

**Demo PDF file. This file includes questions: 10 from 600. Full version of file looks the same as demo, but full version includes all questions. You may download file with all questions by link on bottom of this page**

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## **FCC Element 7 - GMDSS Radio Operating**

### **1. What is the fundamental concept of the GMDSS?**

- **GMDSS utilizes automated systems and satellite technology to improve emergency communications for the world's shipping industry .**
- It is intended to automate and improve existing digital selective calling procedures and techniques.
- It is intended to provide more effective but lower cost commercial communications.
- 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.

Note:

*GMDSS is a system utilizing automated systems and satellite technology to improve emergency communications for the world's shipping industry.*

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### **2. The primary purpose of the GMDSS is:**

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

Note:

*The GMDSS was established to automate and improve emergency communications for the global shipping industry, as defined by SOLAS regulations.*

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### **3. What is the basic concept of GMDSS?**

- Shoreside authorities will rely on reports from nearby vessels to become aware of Distress alerts.
- Shoreside authorities and vessels can assist in a coordinated SAR operation only after the correct chain of DSC relays takes place.
- **SAR authorities ashore can be alerted to a Distress situation & shipping in the vicinity can be requested to participate in SAR operations.**
- SAR authorities ashore wait to have EPIRB Distress alerts confirmed by satellite follow-on communications.

Note:

*GMDSS ensures rapid alerting of shore-based SAR authorities and nearby ships to facilitate coordinated rescue operations.*

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### **4. GMDSS is primarily a system based on:**

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

Note:

*GMDSS primarily connects shore-based search and rescue authorities with distressed ships and nearby vessels, utilizing various communication technologies.*

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## 5. What is the responsibility of compulsory GMDSS vessels?

- **Every vessel must be able to perform communications functions essential for its own safety and the safety of other vessels.**
- Vessels must transmit a DSC distress relay upon receipt of a DSC distress alert.
- Only the vessels closest to a Distress incident must render assistance.
- Vessels must immediately acknowledge all DSC distress alerts.

Note:

*Compulsory GMDSS vessels must be capable of performing essential radio communications functions for their own safety and the safety of other vessels.*

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## 6. GMDSS is required for which of the following?

- All vessels capable of international voyages.
- **SOLAS Convention ships of 300 gross tonnage or more.**
- Vessels operating outside of the range of VHF coast radio stations.
- Coastal vessels of less than 300 gross tons.

Note:

*GMDSS is mandated for SOLAS Convention ships of 300 gross tonnage or more.*

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## 7. Which GMDSS system utilizes terrestrial radio techniques?

- Inmarsat-FBB
- Inmarsat-C
- GPS
- **VHF - MF - HF - DSC**

Note:

*VHF-MF-HF-DSC utilizes terrestrial radio techniques by employing shore-based radio stations and traditional radio propagation, distinguishing it from satellite-based systems like Inmarsat and GPS, which are used for navigation or satellite communication.*

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## 8. What equipment utilizes satellite communications?

- **Inmarsat -C**
- VHF-MF-HF
- NAVTEX
- SART

Note:

*Inmarsat-C utilizes satellite communication, unlike VHF-MF-HF, NAVTEX, and SART, which rely on terrestrial radio or radar systems.*

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## 9. What equipment is used in or near the survival craft?

- NAVTEX
- **EPIRB**
- Fathometer
- COSPAS-SARSAT

Note:

*An EPIRB is the required emergency distress beacon designed to be used in or near survival craft to alert rescuers after abandonment.*

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

- NAVTEX
- GPS
- **DSC Controller**
- DSC Scanning Watch Receiver

Note:

*The DSC controller is programmed with the ship's MMSI and initiates Digital Selective Calling (DSC) distress alerts and individual calls.*

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