



DEPARTMENT OF THE NAVY

NAVAL SURFACE WARFARE CENTER
DAHLGREN DIVISION
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DAHLGREN, VIRGINIA 22448-5130

IN REPLY REFER TO

8020

Ser B52/5702

15 Sep 17

From: Commanding Officer, Naval Surface Warfare Center,
Dahlgren Division

To: T Mobile (NBC LLC/Andrew Senker) Elkridge, MD

Subj: HAZARDS OF ELECTROMAGNETIC RADIATION TO ORDNANCE,
PERSONNEL, AND FUEL ANALYSIS FOR THE INSTALLATION OF
T MOBILE CELLULAR EQUIPMENT AT MARIINE CORPS BASE
QUANTICO, VIRGINIA

Ref: (a) NAVSEA OP 3565/NAVAIR 16-1-529, Volume 2, Nineteenth
Revision of 1 Jul 16
(b) NAVSEA OP 3565/NAVAIR 16-1-529, Volume 1, Sixth
Revision of 1 Feb 03
(c) DoDINST 6055.11 of 19 Aug 09
(d) Network Building & Consulting LLC e-mail memo
Mr. A. Senker of 19 Apr 17
(e) NAVCOMPT Form 2276A N0017817SD17009 of 5 Jul 17

Encl: (1) Antenna Locations and Nearest Ordnance Operation
Areas
(2) System Specifications and Hazards of Electromagnetic
Radiation to Ordnance Safe Separation Distances
(3) System Specifications and Hazards of Electromagnetic
Radiation to Personnel and Fuel Safe Separation
Distances
(4) Radiation Hazard Control Measures
(5) Distribution List

1. In accordance with references (a) through (c) and as requested by reference (d) and funded by reference (e), a Hazards of Electromagnetic Radiation to Ordnance (HERO), Personnel (HERP), and Fuel (HERF) analysis was performed to assess the impact of installing T Mobile cellular equipment at Marine Corps Base (MCB) Quantico, Virginia.

2. Enclosure (1) provides a listing of the locations of the antenna/transmitter systems being installed with respect to the nearest ordnance operation area. Enclosure (2) provides the system specifications and HERO safe separation distances.

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3. Calculated electromagnetic environments (EMEs) that could be produced by these systems indicate that the power and antenna placement of the system are such that the distance with respect to ordnance locations preclude the need for HERO emission control (EMCON). Therefore, no HERO EMCON changes are required.

4. Enclosure (3) provides the system specifications and HERP/HERF safe separation distances. However, calculated EMEs that could be produced by these systems indicate that the power and antenna placement of these systems are such that the distance with respect to normally occupied areas precludes the need for HERP control measures. Since personnel can obtain access to the towers where the antennas are installed, Type 2 warning signs should be posted at all tower access points notifying personnel to check with command authority before proceeding. Ensure radiation hazard (RADHAZ) control measures are placed in accordance with the instructions detailed in enclosure (4).

5. The installation of these systems does not present any hazard to any existing fuel handling areas.

6. Based on this analysis, the Naval Surface Warfare Center, Dahlgren Division (NSWCDD), Electromagnetic Environmental Effects (E3) Assessment and Evaluation Branch (B52), recommends that MCB Quantico request RADHAZ (HERO, HERP, and HERF) certification from the Naval Ordnance Safety and Security Activity (NOSSA) (N8) for the equipment described in the preceding paragraphs. Upon receipt of certification from NOSSA (N8), NSWCDD (B52) recommends incorporating enclosure (2) into the installation's HERO Instruction/Bill and enclosure (4) into the installation's RADHAZ HERP/HERF control measures. All updates may be found on the E3 Team Online Knowledge Management System (KMS).

7. The E3 Team Online KMS is an official Department of the Navy web portal that provides access to HERO, HERP, and HERF E3 data; technical reports; and RADHAZ calculation tools. E3 Team Online can be accessed at <https://e3.nswc.navy.mil>. A valid Common Access Card is required for access to this web portal. To request an E3 Team Online account, visit

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<https://www.e3teamonline.org>. Upon receipt of account approval,
visit <https://e3.nswc.navy.mil> for log-in. Questions regarding
E3 Team Online content should be directed to
Mr. Richard Magrogan, NSWCDD (B52), at commercial 540-653-3445
or DSN 249-3445, or via electronic mail at
richard.magrogan@navy.mil. Questions regarding access to
E3 Team Online should be directed to Ms. Rebecca Payne, AECOM,
at commercial 540-663-9460 or via electronic mail at
rebecca.payne@aecom.com.

