it may interfere with other vessels' safe navigation.
- c) Battery should be replaced with a new one before the manufacturer's expiration date shown on the SART.
- d) All of these

030D-Why should functional testing of a SART be minimized?

- a) Potential interference with safe navigation.
- b) Minimize power consumption of the battery.
- c) Possibility of misinterpretation by other vessels as a Distress situation.
- d) All of these

030E- Which is not a valid maintenance and testing function for a SART?

- a) Operational test with several vessels to determine effective transmitting range.
- b) Inspection of container for apparent damage.
- c) Inspect battery expiration date and the lanyard condition.
- d) Brief operational test utilizing own ship's radar.

030F- The SART is required to have sufficient battery capacity to operate in the stand-by mode for what period of time?

- a) Eight hours
- b) Three days
- c) Four days
- d) Forty-eight hours

Key Topic #030 Answer Key: A: b) B: b) C: d) D: d) E: a) F: c).

KEY TOPIC #031: EPIRB: SYSTEM STRUCTURE & OPERATION:

031A- Which is a function of a satellite under COSPAS-SARSAT using satellite EPIRBs?

- a) Relayed satellite message includes the EPIRB ID number which provides a reference for retrieval of vessel information from the shore database.
- b) Doppler shift of EPIRB signal is measured.
- c) Information received from EPIRBs are time-tagged and transmitted to any Local User Terminal in the satellite's view.
- d) All of these

031B- Which of the following satellite systems is of particular importance to search and rescue missions under GMDSS?

- a) COSPAS/SARSAT
- b) AMSAT
- c) NASA/Arienne
- d) COMSAT

031C- Which of the following statements concerning COSPAS-SARSAT is true?

- a) EPIRBs are units that are used as alerting devices.
- b) These are satellites in a low-earth polar orbit that detect EPIRB beacons on 406 MHz and relay the information to a Local User Terminal (LUT).
- c) The Doppler frequency measurement concept is used to determine the EPIRB's location.
- d) All of the above.

031D- Which of the following statements concerning COSPAS-SARSAT is false?

- a) EPIRBs are used primarily for Distress alerting.
- b) These satellites are looking for EPIRB signals on 406 MHz.
- c) These satellites use Doppler shift measurement to determine the location of the beacons.
- d) After initiating a call request and selecting the CES, these satellites may be used for commercial messages.

031E- Which of the following statements concerning the EPIRB system is true?

- a) GOES weather satellites will provide alerting with worldwide coverage.
- b) The COSPAS-SARSAT system always provides an alert and position report within 5-20 minutes of reception.
- c) The Inmarsat system will not provide alerts and position report for 406 Mhz EPIRBs equipped with GPS receivers.
- d) The GPS satellite system will provide an alert and position report within 20 minutes of reception.

031F- Which of the following statements concerning satellite EPIRBs is true?

- a) Once activated, these EPIRBs transmit a signal for use in identifying the vessel and for determining the position of the beacon.
- b) The coded signal identifies the nature of the Distress situation.
- c) The coded signal only identifies the vessel's name and port of registry.
- d) If the GMDSS Radio Operator does not program the EPIRB, it will transmit default information such as the follow-on communications frequency and mode.

Key Topic #031 Answer Key: A: d) B: a) C: d) D: d) E: c) F: a).

KEY TOPIC #032: EPIRB: ALERTING & FEATURES:

032A- What feature(s) may be found on certain satellite EPIRB units?

- a) Strobe light
- b) Emergency transmission on 406 MHz.
- c) Float-free release bracket.
- d) All of these

032B- What feature is not found on 406 MHz satellite EPIRB units?

- a) 121.5 MHz emergency homing transmitter.
- b) Aural locator signal.
- c) Emergency transmission on 406.025 MHz.
- d) Float-free release bracket.

032C- What statement is true regarding 406 MHz EPIRB transmissions?

- a) Allows immediate voice communications with the RCC.
- b) Coding permits the SAR authorities to know if manually or automatically activated.
- c) Transmits a unique hexadecimal identification number.
- d) Radio Operator programs an I.D. into the SART immediately prior to activation.

032D- Which of the following is normally found on EPIRBs that are detected by satellites?

- a) A strobe light
- b) A 5-watt 406-MHz beacon.
- c) A bracket designed to allow the EPIRB to automatically float-free.
- d) All of the above

032E- Which of the following statements concerning EPIRB alerts is false?

