Inmarsat-C/mini-C, Confirmaiton Procedure of Serial number and

Procedure for confirming whether software update is required

1. **Outline**

   This manual explains confirmation procedure of Inmarsat-C/mini-C serial number and whether the software updata is required for the Inmarsat-C/mini-C that are subject to the GPS rollover that will occur on 15th May 2022.

   Software update is not required in the following cases even if the serial number is applicable.

   - The software has been updated to the latest version.
   - The model name of the installed EME (Externally Mounted Equipment) is NAF-253GM5, NAF-253SA, NAF-253VM, and NAF-253LT.

   There are two types of EME for Inmarsat C and mini-C, NAF-741/742 series[*1] and NAF-253 series[*2], and if NAF-741/742 series are installed, GPS rollover will occur. It is possible to identify the model name of the EME at the time of shipment from the serial number on the nameplate of the IME (Internally Mounted Equipment: Indoor Equipment). If the EME has been replaced with NAF-253 series due to repair work, etc., the GPS rollover on 15th May 2022 will not occur and no action is required.
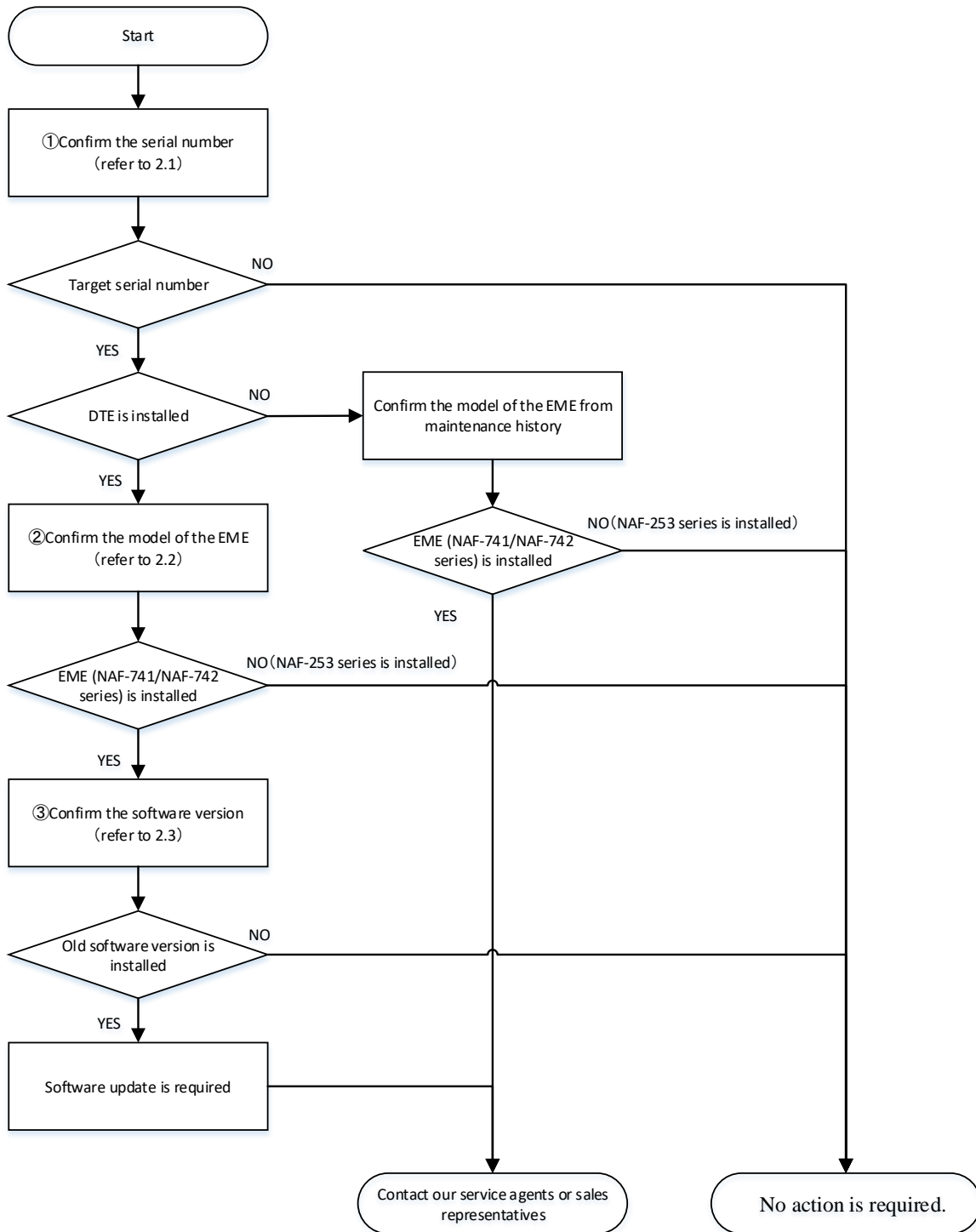
   *1 NAF-741/742 series : NAF-741GM、NAF-742SA、NAF-742LT、NAF-742VM