8. This project is recommended for HERO/HERP/HERF approval.
9. Enclosure (5) is the distribution list for this letter.
10. If there are any questions or comments, please contact
Steven Springer (B52) at commercial 540-653-2931 or
DSN 249-2931, or via electronic mail at
steven.p.springer@navy.mil.



RICHARD F. MAGROGAN
By direction

Copy to:
MARINE CORPS BASE QUANTICO (ESO/C. Dauksys, Capt. D. Flick,
J. Taylor)
NAVORDSAFSECACT ESSOLANT NORFOLK (N5L/B. Sizemore)
NCTAMS LANT NORFOLK (N6 EMO/T. Severn)
NAVORDSAFSECACT INDIAN HEAD MD (N843/Rash)
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ANTENNA LOCATIONS AND NEAREST ORDNANCE OPERATION AREAS

ANTENNA LOCATIONS AND NEAREST ORDNANCE OPERATION AREAS

Building Number and Building Name	Latitude	Longitude	Antenna Height Above Ground (feet)	HERO Zone of Antenna	Nearest Ordnance Operation Area	HERO Zone of Ordnance Operation Area	Distance to Nearest Ordnance Operation Area (feet/meters)
WATER TOWER (ARGONNE HILL)	38.51665	-77.31055	170	2	RUSSEL ROAD (PRIMARY ROUTE)	2	2000/609
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	38.52642	-77.30644	129	2	RUSSEL ROAD (PRIMARY ROUTE)	2	5590/1706
MARS TOWER (T MOBILE)	38.53055	-77.32631	148	2	RUSSEL ROAD (PRIMARY ROUTE)	2	5860/1786
T MOBILE (WTBN WATER TOWER)	38.52900	-77.43148	96	3	MCB 4 (PRIMARY ROUTE)	3	240/74

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SYSTEM SPECIFICATIONS AND HAZARDS OF ELECTROMAGNETIC RADIATION TO
ORDNANCE SAFE SEPARATION DISTANCES

