



Mercury Networks, LLC.
1100 Walnut St, Suite 2050
Kansas City, Missouri 64106

Date: September 17, 2020

Federal Communications Commission

Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MD 21046
FCC ID: XN3-QUANTUM6636

Subject: Statement of Compliance with KBD 940060

To whom it may concern,

We, Mercury Networks, LLC., hereby attest that the firmware upgrade made available to the Quantum 6636 product will allow the device to operate within the parameters outlined in FCC CFR 47 Part 96, as well as OET KDB 940060, Certification and Test Procedures for Citizens Broadband Radio Service Devices Authorized under Part 96. Specific test parameters and system capabilities are outlined below:

- Application for authorization as Category B CBSD per Section 96.49
- Capability of two-way transmission and operation in the entire 3550-3700 MHz band
- Test mode and radio management
 - Compel the device-under-test to operate on a channel selectable by test personnel
 - Vary the output power from minimum to maximum EIRP and set it to a desired level
 - As needed, continuously transmit a modulated signal (i.e with no time bursting or signal gating applied)
- Enter all required SAS registration Information via a Domain Proxy server
- View all information provided to the radio by the SAS
- Force the DUT to stop operations on a specific channel and/or move to another channel
- Geo-location to an accuracy of +/-50 m horizontal and +/-3 m of elevation.
- Signal level reporting
- Frequency reporting

CBSD Management Software (Domain Proxy) data collection capabilities

- Geographic location
- Antenna height AGL (m)
- CBSD class (Category B)
- Requested authorization status (PAL or GAA)
- FCC ID
- Call sign (PALs only)
- User contact info
- Air interference technology
- Serial #
- Antenna gain
- Antenna beamwidth
- Antenna azimuth
- Antenna downtilt

CBSD General Requirements



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- CBSD will only transmit after it receives authorization from SAS
- CBSD will change operating power and/or channel in response to command from SAS
- CBSD will transmit at a power level less than or equal to the maximum power level approved by SAs
- CBSD will transmit with a bandwidth less than or equal to SAS specified bandwidth
- CBSD will transmit on SAS specified frequency
- CBSD will stop transmission in response to a command from SAS, within a period as required by Part 96
- CBSD will send measurement in response to command from SAS
- CBSD will notify SAS via Domain Proxy of a new location when it is beyond the required distance parameter (+/-50 m) within the required time frame
- CBSD will be capable of reporting signal level (measurement data) and frequency to SAS via Domain Proxy
- When communication to SAS/Domain Proxy is lost, the CBSD will:
 - Immediately stop transmission after expiration of heartbeat timeout
 - Re-establish its connection to the SAS via Domain Proxy

Sincerely,

A handwritten signature in black ink that reads "Matthew Sams".

Matthew Sams
Chief of Staff
Mercury Networks, LLC.