## Connexicore

Commercial UAV Drone Inspection Services

## (SAMPLE) RAPID AUDIT CELL TOWER REPORT

Commercial Drone Flight Services

## ABC Company, Inc. Cell Tower (EXAMPLE) RAPID AUDIT Inspection Report

| Site Address: |
| :--- |
| WWWW TV-65 |
| 1234 Any Street |
| Hometown, YS 12345 |
|  |
| Tower Information: |
| Tower Manufacturer: Dressor Ideco |
| Tower structure height: xxx.x |
| Guyed Antenna top height: xxx' |
| Year of manufacture: 1970 Tower |
| Finish: Galvanized |

GPS Location:
Latitude: N $00^{\circ} 00^{\prime} 00^{\prime \prime}$
Longitude: W $000^{\circ} 00^{\prime} 00^{\prime \prime}$

FCC registration number: 12341234
Point of Contact:
Frank Segarra
Office: (800) 874-9640
Cell: (973) 769-3490

| Date | Project No. | Operator | Operator | Analyst | Revision No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 1 / 2018$ | 12345 ABC Co. | FS | FS | FS |  |


| Client Name <br> ABC Company | Project <br> Number 12345 | Inspection Type <br> Cell Tower Analysis | ABC Company Inc. |
| :--- | :--- | :--- | :--- |

## Example Project Overview

ABC Company requested the services of ConnexiCore, LLC for inspection purposes of tower XXX located off of 1234 Any Street Hometown, YS 12345. The inspection process consists of the use of Unmanned Aerial Vehicles (UAVs) to assess the existing antennas and transceivers on the cellular tower.

Equipment Required
Aircraft(s): DJI P4P Sensor(s):
FoxTech V4 RGB

Location


| Client Name <br> ABC Company | Project <br> Number 12345 | Inspection Type <br> Cell Tower Analysis -45 m | ABC Company Inc. |
| :--- | :--- | :--- | :--- |

The cell tower has three (3) levels of antennas that were observed and inspected. The three levels are categorized in accordance to their altitude on the tower. The three levels are 45 meters, 65 meters, and 85 meters.

45 Meters


45 Meter Level Overview


Antenna Inspection


Interior Cabling Inspection


65 Meter Level Overview


Antenna Inspection

Interior Cabling Inspection



Antenna Inspection


85 Meter Level Overview


Antenna Inspection


Top Platform Equipment Inspection


85 Meter Level Overview


Antenna Cabling Inspection


Top Platform Equipment Inspection

## OBSERVATIONS AND MEASUREMENTS

A. Tower Members:
B. Connections:
C. Ladder and Safety Device:
D. Guys and Guy Hardware:
E. Foundations:

## F. Antennas and Antenna Mountings:

G. Transmission Lines:
H. Waveguide Bridge:
I. Grounding:
J. Conduit and Lighting:
K. Paint:
L. Galvanizing:
M. Guy Tensions:
N. Tower Alignment:
O. Additional Remarks:

The tower members appear satisfactory.
All tower connections appear satisfactory.

The ladder and Trylon safety rail system are in satisfactory condition.

The guys and guy hardware are in satisfactory condition. See Table for accompanying hardware components.

Visible portions of the foundations appear satisfactory.
The antennas and mountings are in satisfactory condition. See Table for list of antennas on this structure.

1. There are several loose $1 / 4^{\prime \prime}$ transmission lines throughout the length of the tower. This is tolerable.
2. There is a loose relay box in the second cluster of antennas. See Photo \#X.
3. There is a loose transmission line splitter connection. See Photo \#X. The waveguide bridge and port into the building are in satisfactory condition. See Photos \#X and \#X.

The grounding is satisfactory.
The DOL on face 3-1 at 142' and beacon at the top of the tower are in satisfactory condition.

The paint is in excellent condition and approximately $90 \%$
effective. The tower galvanizing appears satisfactory.
The guy tensions are mainly within recommended CSA limits.
See Table X
The tower alignment is satisfactory. See Table X.

1. There is no security fence or anti-climb system in place to restrict unauthorized personnel from accessing this structure.
2. There are numerous unused yagis and dipole antennas lying behind the building. See Photo \#X.

Existing Equipment (EXAMPLE)

| Elevation (ft) | Equipment | Tx Line |
| :---: | :---: | :---: |
|  | (3) Strobes | (1) 1-1/2" conduit |
|  | (1) Alan Dick 7-bay FM | (1) 6-1/8" rigid |
|  | \# 3 platform with boxes | (1) 1" cable |
|  | (2) 10' quasi omni antennas | (1) 2-1/4" heliax from \# 2 platform |
|  | (1) 20 ' omni | (1) 1-1/4" heliax from \# 2 platform |
|  | (1) Cluster of yagi | (1) $7 / 8^{\prime \prime}$ heliax from \# 3 platform |
|  | (1) ENG | (1) 7/8" heliax from \# 2 platform |
|  | (3) Strobes | (1) 1-1/2" conduit |
|  | (1) 20 ' omni | (1) 7/8" heliax from \# 2 platform |
|  | (1) ENG | (1) 7/8" heliax from \# 2 platform |
|  | (1) 8' dish | (1) EW63 from \# 2 platform |
|  | \# 2 platform with boxes | (1) $1^{\prime \prime}$ cable |
|  | (1) 20 ' quasi omni | (1) 7/8" heliax from \# 2 platform |
|  | (2) 20 ' quasi omni antennas | (2) $1 / 2^{\prime \prime}$ heliax from \# 2 platform |
|  | (1) 20 ' omni | (1) 1/2" heliax from \# 2 platform |
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| Client Name <br> ABC Company | Project Number <br> 12345 | Inspection Type <br> Cell Tower Analysis -85 m | ABC Company Inc. |
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