- a) The COSPAS-SARSAT system may take a full hour or more to provide an alert.
- b) The GOES weather satellites are in a geostationary orbit.
- c) The Inmarsat system provides worldwide coverage for Distress alerts.
- d) 406 MHz EPIRB units may be equipped with GPS receivers.

032F- Which of the following EPIRBs is most likely to be used to transmit a Distress alert signal?

- a) S-Band EPIRBs
- b) 406 MHz EPIRBs
- c) Class A EPIRBs
- d) 121.5/243 MHz EPIRBs

Key Topic #032 Answer Key: A: d) B: b) C: c) D: d) E: c) F: b).

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KEY TOPIC #033: EPIRB: HOMING & LOCATING SIGNALS:

033A- Which of the following would best be used for visual detection of a distressed vessel?

- a) A 9-GHz SART's beacon.
- b) An EPIRB's strobe light.
- c) A 121.5-MHz EPIRB beacon.
- d) A 406-MHz EPIRB beacon.

033B- Which piece of required GMDSS equipment is the primary source of transmitting locating signals?

- a) Radio Direction Finder (RDF).
- b) An EPIRB transmitting on 406 MHz.
- c) Survival Craft Transceiver.
- d) A SART transmitting on 406 MHz.

033C- What may be used as a homing signal by the search and rescue vessels in the immediate vicinity of the ship in Distress?

- a) Flare gun
- b) Strobe Light
- c) A 121.5 MHz emergency transmitter in a satellite EPIRB.
- d) 406 MHz signal from a satellite EPIRB.

033D- What part of a satellite EPIRB may function as a visual aid to rescue vessels?

- a) A 121.5 MHz emergency transmitter in a satellite EPIRB.
- b) Strobe light
- c) 406 MHz signal from a satellite EPIRB.
- d) Loud beeping tone emitted by the unit, once activated.

033E- What is an example of a locating signal?

- a) SSB phone traffic
- b) Ship to shore transmissions
- c) Loran C
- d) A float-free EPIRB

033F- Which device provides the main means in the GMDSS for locating ships in Distress, or their survival craft?

- a) Radio Direction Finder
- b) Satellite EPIRBs
- c) MF/HF DSC
- d) VHF homing device

Key Topic #033 Answer Key: A: b) B: b) C: c) D: b) E: d) F: b).

KEY TOPIC #034: SURVIVAL CRAFT TRANSCEIVER:

034A- With what other stations may portable survival craft transceivers communicate?

- a) Communication is permitted between survival craft.
- b) Communication is permitted between survival craft and ship.
- c) Communication is permitted between survival craft and rescue unit.
- d) All of the above

034B- Equipment for radiotelephony use in survival craft stations under GMDSS must have what capability?

- a) Operation on Ch-16.
- b) Operation on 457.525 MHz.
- c) Operation on 121.5 MHz.
- d) Any one of these

034C- Equipment for radiotelephony use in survival craft stations under GMDSS must have what characteristic(s)?

- a) Operation on Ch-16
- b) Watertight
- c) Permanently-affixed antenna
- d) All of these

034D- Which statement is NOT true regarding the requirements of survival craft portable two-way VHF radiotelephone equipment?

- a) Operation on Ch-16
- b) Effective radiated power should be a minimum of 2.0 Watts.
- c) Simplex (single frequency) voice communications only.
- d) All of these

034E- Which statement is NOT true regarding the requirements of survival craft portable two-way VHF radiotelephone equipment?

- a) Operation on Ch-13
- b) Effective radiated power should be a minimum of 0.25 Watts.
- c) Simplex (single frequency) voice communications only.
- d) Operation on Ch-16

034F- Which statement is NOT true regarding the requirements of survival craft portable two-way VHF radiotelephone equipment?

- a) Operates simplex on Ch-70 and at least one other channel.
- b) Watertight to a depth of 1 meter for 5 minutes.
- c) Effective radiated power should be a minimum of 0.25 Watts.
- d) The antenna is fixed and non-removable.

Key Topic #034 Answer Key: A: d) B: a) C: d) D: b) E: a) F: a).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #035: SAR/MCC/RCC: SYSTEMS & PROCEDURES:

035A- Which action should the GMDSS radio operator take in a Distress situation when embarking in survival craft?

- a) Switch on EPIRB and SART immediately and leave on.
- b) EPIRB and SART switched on manually prior to embarking; remain aboard vessel in Distress.
- c) Notify RCC (Rescue Coordination Center) through VHF DSC in portable equipment.
- d) Communicate via Inmarsat-C from the survival craft.

035B- Which is the key part of the search and rescue system under GMDSS?

