SERVICE BULLETIN

Issue No: MG025   **Date: 05 June 2017**

McMurdo SmartFind R5 GMDSS Radio IMO MSC. 1/Circ. 1460 Update procedure

Product Affected:

- McMurdo R5 GMDSS VHF Handheld Radio

Reason: Compliance with revised ITU Radio Regulations after 1st January 2017

For continued compliancy with IMO guidance it is recommended that R5 radios are updated. The software version installed in the R5 radio should be version 2.00.23 or higher. A simple check can be done to see if the software requires updating. Switching on the radio and checking to see if the following channels are available:

19a, 20a, 27a, 28a, 78a and 79a.

If these channels are not available, then its recommended that the radio software should now be updated.

General information

This service bulletin describes the installation and operation of the Service Tool software for the McMurdo SmartFind R5 GMDSS radio and how to update. It will also provide information on ordering the required programming cable. The Service Tool Software can be downloaded from the McMurdo partner portal and is only intended to be used to program McMurdo SmartFind R5 or McMurdo R8F radios. It is not provided to program any other radio or manufacturers equipment.

- Service Cable
  The service cable can be ordered as shown from McMurdo. Please contact the RSM

Part number	Description	Driver
20-051A	Service cable for McMurdo R5 radio	Available on the partner portal

- McMurdo Radio Portable Radio Service Tool Package (zip-file). This package contains:
  - Latest radio software for all Portable Radio
  - Service Tool software
  - Default configuration files for all radio models.
  - Latest Service Software manual
  - Driver for the USB defined COM ports
- System requirements

  The PC used for the installation should have the following minimum capabilities:
  - Operating system: Windows 7
  - Platform: X86 compatible
  - Screen with minimum 1024*768 resolution
  - 20 MB free hard disk space
  - 256MB RAM
  - USB 1.1
  - .Net 2.0 framework (part of installation package)

ServiceSoftware

The service software is installed on the service PC by using the downloaded **Portable Radio Service Tool Package**. Be sure the folder is un-zipped and stored locally on the service PC. Double click on the **setup.exe** icon from the un-zipped folder and follow the instructions, to update the system.


Figure 11 - Install wizard for the service tool.

The installer program removes old installations before a new version is installed. Therefore, it is not recommended to store personal set-up files in the selected install directory. The software installation procedure should be executed whenever any upgrades are recommended.

Service Cable

Before the service cable is connected for the first time, the driver for the service cable should be installed. The following procedure is only required prior to the first time the service cable is used:

1. From **Start-> Cobham,** run the **Service Cable Driver**.
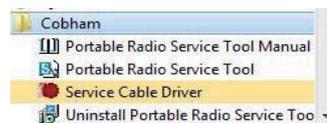
2. The driver will now be installed on the Service PC.

After installation, the service cable (USB end) is plugged into a free USB slot on the service PC. The PC should now be able to identify a new USB device.

The PC sets up a virtual COM port, which later is to be used by the Service Tool.

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Operation of Service Software

The software will identify and configure the McMurdo SmartFind R5 GMDSS radio. Features that are not supported in the particular radio as well as functions/parameters, which are not available for alteration, will be shown on a shaded background.

Connecting the R5 GMDSS radio

This connection procedure shall be followed each time the Service Tool is used.

> Note | **Make sure the Radio battery is fully charged before programming**

The radio is connected to the service PC by first plugging the service cable (USB end) into a free USB slot on the service PC. Then screw the service cable onto the radio top connector, which – under normal conditions is used for attaching accessories.

Figure 1 - Simple connection between service PC and radio.

1. Open the Software and then turn on the radio.

> Note | The selected COM port is the default selection next time the program is accessed.

Figure 4 - Once connection between the Service Tool and the radio has been established, this will be indicated in the radio display by reading "SERVICE" as well as a soft beep from the radio.

2. After having done the required radio upgrade in service mode, **switch off the radio, then disconnect the cable from the radio.** Turn on the radio and check that the relevant updates have been done.

Start Up Page

The McMurdo SmartFind Radio Service Tool is initiated from the **Start** menu. Here it is also possible to bring up the manual. The tool can also be started by clicking on the SAILOR portable Radio Service Tool"-icon, located at the PC-desktop after installation. The startup window will appear on the service PC screen.
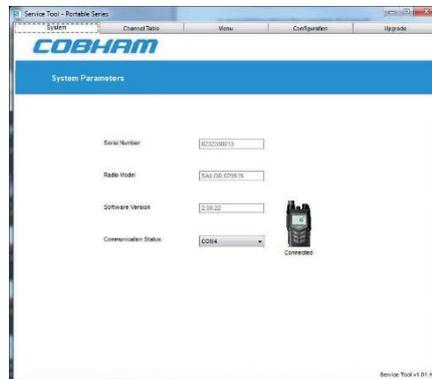

Figure 3 - Portable Radio Service Tool start-up screen.

