Date: July 25, 2024

Office of Engineering and Technology
Laboratory Division
Equipment Authorization Branch
Federal Communications Commission Laboratory
7435 Oakland Mills Road
Columbia, MD 21046

Subject: Application for Class 2 Permissive Change to FCC Authorized Transceiver with FCC ID: AZ489FT7143

Dear Sir/Madam,

A permissive change is requested for the subject transceiver which is marketed in the United States and elsewhere.

A. DESCRIPTION OF PRODUCT CHANGES:

1. A new amplifier and pre-driver are introduced in the transmitter section, adding skip mode new circuitry and a new RTC chipset changes in the controller section, new audio PA design in the power management and audio section, a new Triplexer change in the BT/WiFi section and a resistor will be added to the GNSS section for reset purpose.

2. Removing zener diodes and the low battery circuit in the controller section for cost reduction.

3. Adding an alternative source for electrical parts to ensure the continuity of supply, it will be a dual source part. There are few dual source drop-in parts added like NPN digital transistor, operational amplifier, speaker switch, LMR & BT/WiFi 38.4MHz TCXO and current limiter switch.

4. Layout changes at volume switch, emergency button and LMR antenna port areas to minimize the interaction with Triband/LMR.

5. Adding an ESD protection diode at the supply line for ESD enhancement.

6. Adding 2 diodes at supply line to RFIC, downsize ferrite beads and footprint changed for ferrite bead at RFIC section for UL 2-fault isolation and clearance.

7. Adding bypass capacitor at battery data line to fix the interaction of battery data line to antenna performance.

8. Adding bypass capacitor at SPI1_MISO line to fix ringing issue.

9. A new battery contact connector and gore vent are introduced for cost reduction.

10. Adding an alternative source for mechanical parts to ensure the continuity of supply, it will be a dual source part. The changes involved dual source for keypad PCB and full keypad interface board PCB, volume knob, frequency knob, zif connectors, flex assembly and some rubber parts like keypad dome, PTT dome, PTT mylar, PTT rubber, mic boot and top control seal.

B. PERFORMANCE DIFFERENCES:
EMC has been assessed and no degradation was found, however EME observed degradation as compared to the previous filing but the data continues to be compliant to the FCC limits.

C. CONCLUSION:
This radio continues to meet all FCC emissions requirements for which authorization was granted.

Sincerely,

Arine Lee
FCC/IC Certification Manager
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