- a) COSPAS/SARSAT satellites
- b) AMSAT satellites
- c) NASA satellites
- d) U.S. Space Agency satellites

035C- Which statement is true regarding the COSPAS-SARSAT system?

- a) EPIRBs are satellite beacons used aboard vessels as alerting devices.
- b) Signals received by low altitude, near-polar orbiting satellites are relayed to a ground receiving station, called a Local User Terminal.
- c) Doppler shift is used to locate the beacons.
- d) All of these

035D- Which statement is NOT true regarding the COSPAS-SARSAT system?

- a) EPIRBs are satellite beacons used as alerting/locating devices.
- b) Locates Distress beacons transmitting on 406 MHz.
- c) Doppler shift is used to locate the beacons.
- d) May be used to transmit public correspondence.

035E- What information is transmitted by a 406 MHz EPIRB alert?

- a) Vessel position and nature of Distress.
- b) A unique Hexadecimal I.D. number.
- c) Vessel name and identification.
- d) None of the above

035F- Which statement is true regarding the COSPAS-SARSAT system and EPIRB operations?

- a) The EPIRB's position is calculated by the system and passed to the RCC.
- b) The EPIRB transmits a unique Hex I.D. and vessel position that is passed to the RCC.
- c) The EPIRB transmits a unique Hex I.D. that is passed to the RCC.
- d) Both a) and c) are true

Key Topic #035 Answer Key: A: a) B: a) C: d) D: d) E: b) F: d).

KEY TOPIC #036: ON SCENE COMMUNICATIONS:

036A- The "On Scene Coordinator" may be which of the following?

- a) The vessel in Distress.
- b) The first search vessel to arrive on the scene.
- c) Any involved vessel so designated by the Search and Rescue Mission Coordinator.
- d) May be either b) or c) depending on the circumstances.

036B- Which of the following channels is designated as the VHF follow-on communications channel and is required in all portable survival craft equipment?

- a) Ch-6
- b) Ch-13
- c) Ch-16
- d) Ch-70

036C- The determination that the Distress traffic is over is usually made by whom?

- a) The vessel in Distress.
- b) The "On Scene Coordinator" and/or the RCC controlling the Distress traffic.
- c) The first Coast Station to receive the DSC Distress alert.
- d) None of the above

036D- On Scene communications are usually initiated using what equipment:

- a) EPIRB on 121.5 MHz
- b) SART on 9 GHz
- c) VHF on Ch-16
- d) VHF on Ch-70

036E- On Scene communications should be conducted on which of the following channels?

- a) 406 MHz
- b) VHF Ch-22A
- c) VHF Ch-16/06
- d) VHF Ch-70

036F- On Scene communications should be conducted on which of the following channels?

- a) 9 GHz
- b) VHF Ch-16/06
- c) VHF Ch-13
- d) VHF Ch-26

Key Topic #036 Answer Key: A: d) B: c) C: b) D: c) E: c) F: b)

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KEY TOPIC #037: NAVTEX-1: OPERATIONS:

037A- How is mutual interference among NAVTEX stations avoided?

- a) Stations are limited to daytime operation only.
- b) Transmitter power is limited to that necessary for coverage of assigned area.
- c) Transmissions by stations in each NAVAREA are arranged in a time-sharing basis.
- d) Both b) and c).

037B- When do NAVTEX broadcasts typically achieve maximum transmitting range?

- a) Local noontime
- b) Middle of the night
- c) Sunset
- d) Post sunrise

037C- What should a GMDSS Radio Operator do if a NAVTEX warning message is received but it contains too many errors to be usable?

- a) Do nothing. Vital NAVTEX messages will be repeated on the next scheduled broadcast.
- b) Contact the NAVAREA coordinator and request a repeat broadcast.
- c) The hurricane will be upon the vessel; they're in big trouble.
- d) Listen to appropriate VHF weather channel for repeat warnings.

037D- What does a NAVTEX receiver do when it runs out of paper?

- a) The unit cannot operate, and all subsequent MSI broadcasts are missed until the paper is replaced.
- b) It will give off either an audible and/or visual alarm.
- c) The system will automatically change from receiving MSI by NAVTEX to receiving it by SafetyNETTM so that no messages will be lost.
- d) All of the above

037E- Which of the following is the primary frequency that is used exclusively for NAVTEX broadcasts internationally?

- a) 518 kHz
- b) 2187.5 kHz
- c) 4209.5 kHz
- d) VHF channel 16 when the vessel is sailing in Sea Area A1, and 2187.5 kHz when in Sea Area A2.

