

How AI Feature in ORCA's MDCS-Cloud Supports Your SMS Operations

- MDCS-Cloud is equipped with an AI support feature.
- AI automatically learns from SMS documents registered in MDCS-Cloud.
- When documents are revised, added, or withdrawn, AI updates its learning automatically and recognizes only the currently valid documents.
- End users can ask questions about SMS document content using natural language.
- Based on the learned content, AI compiles and provides responses to user inquiries.
- AI supports SMS operations by assisting crew members who are not yet fully familiar with their company's SMS manuals.

Sample Usage^①

Asking what actions to take if a virus infection is detected on a vessel's PC

I found an computer virus infected to E-mail PC onboard. What shall I do?

Based on the procedures in **[ENTRY: MN1301.rtf]** and **[ENTRY: MN0903A.rtf]**, a computer virus infection is classified as a **cyber risk incident**. You should follow these steps:

1. Immediate Reporting

- Report to the Master**: Any personnel discovering a cyber risk incident must report it immediately to the Master.
- Report to the Company**: The Master is responsible for reporting the incident to the **Designated Person (DP)** as soon as possible for immediate countermeasures **[ENTRY: MN1301.rtf]**.

2. Documentation and Investigation

- Accident and Casualty Report**: The Master must complete the form **ORCA-SM-05-01** (Accident and Casualty Report) and submit it to the Designated Person **[ENTRY: MN1301.rtf]**.
- Cyber Risk Management**: You must refer to the specific **"Procedure for Cyber Risk Management"** (ORCA-MN-20-02) for detailed technical response steps (Note: the full content of MN-20-02 is not in the current repository, but it is the mandated reference) **[ENTRY: MN1301.rtf]**.

3. IT System Management

- IT Manager Involvement**: The Company's IT Manager is responsible for the **"Record for Risk Assessment of IT Systems"** (ORCA-SM-07-52). A risk assessment should be conducted if considered necessary by the IT Manager or the Designated Person following the infection **[ENTRY: MN0903A.rtf]**.
- System Records**: The Master should have the **"List of IT Systems"** (ORCA-SM-07-51) available onboard for handy reference to identify affected