To access the radio, select the appropriate COM port through the Communication Status drop down on the user interface. When the correct COM port is selected on the start-up page (System tab) the fields on the start page will populate with the basic radio identity information (**Serial number, Radio model** and **Software version**) as read out from the radio.

| Warning | Once the Service Tool has connected to the radio and all parameters are available, the radio should not be turned off until all configurations have been done. |

Radio Upgrades

McMurdo SmartFind R5 GMDSS Radio can be upgraded when radio regulations have changed. No other time will it be required to upgrade or configure a GMDSS radio unless there is a defined requirement. To upgrade the radio, from the user interface:

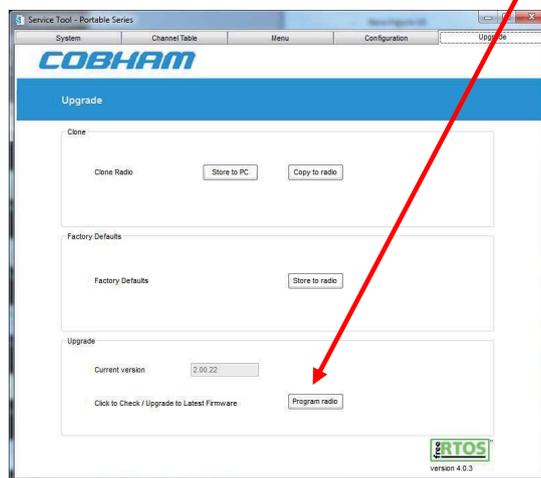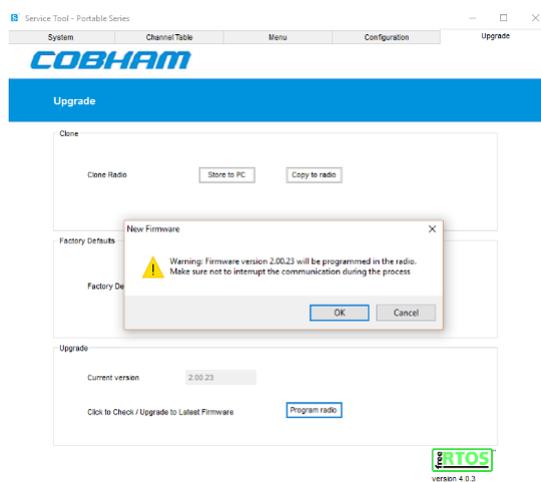1. Click on the Upgrade Table – a caution window will come up, press ok.
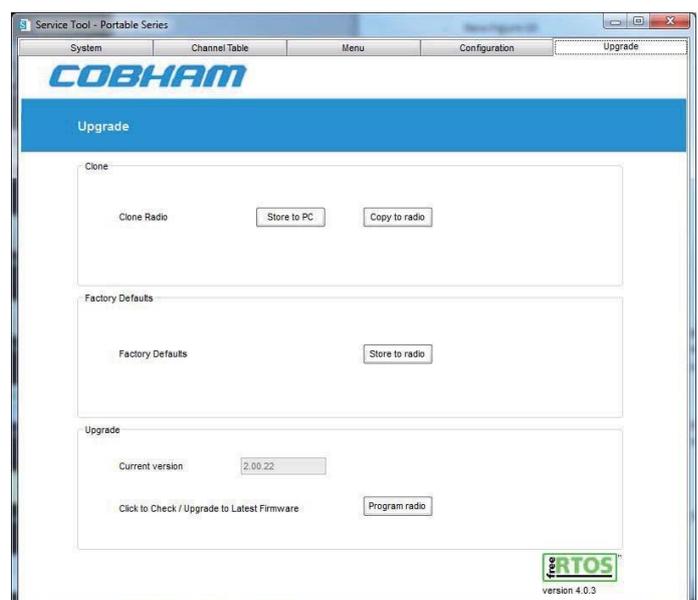
2. Find the Upgrade box on the Upgrade Page
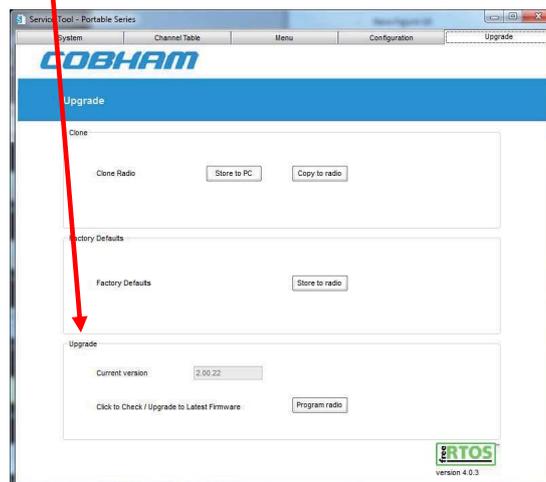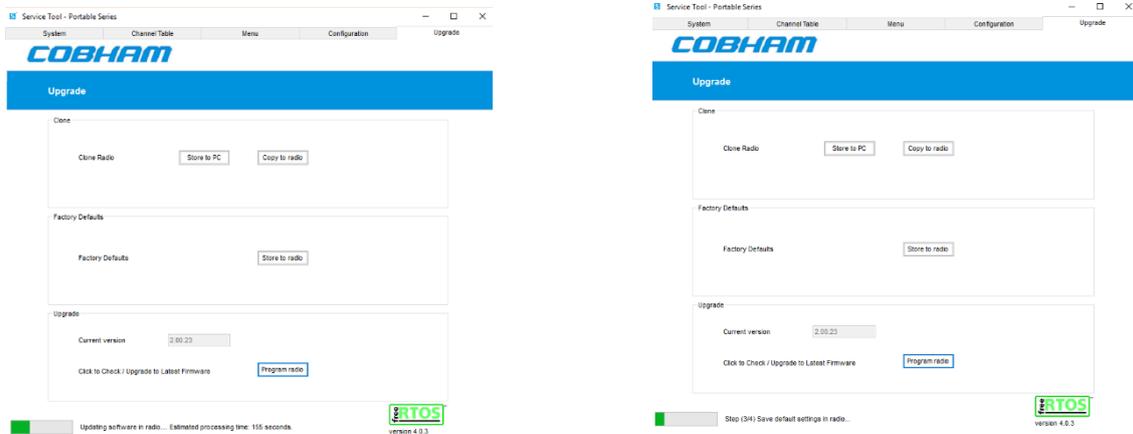