   *2 NAF-253 series : NAF-253GM5、NAF-253SA、NAF-253LT、NAF-253VM

   If a DTE (Data Terminal Equipment) is installed, the model name of the EME can be confirmed by the DTE. However, since the DTE is optional for the Inmarsat mini-C, if no DTE is installed, it is necessary to confirm the model name of the EME from the maintenance history.

   Check whether software update is required or not according to the flowchart in the next section.

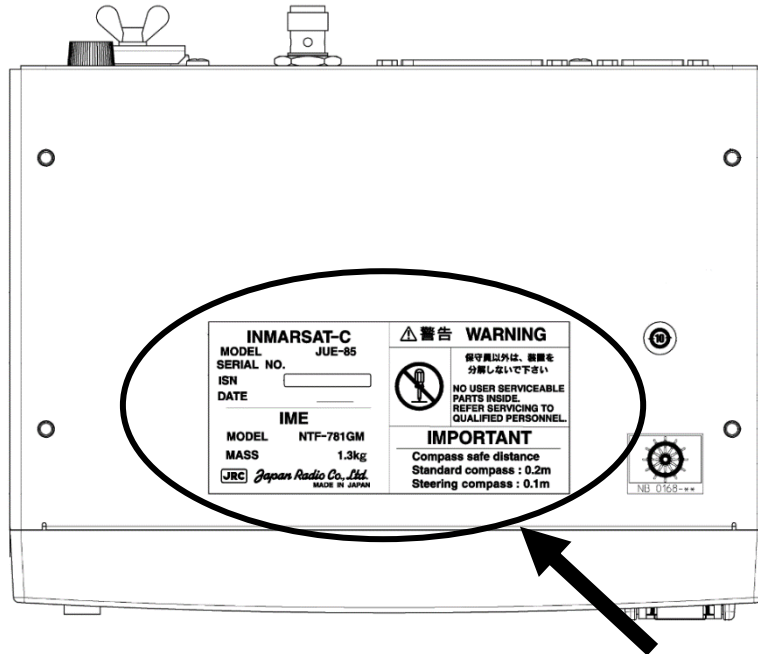## 2. Procedure for confirming whether software update is required

Figure 1. Flowchart (Procedure for confirming whether software update is required)
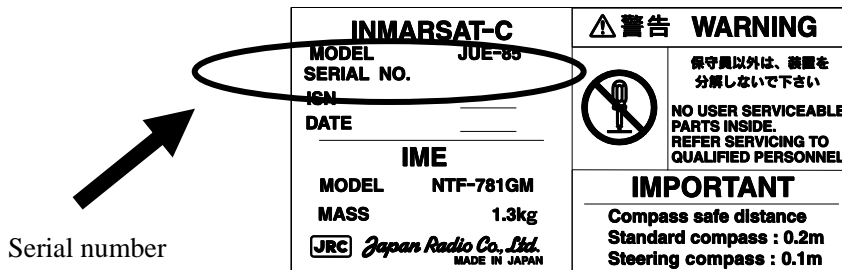
2.1. Confirmation procedure of serial number

Confirm the serial number on the nameplate of the IME as shown in Figure 1, and confirm if the serial number is the target of software update in Table 1.