037F- What is the transmitting range of most NAVTEX stations?

- a) Typically 50-100 nautical miles (90-180 km) from shore.
- b) Typically upwards of 1000 nautical miles (1800 km) during the daytime.
- c) It is limited to line-of-sight or about 30 nautical miles (54 km).
- d) Typically 200-400 nautical miles (360-720 km).

Key Topic #037 Answer Key: A: d) B: b) C: a) D: b) E: a) F: d).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #038: NAVTEX-2: PROGRAMMING:

038A- How is a NAVTEX receiver programmed to reject certain messages?

- a) The transmitting station's two-digit identification can be entered to de-select reception of its broadcasts.
- b) By choosing a message category's single letter (A-Z) identifier and then deselecting or deactivating.
- c) By entering the SELCALL of the transmitting station.
- d) By pressing "00" in the transmitter's ID block.

038B- How can reception of certain NAVTEX broadcasts be prevented?

- a) Stations are limited to daytime operation only.
- b) The receiver can be programmed to reject certain stations and message categories.
- c) Coordinating reception with published broadcast schedules.
- d) Automatic receiver desensitization during night hours.

038C- Which of the following statements is true?

- a) The GMDSS Radio Operator can program the NAVTEX receiver to automatically reject any category of messages.
- b) The GMDSS Radio Operator can program the NAVTEX receiver to reject all messages except navigation warnings, meteorological warnings, and search and rescue information.
- c) The GMDSS Radio Operator can select the "None" option in the message category menu.
- d) Upon entering a new NAVTEX station's broadcast range, the GMDSS Radio Operator enters the station's SELCALL number.

038D- What means are used to prevent the reception of unwanted broadcasts by vessels utilizing the NAVTEX system?

- a) Operating the receiver only during daytime hours.
- b) Programming the receiver to reject unwanted broadcasts.
- c) Coordinating reception with published broadcast schedules.
- d) Automatic receiver de-sensitization during night hours.

038E- What statement is true regarding the control the operator can exercise over the NAVTEX receiver's operation?

- a) The operator can set the unit to automatically reject any and all categories of messages if the ship desires to not receive them.
- b) The operator can set the unit to reject all messages except navigation, weather and sea warnings, and search and rescue messages.
- c) To reduce the number of messages, the operator can select code 00 to indicate "not in coastal passage".
- d) Upon entering a coastal area for the first time, the operator enters code KK to indicate "ready to receive NAVTEX".

038F- Which message subject matter can be programmed to be rejected or disabled by the operator of a NAVTEX receiver?

- a) Navigational warnings
- b) Meteorological warnings
- c) Pilot Service Messages
- d) All of these

Key Topic #038 Answer Key: A: b) B: b) C: b) D: b) E: b) F: c).

KEY TOPIC #039: NAVTEX-3: MESSAGE FORMAT:

039A- The NAVTEX message header contains the following?

- a) A single letter (A-Z) indicates the NAVTEX transmitting station.
- b) A two-digit number (01-99) indicates the NAVTEX message category.
- c) Message numbers include a date/time group, along with the transmitting station's numerical ID.
- d) None of these

039B- Which of the following message categories cannot be disabled by the GMDSS Radio Operator?

- a) Navigational warnings
- b) Meteorological warnings
- c) Search and Rescue information
- d) All of the above

039C- How are NAVTEX broadcasts transmitted?

- a) Using FEC techniques.
- b) NAVTEX is transmitted by commercial coast radio stations following their traffic lists.
- c) NAVTEX is transmitted only when an Urgency or Distress broadcast is warranted.
- d) No more often than every two hours and should immediately follow the radiotelephone silent periods.

039D- Which determines whether a NAVTEX receiver does not print a particular type of message content?

- a) The serial number and type of message have already been received.
- b) The subject indicator matches that programmed for rejection by the operator.
- c) The transmitting station ID covering your area has not been programmed for rejection by the operator.
- d) Both answers a) and b).

039E- Which information determines if a NAVTEX message is to be rejected?

- a) Transmitter identity (numerals from 1 to 26 identifying transmitting station within the NAVAREA).
- b) Subject indicator (single letter from A to Z indicating the type of message).
- c) The Answerback of the receiving station has not been entered in the NAVTEX receiver.
- d) Only messages having a serial number 00 are rejected.

039F- NAVTEX broadcasts are sent:

- a) In categories of messages indicated by a single letter or identifier.
- b) Immediately following traffic lists.
- c) On request of maritime mobile stations.
- d) Regularly, after the radiotelephone silent periods.