3. Click on the Program radio button when ready to program

4. The following caution window will appear, press ok

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Page | 5

5. Two programming status pages will be shown with progress bars

6. When update has been completed, the following window will shown
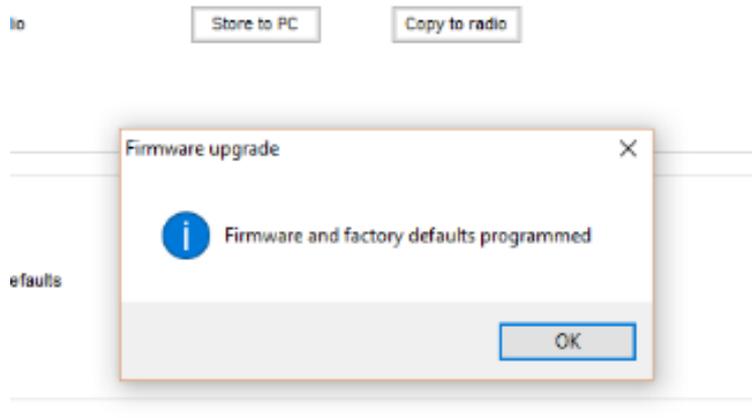
If there is any doubt in the upgrading process, please feel free to contact McMurdo for further information

Ordering information

The service cable can be ordered as shown from McMurdo. Please contact your RSM

Part number	Description	Driver
20-051A	Service cable for McMurdo R8F	Available on the partner portal

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Page | 6

Trouble shooting

Symptom	Possible Error	Solution
No connection to radio.	Radio is not switched on.	Turn on the radio and ensure the service cable is firmly attached.
	COM port is not configured correct.	1) Check the system settings on your computer to verify which COM port number is defined for the service cable. 2) Ensure that the COM port selected on the front page is the same as identified above.
Radio does not start up correct after configuration.	Test mode.	Disconnect service cable and power cycle radio.
Radio configuration wrong after a software	Incompatible configuration files.	Either try to perform a software upgrade or a default configuration.
Radio upgrade failed, and the Service Tool cannot communicate with the radio.	Program is erased in radio. The service cable was probably disconnected, or radio switched off during the upgrade process.	Switch the radio on while the buttons **SQ** and **16/C** is pressed (the radio will go into boot mode). In the Service Tool, select the appropriate COM port under the **System** tab (don't wait for connection). Select upgrade tab and re-program radio. If the problem persists, restart Service Tool and repeat procedure.

Contact Information:

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To be carried out immediately	☐
To be carried out during normal service	☐
To be carried out if required	☐
To be carried out only on PCB repair	☐
For information only	■

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Page | 7