JUE-85 IME, JUE-95SA/95VM/95LT IME

Nameplate

Nameplate <Type1>

Serial number
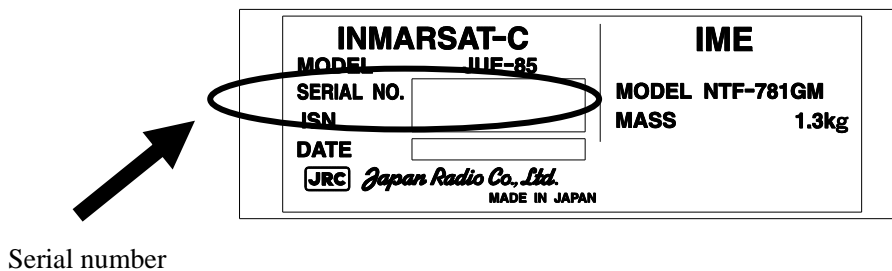
Nameplate <Type2> (for GMDSS console)

Serial number

Figure 2. Confirmation procedure of serial number

Table 1. Serial Number for software update

Equipment	Model	Serial number
INMARSAT-C	JUE-85	GR10251 to GR23738
INMARSAT mini-C	JUE-95SA	GR10051 to GR23188
INMARSAT mini-C	JUE-95LT	GR11703 to GR23598
INMARSAT mini-C	JUE-95VM	GR10001 to GR23593

2.2. **Confirmation Procedure of EME Model**

If the EME model name is NAF-741/742 series, the EME software (ACSE) needs to be updated, However, if the EME software (ACSE) is the latest version, the GPS rollover countermeasure function has been implemented and no action is required. Please refer to Table 4 for the latest version of the EME software (ACSE) as of 20th December 2021.

Figure 3a. EME (NAF-741/742 series)   **Figure 3b. EME (NAF-253 series)**

Confirming the displayed model name of Inmarsat-C/mini-C on DTE (Data terminal equipment) enables to identify the model name of the EME. The relationship between the EME model and displayed model name of Inmarsat-C/mini-C on DTE is shown in table 2. Also, please refer to step-1 to step-4 below for how to display model name of Inmarsat-C/mini-C.

Table 2.   The relationship between the EME model name and displayed model name of Inmarsat-C/mini-C

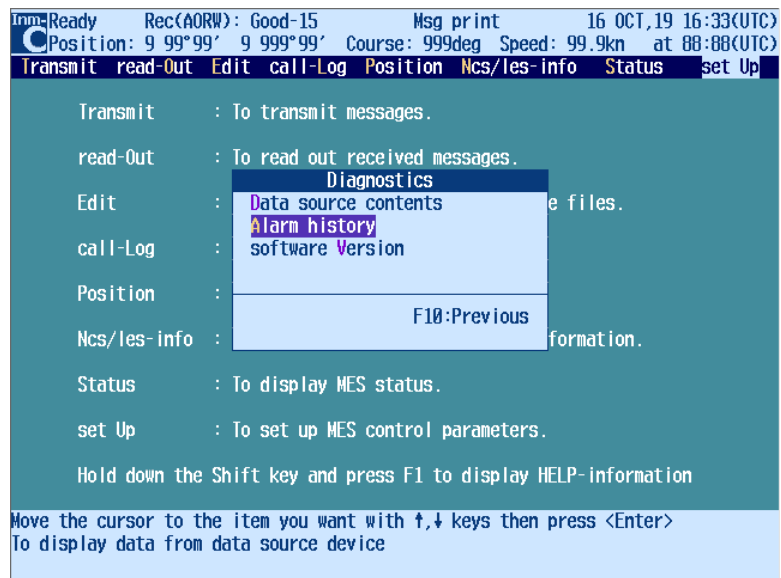| EME Model	Displayed model name of Inmarsat-C/mini-C		
	Standard model	Russian model	Chinese model
NAF-741GM	**JUE-85**	**JUE85R**	**JUE85C**
NAF-742SA	**JUE-95SA**	**JUE95SAR**	**JUE95SAC**
NAF-742LT	**JUE-95LT**	**JUE95LTR**	－(No applicable model)
NAF-742VM	**JUE-95VM**	**JUE95VMR**	－(No applicable model)
NAF-253GM5	JUE85-A	JUE85R-A	JUE85C-A
NAF-253SA	JUE95SA-A	JUE95SAR-A	JUE95SAC-A
NAF-253LT	JUE95LT-A	JUE95VMR-A	－(No applicable model)
NAF-253VM	JUE95VM-A	JUE95LTR-A	－(No applicable model)