Key Topic #039 Answer Key: A: a) B: d) C: a) D: d) E: b) F: a).

KEY TOPIC #040: SafetyNETTM-1: OPERATIONS:

040A- Where NAVTEX cannot be feasibly established, what system can be implemented to provide an automated service in coastal waters to receive MSI?

- a) SafetyNETTM
- b) AMVER
- c) VHF DSC
- d) ARQ SITOR

040B- What action should a GMDSS Radio Operator take when SafetyNETTM Distress or Urgency messages are received by the vessel's EGC receiver?

- a) No immediate action is required, as an audible tone will be generated at the beginning and end of the transmission and a paper printout of the message will be generated.
- b) Aural and visual alarms are activated, and require manual deactivation.
- c) No immediate action is required by the operator, since the transmission will be automatically acknowledged by the receiving vessel.
- d) A periodic alarm tone will be heard until the radio operator prints the message from the unit's memory.

040C- 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?

- a) SafetyNETTM
- b) AMVÉR
- c) VHF DSC
- d) ARQ SITOR

040D- Which equipment can receive SafetyNET[™] messages?

- a) VHF DSC
- b) NAVTEX Receiver
- c) Dedicated EGC receiver
- d) All of these

040E- SafetyNETTM messages can be received by which of the following shipboard equipment?

- a) NAVTEX
- b) MF and HF NBDP
- c) EGC receiver
- d) All of these

040F- Maritime Safety Information is promulgated via satellite through which system?

- a) AMVER
- b) SafetyNETTM
- c) NAVTEX
- d) Inmarsat-M SES

Key Topic #040 Answer Key: A: a) B: b) C: a) D: c) E: c) F: b).

KEY TOPIC #041: SafetyNETTM-2: INFORMATION:

041A- SafetyNETTM promulgates what type of information?

- a) MSI
- b) Traffic Lists
- c) News advisories
- d) MARAD

041B- What kind(s) of broadcasts are not available through SafetyNETTM?

- a) MSI and messages to specific geographic areas.
- b) Vessel traffic lists
- c) Storm warnings
- d) Distress and Urgency bulletins

041C- Which satellite system promulgates Maritime Safety Information?

- a) AMVER
- b) Inmarsat-C SafetyNETTM
- c) NAVTEX
- d) Inmarsat-M SES

041D- What information is promulgated by the international SafetyNETTM?

- a) MSI
- b) Traffic Lists
- c) Priority Messages
- d) MARAD

041E- A vessel using SafetyNETTM:

- a) Notify the NAVAREA coordinator you are using SafetyNETTM for MSI (Maritime Safety Information).
- b) Set the receiver to your present NAVAREA.
- c) Set the receiver to your destination Ocean Region.
- d) Notify the NAVAREA coordinator you are using SafetyNETTM for MSI (Maritime Safety Information) and set the receiver to your destination Ocean Region.

041F- In using SafetyNET™ for MSI (Maritime Safety Information):

- a) In an area where Ocean Region coverage patterns overlap, the scheduled MSI broadcasts you receive will be determined by the NCS you are currently monitoring.
- b) You will always receive all unscheduled broadcasts regardless of which NCS you are monitoring.
- c) Both of the above
- d) None of the above

Key Topic #041 Answer Key: A: a) B: b) C: b) D: a) E: b) F: c).

KEY TOPIC #042: EGC:

042A- Over what system are Enhanced Group Calls transmitted?

- a) COSPAS satellite
- b) HF SITOR shore stations
- c) NAVTEX shore stations
- d) Inmarsat satellite

042B- What is the purpose of the dedicated EGC receiver for A-1 area GMDSS Vessels?

- a) To allow monitoring of the vessels location for AMVER tracking.
- b) Simultaneous receipt and transmission of vessel SafetyNET™ messages.
- c) To track which NAVAREA the vessel is currently in for receipt of MSI.
- d) To insure receipt of MSI in areas without NAVTEX coverage.

042C- Which of the following provides a unique automated system capable of addressing messages to predetermined groups of ships or all vessels in both fixed and variable geographic areas?

- a) NAVTEX
- b) EGC
- c) AFRTS
- d) NAVAREAs

042D- 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?

- a) NAVTEX
- b) EGC
- c) AMVER
- d) DSC

042E- What services are available through Enhanced Group Calls?

- a) Maritime Safety Information and messages to pre-defined groups of subscribers.
- b) Maritime Safety Information and vessel traffic lists.
- c) Hourly NOAA weather broadcasts from the NWS.
- d) Coastal weather broadcasts.

