

13th June 2022

Mr. Rick King
Elite Electronic Engineering Inc
1516 Centre Circle Downers Grove
Illinois 60515-1082
United States of America

Dear Rick,

Subject: TCB Services on a 35W Digital Mobile Transceiver (762-870 MHz)

As per Elite Quotation EEE2202062-1 please carry out FCC (C2PC) PAG to the existing Grant / Certification for our Digital Mobile transceiver:

- FCC ID: CASTMBK5B

This C2PC is based on FCC Notification 202109-001 Guidance for non-pin-to-pin part modification due to component shortage, and KDB 178919 D01 Permissive Change Policy.

Due to supply chain issues and shortages, the following changes were necessary:

- The 6W (PD85006) driver PA will be replaced with 4W driver (AFT05MS004NT).
- The final PA 2x PD85035S will be replaced with a dual path (AFT09MS055GN).

The circuitry of the VCO, Synthesizer, Exciter, the Tx/Rx PIN and Low Pass Filter remain unchanged.

Tests were performed to verify and proof that no degradation on the RF performance of the equipment occurred due to these changes.

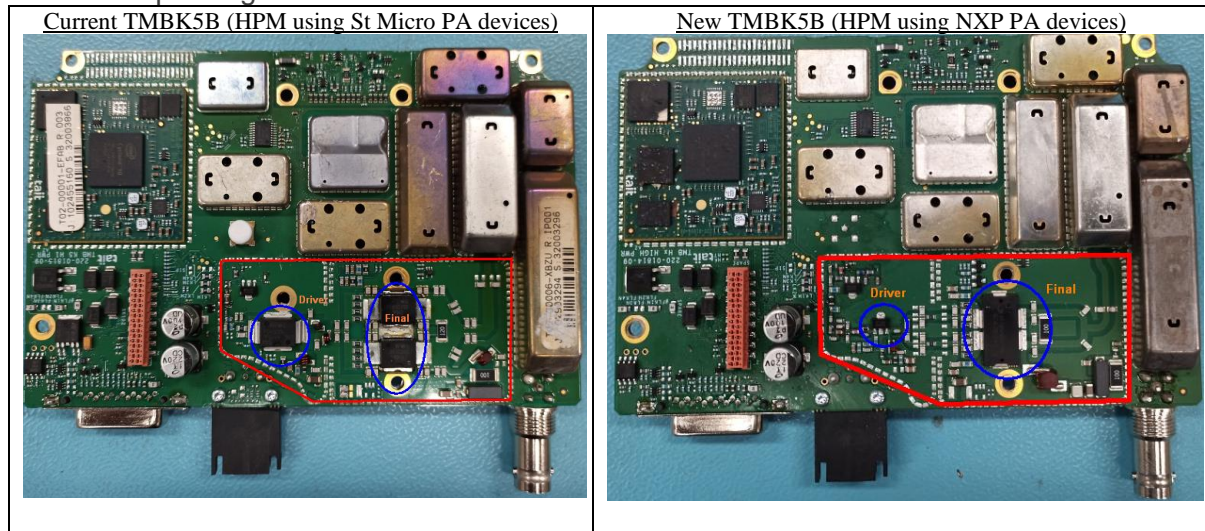
As described above, we reinforce that according to Notification 202109-001:

- 1) *The requirements of § 2.1043 are fulfilled, the device's block functions for the fundamental frequency, primary modulator circuit, maximum power, or field strength ratings are unchanged.*
- 2) *Transmitter PCB layout and parts changes do not change in identifying a device's form, functional specification, as initially granted or previously approved under a Class II permissive change.*
- 3) *PCB changes are non-substantive modifications, and layout changes are to the same size physical circuit board previously granted.*
- 4) *This C2PCPX do not add, remove, augment, or change capabilities, such as transmitters, increased bandwidth, additional rule parts, bands, etc.*
- 5) *The PAG submission for this C2PCPX have complete information on testing demonstrating that the proposed changes for fundamental emissions are unchanged within the normal, acceptable tolerances and out-of-band; emissions do not exceed the appropriate limits. The PAG submission includes all applicable test reports and internal photos.*
- 6) *This modified device will not be marketed under the existing grant of certification before confirmation that the C2PCPX PAG is approved and granted.*
- 7) *There are no Software Defined Radio (SDR) grants for this product.*
- 8) *This C2PCPX PAG procedure has no impact on the provisions of this publication for non-SDR software-only*
- 9) *Tait acknowledge that Class I permissive changes are not permitted under this C2PCPX procedure.*

Additionally, we state that the previous schematics haven't changed, except for the one provided attached where the only updatings are the identification names of the 02 PAs

and the drive PA as well as some values of resistors and capacitors to accommodate the new chipsets.

The pictures below have on the left the current granted hardware and on the right the one we are requesting for a C2PC PAG.



Test reports produced by Teltest and identified as 4242 and 4242a were performed with the new hardware, compared to the previous approved hardware report 3432, fundamental emissions are unchanged within the normal, acceptable tolerances and out-of-band; emissions do not exceed the appropriate limits.

Tait also would like to take this opportunity to fix some type mistakes presented in the previous grant.

We request that the entries of 0.4PPM to be removed, as 0.5 already present is the most appropriated one.

Fix a typo mistake on the emission ddesignator from 7K60F2D to 7K80F2D, as it is state in the original test report submitted.

Best Regards,

Brian Emmett
Standards and Compliance Manager
Legal Department