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User Manual

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Operation RM

Client:

General Dynamics Mission Systems

Mentor:

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Version:

1.0

Overview:

Lorem ipsum dolor sit amet



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1 Introduction

2 Installation

The installation of the application can be done through Android Studio. In order to build the application you will need to make sure you have the RClapi folder into the cpp file with the json-c files also included with in.you will then want to make sure the cpp, RClapi,and json folder have their own respective Cmake files what would build the respective part of the program. Then you will sync Gradle in Android Studio. Once that has successfully synced then you could build the Application by hitting the green hammer button on the top bar. As long as that completes without any errors then you can go ahead and put it on the phone by either hitting the play button.

3 Configuration and Daily Operation

Once the application has been built and launched onto the mobile device, the application is almost ready for use. The next important step is to confirm that the radio modem has been started and ready to connect to a device. For this project in particular, the radio modem simulator is used to demonstrate the application's functionality. To start the radio modem simulator, the following steps will be conducted:

1. Log into the VirtualBox Virtual Machine where the simulator is located
2. Navigate to the simulator executable
3. Start the radio modem simulator executable

Now that the radio modem simulator is executing, connecting to the radio modem needs to be done. This is done by creating a connection to it on the mobile application and then activating a waveform preset. To do so the following steps will be conducted:

1. Navigate to the "Settings" page on the mobile application
2. Select the "Status" button



3. Select the “Connection Address” button
4. Type in the IP address of the radio modem into the provided text box and click the submit button
5. Next, click the preset button
6. Select the desired preset from the drop-down box and click the submit button

4 Maintenance

For Maintaining the long term health of this application, key tasks will need to be handled periodically. Luckily, this application is low maintenance and will not take much effort to maintain. First, it is recommended to delete the “log.txt” file found in the downloads directory. This log file is displayed on the system_health fragment. This log file will accumulate data over time, potentially occupying unnecessary storage space. Operation RM advises deleting this file at regular intervals, around a month's time. The deletion of the file will not compromise the ability to be able to debug using the system health as the log file will recreate itself.

Additionally, clearing out emails from the phone's storage is a suggested action to prevent clutter and optimize storage space usage. User's should regularly review and delete unnecessary emails to keep the inbox organized and reduce clutter. A monthly clean-up is also recommended to ensure efficient email management and that there is no unnecessary storage usage. y6

5 Troubleshooting

5.1 Remnant Build Issues

One of the primary issues that can occur when building the project is remnant build files preventing the Gradle and CMake build processes from completing successfully. If build



issues occur that may be related to remnant build files, ensure the following folders and directories are removed before launching the app in Android Studio:

TODO

5.2 CMake Build Issues

While the CMakeLists.txt build files are

6 Conclusion