

FM Transmission System Blue Tower, Dubai

Client: Hamdan Bin Mohammad Heritage Center

Location: Dubai, United Arab Emirates

Scope: Supply and Installation of 2+1 20kw FM Transmitter and Antenna System

Service Type: Design , Supply, Commissioning and Remote Monitoring

Brief:

Hamdam Bin Mohammed Heritage Center approached Jaggard to design, supply installation and commissioning of a 2+1 20KW FM Transmission System to broadcast the respective frequencies of 91.4Mhz and 107.4Mhz from “Blue Tower” Rooftop in Sheik Zayed Road, Dubai, UAE.

Scope of Works (SOW):

Design and detail the complete transmission from point of client’s input power through the chain to the antenna output point.

Supply Install and Commission Transmitter System, Combiner and PIE equipment.

Supply and Install all System Interconnecting Power Cabling and Containment.

Supply and Install all System grounding to client’s ground points.

Supply and Install galvanised Steel Antenna, Feedline and Power Divider mounts on existing Spine and Low-Level Feeder Gantry from the feeder exit across rooftop to spine structure.

Supply Install and Commission Antenna System complete.

Perform Antenna Component and System Testing including VSWR and DTF measurements.

Perform Transmitter and PIE SAT Testing.

Perform Drive Testing Coverage Surveys.

Perform complete SAT and Drive Test Coverage Report.



Constraints:

The site is situated along Sheikh Zayed Road, a bustling and expansive thoroughfare. Blue Tower was the second tallest residential building in the world in 2010 with 72 floors. The surrounding public areas necessitate careful attention to the safety of the public, the installation crew, and the client. The delivery and installation of materials were difficult as access and maneuverability were constrained due to the workspace environment of as building.



JAGGARD

Global leaders in broadcast and communications infrastructure

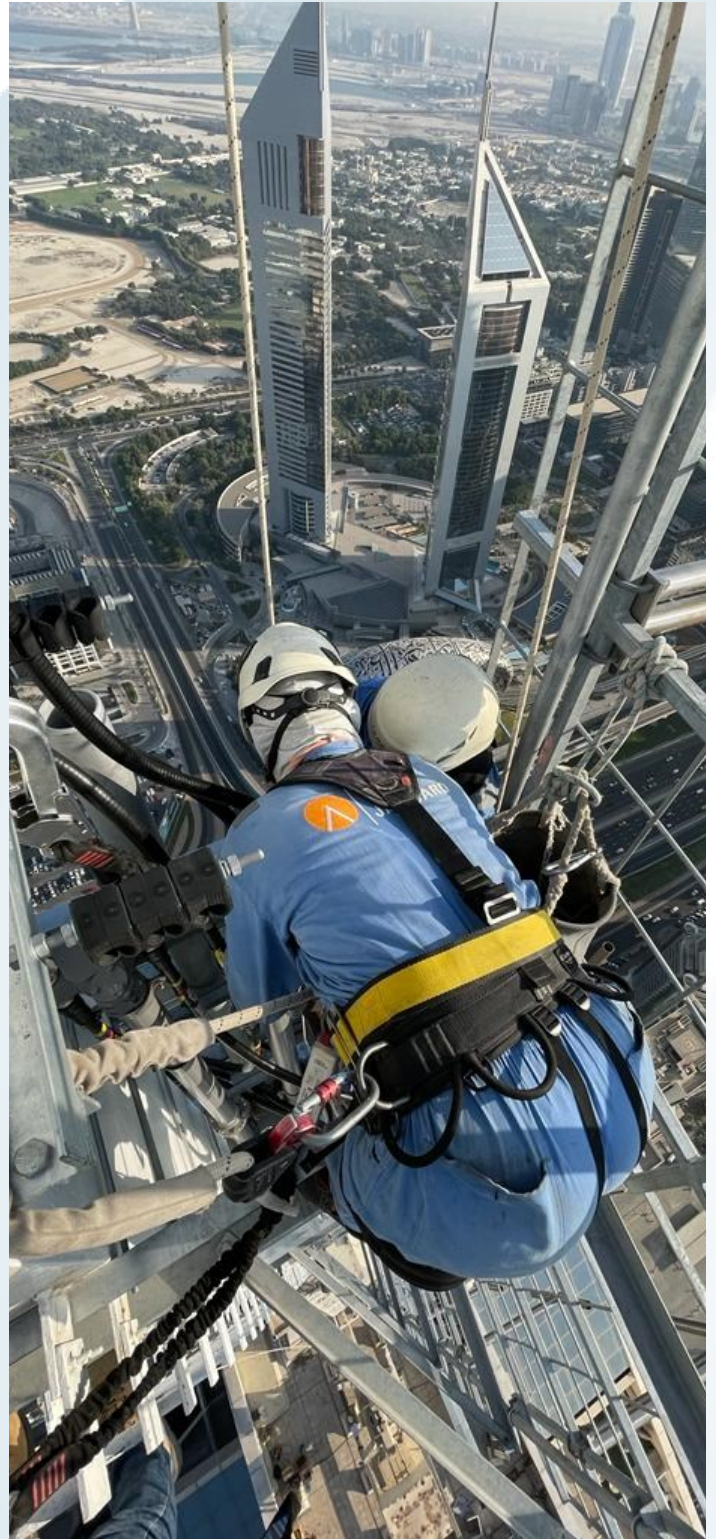
www.jaggard.ae

sales@jaggard.ae

FM Transmission System Blue Tower, Dubai

Method:

FM Transmission System Design and Civil Works
Procurement of Transmitter System, Combiners and PIE Equipment
Transmitter and PIE Installation and Commissioning
Antenna Rigging and Installation
Feeder and Gantry Installation
Combiner Installation and Commissioning
Antenna Test including VSWR and DTF Measurement
Transmitter and PIE SAT Test
Drive Test for Coverage Survey



JAGGARD

Global leaders in broadcast and communications infrastructure

www.jaggard.ae

sales@jaggard.ae

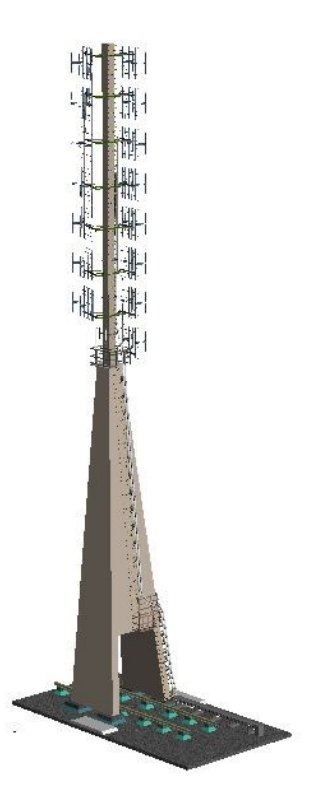
FM Transmission System Blue Tower, Dubai

Result:

Jaggard successfully installed 2+1 20KW FM Transmitter and 8:7 Vertical Polarised FM Antenna Panels to provide FM Services for Hamdan Bin Mohammed Heritage Center.

Jaggard also installed a Monitoring System that provides Remote Status Monitoring of Power, Inside and Outside Temperature, Lightning Detection, Feeder Pressure and VSWR of the Antenna.

The FM Transmission System is designed to allow for future expansion to a 4+1 20kw System.



JAGGARD

Global leaders in broadcast and communications infrastructure

www.jaggard.ae

sales@jaggard.ae