042F- What messages originate from registered information providers anywhere in the world and are broadcast to the appropriate ocean region via a CES?

- a) SafetyNETTM messages
- b) AMVER broadcasts
- c) Urgency messages
- d) NAVTEX broadcasts

Key Topic #042 Answer Key: A: d) B: d) C: b) D: b) E: a) F: a).

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KEY TOPIC #043: VHF: CONTROLS, VOLUME, SQUELCH, DW and SCAN:

043A- Adjusting the volume control has the following results:

- a) The higher the volume control is set the greater the sensitivity.
- b) Adjusting the volume control has no effect on the sensitivity.
- c) The volume control sets the threshold for receiving signals.
- d) None of the above

043B- The Dual Watch (DW) function is used to:

- a) Listen to Ch-70 at the same time while monitoring Ch-16.
- b) Sequentially monitor 4 different channels.
- c) Listening on any selected channel while periodically monitoring Ch-16.
- d) None of the above

043C- Setting the squelch control to just beyond the point where the background noise disappears results in:

- a) Reduced sensitivity without background noise.
- b) Maximum sensitivity without background noise.
- c) Minimum background noise with reduced sensitivity.
- d) Greater bandwidth without background noise.

043D- The "Scan" function is used to:

- a) Monitor Ch-16 continuously and switching to either Ch-70 or Ch-13 every 5 seconds.
- b) Sequentially scan all or selected channels.
- c) Scan Ch-70 for Distress alerts.
- d) None of the above

043E- Setting the squelch control to the end of its range without any noise being heard results in:

- a) Less background noise
- b) Maximum sensitivity
- c) Minimum sensitivity
- d) Does not have any effect on the sensitivity.

043F- Proper and legal VHF operations require:

- a) The channel must be designated as valid for the nature or type of communications desired.
- b) The correct bandwidth must be selected by the operator.
- c) The power level must be appropriately chosen.
- d) Both answers a) and c) are correct

Key Topic #043 Answer Key: A: b) B: c) C: b) D: b) E: c) F: d).

KEY TOPIC #044: VHF: POWER and RANGE:

044A- Which of the following control selections may result in limited receiving range?

- a) Setting the squelch control to its minimum level.
- b) The power switch is set to the "high" output position, resulting in receiver overloading.
- c) Setting the squelch control to its maximum level.
- d) Setting the channel selection switch midway between channels 6 and 16.

044B- While conducting routine communications using the wheelhouse VHF with a station 1 mile distant, your recommended power setting would be:

- a) 25 watts after dark.
- b) 1 watt, day or night.
- c) 25 watts during a clear sunny day.
- d) 1 watt using DSC at night.

044C- Which factors normally determine the range of VHF transmissions:

- a) Channel frequency
- b) Power level
- c) Both b) and d)
- d) Vessel antenna height

044D- Causes of much longer than normal VHF transmissions are:

- a) Changing power from 1W to 25 W.
- b) Atmospheric ducting
- c) Ionospheric activity in layers F1/F2.
- d) None of the above

044E- Describing VHF transmissions as "line of sight" means:

- a) VHF communications are effective only with nearby stations within visual range of the bridge.
- b) Vessel antenna height will affect the radius of propagation.
- c) The normal transmission range to a coast station is approximately 25 NM.
- d) Both b) and c) are true

044F- The effectiveness of VHF communications is maximized by:

- a) The adjustment of squelch for maximum receiver sensitivity.
- b) Appropriate setting of the transmitter power.
- c) Selecting an appropriate channel.
- d) All of the above

Key Topic #044 Answer Key: A: c) B: b) C: c) D: b) E: d) F: d).

GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers. (Answers, bottom of page) Jul.2006 KEY TOPIC #045: VHF: CHANNEL SYSTEM, USAGE: 045A- Which channel would be the most likely to be used for routine ship-to-ship voice traffic? a) Ch-16 b) Ch-70 c) Ch-22A

045B- Which channel is utilized for the required bridge-to-bridge watch?

a) DSC on Ch-70 b) VHF-FM on Ch-16 c) VHF-FM on Ch-13 in most areas of the continental United States. d) The vessel's VHF working frequency.

045C- What channel would you use for routine communications with the U.S.C.G.?

a) Ch-16 b) Ch-22A

d) Ch-08

- c) Ch-80
- d) Ch-13

045D- What channel would you use to place a call to a shore telephone?

- a) Ch-16
- b) Ch-70
- c) Ch-28
- d) Ch-06

045E- What channel is always being continuously monitored?