パンカリング作業時の具体的なチェックリストを教えてください

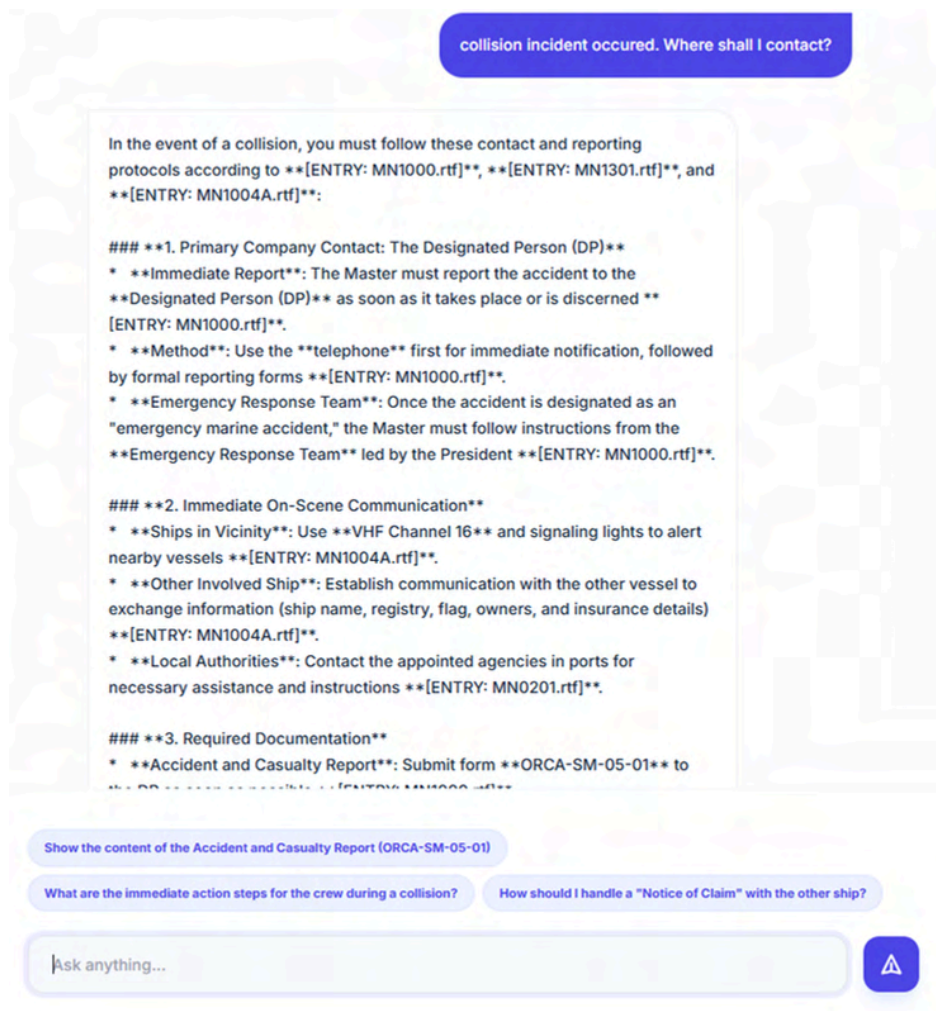
荒天時の船長の責任は何ですか

視界制限時の見張り員の構成を詳しく教えてください

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Sample Usage②

Asking about contact points in the event of a collision accident



Sample Usage③

Inquiries made in Japanese

(When inquiries are made in Japanese, AI will answer in Japanese even if the registered documents are written in English.)

Critical Shipboard Operationについて教えてください

****Critical Shipboard Operation（重大な船上作業）**とは、その作業におけるミスが、乗組員、船舶、または環境に対して直ちに事故や危険な状況を引き起こす可能性のある作業を指します。**

主な内容は以下の通りです（参照：****[ENTRY: MN0700.rtf]****, ****[ENTRY: MN0705.rtf]****）。

**1. 対象となる作業**

以下の6つの状況が定義されています：

- **視界制限下の航行****: 視界が3マイル未満。
- **輻輳（ふくそう）海域の航行****: 2隻以上の他船の存在により、元の針路の維持が困難な状況が続く海域。
- **狭水道の航行****: 幅が2マイル未満のチャネル。
- **荒天下の航行****: 風力ビューフォート階級7以上、かつ波高5m以上。
- **海上でのバンカリング（燃料補給）作業****。
- **適切な詳細チャート（海図）がない状態での航行****。

**2. 実施手順**

作業の開始前および実施中、以下の手順に従う必要があります：

- **報告と宣言****: 当直士官は船長に報告し、船長は作業の開始をアナウンスします。
- **見張りの強化****: 状況に応じて追加の見張りを配置します（例：狭水道かつ視界制限下では、船長、士官2名、甲板手2名に加え、船首見張りを配置）。
- **機器の点検****: レーダー、ARPA、霧中信号、航海灯などの作動確認を行います。
- **機関室の準備****: 非常事態に備え、追加の発電機を運転するなど準備を整えます。
- **貨物の安全****: 荒天時は、一等航海士が貨物のラッシング（固定）を確認し、荷崩れを防止します。

バンカリング作業時の具体的なチェックリストを教えてください

荒天時の船長の責任は何ですか

視界制限時の見張り員の構成を詳しく教えてください

Sample Usage④

Inquiries made in Chinese

(In addition to the above, multiple other languages are supported.)

出海須知

在提供的 <NEURAL_KNOWLEDGE_STORE> 中，並無標題為「出海須知」的直接文件。然而，根據 [ENTRY: MN1400.rtf] 與 [ENTRY: MN1301.rtf] 的內容，有關船舶出航前的查核與安全操作規範如下：

- **出航前查核 (Verification prior to departing port): ****
根據 [ENTRY: MN1400.rtf] 第 3.8 條，驗證活動 (Verify) 包括在船舶「離港前 (prior to departing port)」、在海上或進入港口前，對船舶及其設備進行檢查、測試和操作查核。
- **船舶狀況檢查與報告: ****
根據 [ENTRY: MN1301.rtf] 第 4.1.1 條，船長必須遵循「表格指南 (Form-instructions)」[ENTRY: ORCA-MN-09-03A.rtf] (註：此具體表格內容未在本次檢索範圍內) 來檢查船舶的所有面向，並向公司提交月報、航次報告、季報等。
- **安全操作目標: ****
根據 [ENTRY: MN1400.rtf] 第 4.6 條，安全管理系統 (SMS) 的目標之一是確保「船舶操作的安全實務 (safe practices in ship operation)」以及「安全的工作環境 (a safe working environment)」。
- **關鍵設備與系統: ****
根據 [ENTRY: MN1400.rtf] 第 3.15 條，船舶必須確保關鍵設備的正常運作，這包括：
 - * 貨油泵溫度監控器 (Cargo pump-temperature monitors)
 - * 泵艙固定式氣體偵測系統 (Pump-room fixed gas-detection systems)

離港前需要進行哪些設備查核?

什麼是關鍵設備與系統 (Critical equipment and systems)?

如何報告船舶的缺陷 (Deficiency)?

Important Notes :

- Translations and content summaries are generated by AI and do not guarantee legal completeness or exact reproduction of the original documents.
- This function is intended solely to support SMS operations. For actual operations, users must always refer to and confirm the original SMS manuals.