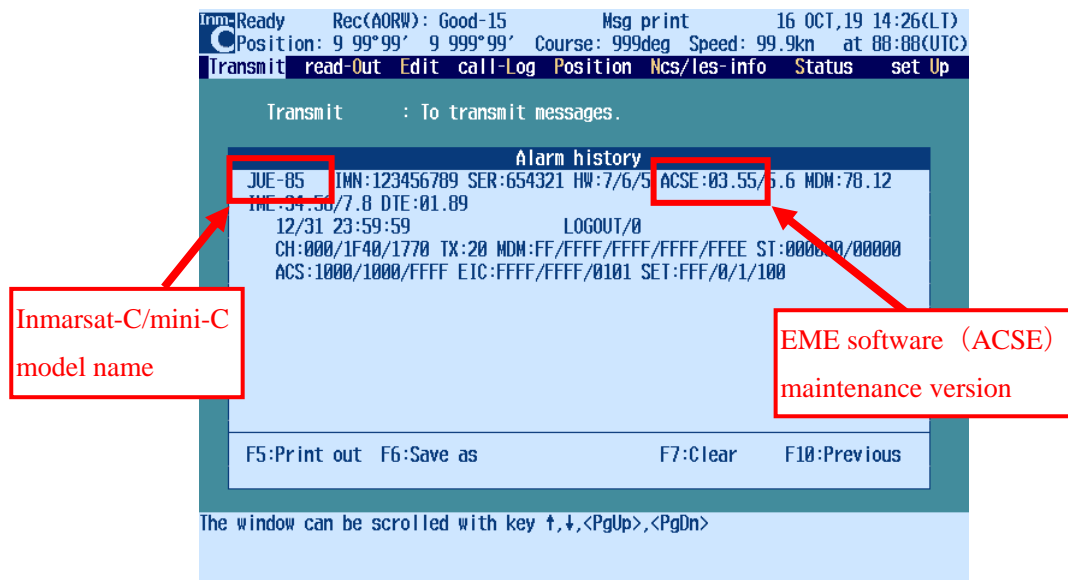(Step-1) Turn on the power of DTE.

Figure 4a. DTE(NDZ-227)

Figure 4b. DTE（NDZ-127C1）

(Step-2) Press 'Alt + A' keys on main menu. (Figure 5 will be displayed).

Figure 5. DTE main screen (Diagnostics menu is displayed)

(Step-3) Select [Alarm history] and press 'Enter' key on Diagnostics Menu. (Figure 6 will be displayed).

Figure 6. DTE main screen (Alarm history window is displayed)

(Step-4) Confirm the model name display at the upper left of the Alarm history screen. If the displayed model on the DTE shown in Table 3, NAF-741/742 series is installed.

Table 3.   Taget displayed model name of Inmarsat-C/mini-C

Displayed model name of Inmarsat-C/mini-C		
JUE-85	**JUE85R**	**JUE85C**
JUE-95SA	**JUE95SAR**	**JUE95SAC**
JUE-95LT	**JUE95LTR**	
JUE-95VM	**JUE95VMR**	

2.3. **Confirmation Procedure of EME software (ACSE) maintenance version**

Refer to Figure 6 for the location of the EME software (ACSE) maintenance version display. Even if the NAF-741/742 series is installed if the maintenance version of the EME software (ACSE) is the version shown in Table 4 or later, the GPS rollover countermeasure function has been implemented and no action is required.

Table 4.   EME software (ACSE) maintenance version

Displayed model name of Inmarsat-C/mini-C	EME software (ACSE) maintenance version
JUE-85	**3.55**
JUE85R	**3.55R**
JUE85C	**3.55C**
JUE-95SA	**3.05**
JUE95SAR	**1.35R**
JUE95SAC	**3.05C**
JUE-95LT	**3.05**
JUE95LTR	**3.05R**
JUE-95VM	**3.55**
JUE95VMR	**1.35R**