- a) Ch-28
- b) Ch-80
- c) Ch-16
- d) Ch-70

045F- Which of the following channels may be used for duplex communications?

- a) Ch-70
- b) Ch-26
- c) Ch-5A
- d) Ch-22A

Key Topic #045 Answer Key: A: d) B: c) C: b) D: c) E: d) F: b).

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<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #046: VHF: SIMPLEX-DUPLEX, USA-INT:

046A- The nearest Coast Guard station is being called by a vessel on Ch-22. His USA-INT switch is set to INT. What will be the results?

- a) The Coast Guard station will probably hear the call and respond but the vessel called will not hear the response.
- b) There should be no problem carrying on communications.
- c) The Coast Guard station will not hear the call because he is listening on a duplex receiving frequency.
- d) Neither station will hear the other's calls.

046B- What is the reason for the USA-INT control or function?

- a) It changes channels that are normally simplex channels into duplex channels.
- b) It changes some channels that are normally duplex channels into simplex channels.
- c) When the control is set to "INT" the range is increased.
- d) None of the above

046C- Which of the following statements is true?

- a) You should always use the "INT" setting for calling a Public Correspondence station.
- b) You should use Ch-22 when calling the U. S. Coast Guard.
- c) Using the "USA" setting changes certain channels from duplex to simplex operation.
- d) Using the "INT" setting will prevent proper Ch-13 bridge-to-bridge operations.

046D- The USA-INT control on VHF units:

- a) Selects duplex operations for U.S. coastal waters and simplex operations in non-U.S. waters, on the "alpha" channels.
- b) Changes selected international duplex channels to simplex channels for use in U.S. waters.
- c) Both of the scenarios above may be set up and selected by the operator.
- d) None of the above

046E- The USA-INT control on VHF units:

- a) Was made necessary by a desire for more simplex channels in the U.S.
- b) Correctly set, will result in duplex operations in U.S. Coastal waters on the "alpha" channels.
- c) Correctly set, will result in simplex operations in U.S. Coastal waters on the "alpha" channels.
- d) Both a) and c) are true

046F- What would happen if your VHF is set to "USA" and you called a coast station on Ch-03?

- a) The coast station should hear your call and respond.
- b) You will be able to conduct normal communications.
- c) You will not be able to hear the coast station calling you.
- d) Both a) and c) are correct

Key Topic #046 Answer Key: A: a) B: b) C: c) D: b) E: d) F: d).

KEY TOPIC #047: VHF-DSC CALLS: DISTRESS, URGENCY and SAFETY:

047A- The quickest way to transmit a DSC Distress alert is:

- a) Select "Distress" priority from the menu and transmit an "all ships" call.
- b) Press the "Distress Hot Key" as specified by the equipment manufacturer.
- c) Transmit a "MAYDAY" call on Ch-16.
- d) None of the above

047B- A DSC Urgency priority call is usually set up in the following manner:

- a) They are sent to "all ships" or "all stations".
- b) They are sent to an individual coast station.
- c) They are sent to an individual ship station.
- d) None of the above

047C- A DSC Safety call is usually used under the following conditions:

- a) Man overboard
- b) Distress situation
- c) Navigation Hazard
- d) All of the above

047D- To send a Distress alert use the following procedure:

- a) Initiate a menu call to select Ch-16 for voice communications.
- b) Use the "Distress Hot Key" in an appropriate manner.
- c) Always insert the nature of the Distress first.
- d) None of the above

047E- DSC Urgency priority calls may be sent using the "Distress Hot Key" under the following circumstances:

- a) If no additional information is required to be transmitted.
- b) Only if the position information is correct.
- c) Under NO circumstances.
- d) None of the above

047F- A DSC Safety priority call would be used under the following circumstances:

- a) A lifeboat has been lost over the side in heavy weather and is adrift.
- b) A crew member is missing and presumed lost overboard.
- c) There is a fire in the engine room.
- d) None of the above

Key Topic #047 Answer Key: A: b) B: a) C: c) D: b) E: c) F: a).

<u>GMDSS-STCW-ROC-FCC-EI-7R: Test Pool, Questions and Answers.</u> (Answers, bottom of page) Jul.2006 KEY TOPIC #048: VHF-DSC CALLS: ROUTINE, SHIP-TO-SHIP:

048A- How are Routine calls usually formatted/initiated?

- a) By pressing the "Distress Hot Key".
- b) By pressing the "Alarm" button and then selecting from various options.
- c) By making the appropriate key strokes to select the appropriate menu choices.
- d) None of the above

048B- What would be the appropriate menu choice when calling another ship station?

- a) Simplex
- b) Ch-28
- c) Duplex
- d) Ch-22

048C- What would be the appropriate channel selection for follow-on voice communications for a Routine priority call to another vessel?

- a) Ch-70
- b) Ch-16
- c) Ch-22
- d) Ch-08

048D- If the vessel you wish to call is not listed in your VHF address book, what action should be taken?

- a) The vessel's MMSI number must be manually entered during the call setup.
- b) The vessel's name and MMSI number may be entered in the address book for access during call setup.
- c) Either of the above
- d) None of the above

048E- What conditions must exist for a completely automatic DSC acknowledgement of a Routine call and change to suggested working channel?

- a) Both stations must be monitoring Ch-16.
- b) The receiving station must be set up for automatic response.
- c) The receiving station must be monitoring the suggested working frequency.
- d) None of the above

048F- What actions will take place upon receipt of a Routine call from another vessel if both vessels are programmed for automatic response?

- a) The alarm will sound.
- b) The call particulars will appear on the screen and the channel will change to the suggested working frequency.
- c) The alarm will sound and the channel will change.
- d) All of the above may be true.

Key Topic #048 Answer Key: A: c) B: a) C: d) D: c) E: b) F: b).

KEY TOPIC #049: VHF-DSC: OTHER DSC FUNCTIONS-1:

049A- The DSC received call directory usually sorts and stores incoming calls in what manner?

- a) All received calls are saved in a single category.
- b) Received calls are typically divided into two directories but the names of these directories and which message priorities are stored in them vary -- depending on the equipment manufacturer.
- c) Received calls are always divided into Distress and Urgency categories.
- d) Only received Distress calls are saved.

049B- Why would you want to access your MMSI number?

- a) To call another vessel.
- b) To change it.
- c) To determine that the number is correct.
- d) There is no reason to access your MMSI number.

049C- What precautions should be taken when reviewing previously transmitted messages?

- a) Take steps not to accidentally send the message again.
- b) Press the "Call" key when finished.
- c) Always save the message.
- d) No precautions are necessary.

049D- How many times is it possible to change your own MMSI number in a VHF unit?

- a) It is not possible.
- b) It may be changed by the operator up to 4 times.
- c) On some units it can be changed at will if the password is known.
- d) None of the above

049E- What precautions should be taken when reviewing received Distress messages?

- a) Press the "Call" key when finished.
- b) Take steps not to accidentally send a DSC acknowledgement or relay.
- c) Always save the message.
- d) No precautions are necessary.

049F- Which of the following is true regarding vessel position information?

- a) The position is normally provided from GPS input.
- b) If the position is not automatically updated it must be manually updated every 4 hours.
- c) Both a) and b) are true.
- d) None of the above

Key Topic #049 Answer Key: A: b) B: c) C: a) D: c) E: b) F: c).

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KEY TOPIC #050: VHF-DSC: OTHER DSC FUNCTIONS-2:

050A- What information is normally entered in the address book?

- a) The vessel's IMN.
- b) Vessel's name and MMSI number.
- c) The vessel's call sign and name.
- d) All of the above

050B- Which of the following statements is true?

- a) Some DSC units have both a Transmit and Receive message directory or database.
- b) Some DSC units may not contain a database of transmitted DSC calls.
- c) Both a) and b) are true.
- d) None of the above

050C- Which of the following statements on address book entries is correct?

- a) Shore based telephone numbers may be entered for automatic telephone calls ashore.
- b) Public Correspondence Stations may be entered.
- c) A vessel's name and MMSI number may be entered.
- d) All of the above

050D- The VHF-DSC self-test function (if available) usually performs the following:

- a) Makes a diagnostic test of the system without actually transmitting a signal.
- b) Transmits a very weak DSC signal which is picked up by the Ch-70 receiver.
- c) Transmits a weak voice signal which is picked up on Ch-16.
- d) Does a check sum of the memory chips.

050E- What can the operator do to adjust the audible alarm?

- a) The operator can choose to disable the audible alarm.
- b) The alarm cannot be disabled for Distress and Urgency messages.
- c) Both of the above
- d) None of the above

050F- When initiating a DSC call through the menu system what is the most likely information that will be displayed after making the first correct keystroke?

- a) The call setup menu.
- b) The particulars of the previous call.
- c) The priority menu.
- d) The Telecom-1 menu.

Key Topic #050 Answer Key: A: b) B: c) C: d) D: a) E: b) F: a).