SYSTEM SPECIFICATIONS AND HERO SAFE SEPARATION DISTANCES

Antenna Location	Antenna Nomenclature	Antenna Type	Antenna Gain (dBi)	Transmitter Frequency (MHz)	Transmitter Max. Avg. Power (watts)	Transmitter Type	Separation Distances	
							HERO UNSAFE ORDNANCE (feet/meters)	HERO SUSCEPTIBLE ORDNANCE (feet/meters)
WATER TOWER (ARGONNE HILL)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	729-745	80.0	ERICSSON RRUS 11 [B12 (LTE) (2X40)]	241/73	60/18
WATER TOWER (ARGONNE HILL)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	746-757	80.0	ERICSSON RRUS 11 [B13 (2 PORT)]	236/72	59/18
WATER TOWER (ARGONNE HILL)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	791-821	80.0	ERICSSON RRUS 11 [B20 (LTE) (2X40)]	222/68	56/17
WATER TOWER (ARGONNE HILL)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	862-869	80.0	ERICSSON RRUS 11 [B26A (CDMA/LTE) (2X40)]	204/62	51/16
WATER TOWER (ARGONNE HILL)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	869-894	80.0	ERICSSON RRUS 11 [B5 (WCDMA/LTE) (2X40)]	202/62	51/15
WATER TOWER (ARGONNE HILL)	ANDREW TMBXX-6515-R2M	DUAL BAND	17.5	1930-1990	80.0	ERICSSON RRUS 11 [B2 (WCDMA/LTE) (2X40)]	100/30	25/8
WATER TOWER (ARGONNE HILL)	ANDREW TMBXX-6515-R2M	DUAL BAND	17.5	1930-1995	80.0	ERICSSON RRUS 11 [B25 (CDMA/LTE) (2X40)]	100/30	25/8
WATER TOWER (ARGONNE HILL)	ANDREW TMBXX-6515-R2M	DUAL BAND	17.5	2110-2155	80.0	ERICSSON RRUS 11 [B4 (WCDMA/LTE) (2X40)]	91/28	23/7
WATER TOWER (ARGONNE HILL)	ANDREW TMBXX-6515-R2M	DUAL BAND	17.5	2110-2155	80.0	ERICSSON RRUS 11 [B1 (WCDMA/LTE) (2X40)]	91/28	23/7
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE HBXX-9014DS	PANEL	20.2	1930-1990	80.0	ERICSSON RRUS 11 [B2 (WCDMA/LTE) (2X40)]	136/42	34/10
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE HBXX-9014DS	PANEL	20.2	1930-1995	80.0	ERICSSON RRUS 11 [B25 (CDMA/LTE) (2X40)]	136/42	34/10
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE HBXX-9014DS	PANEL	20.2	2110-2155	80.0	ERICSSON RRUS 11 [B4 (WCDMA/LTE) (2X40)]	125/38	31/9
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE HBXX-9014DS	PANEL	20.2	2110-2170	80.0	ERICSSON RRUS 11 [B1 (WCDMA/LTE) (2X40)]	125/38	31/9
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	729-745	80.0	ERICSSON RRUS 11 [B12 (LTE) (2X40)]	241/73	60/18
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	746-757	80.0	ERICSSON RRUS 11 [B13 (2 PORT)]	236/72	59/18
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	791-821	80.0	ERICSSON RRUS 11 [B20 (LTE) (2X40)]	222/68	56/17
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	862-869	80.0	ERICSSON RRUS 11 [B26A (CDMA/LTE) (2X40)]	204/62	51/16
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	869-894	80.0	ERICSSON RRUS 11 [B5 (WCDMA/LTE) (2X40)]	202/62	51/15
MARS TOWER (T MOBILE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	729-745	80.0	ERICSSON RRUS 11 [B12 (LTE) (2X40)]	241/73	60/18
MARS TOWER (T MOBILE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	746-757	80.0	ERICSSON RRUS 11 [B13 (2 PORT)]	236/72	59/18
MARS TOWER (T MOBILE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	791-821	80.0	ERICSSON RRUS 11 [B20 (LTE) (2X40)]	222/68	56/17
MARS TOWER (T MOBILE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	862-869	80.0	ERICSSON RRUS 11 [B26A (CDMA/LTE) (2X40)]	204/62	51/16
MARS TOWER (T MOBILE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	869-894	80.0	ERICSSON RRUS 11 [B5 (WCDMA/LTE) (2X40)]	202/62	51/15
MARS TOWER (T MOBILE)	COMMSCOPE HBXX-9014DS	PANEL	20.2	1930-1990	80.0	ERICSSON RRUS 11 [B2 (WCDMA/LTE) (2X40)]	136/42	34/10
MARS TOWER (T MOBILE)	COMMSCOPE HBXX-9014DS	PANEL	20.2	1930-1995	80.0	ERICSSON RRUS 11 [B25 (CDMA/LTE) (2X40)]	136/42	34/10
MARS TOWER (T MOBILE)	COMMSCOPE HBXX-9014DS	PANEL	20.2	2110-2155	80.0	ERICSSON RRUS 11 [B4 (WCDMA/LTE) (2X40)]	125/38	31/9
MARS TOWER (T MOBILE)	COMMSCOPE HBXX-9014DS	PANEL	20.2	2110-2170	80.0	ERICSSON RRUS 11 [B1 (WCDMA/LTE) (2X40)]	125/38	31/9

SYSTEM SPECIFICATIONS AND HERO SAFE SEPARATION DISTANCES (CONT.)

Antenna Location	Antenna Nomenclature	Antenna Type	Antenna Gain (dBi)	Transmitter Frequency (MHz)	Transmitter Max. Avg. Power (watts)	Transmitter Type	Separation Distances	
							HERO UNSAFE ORDNANCE (feet/meters)	HERO SUSCEPTIBLE ORDNANCE (feet/meters)
T MOBILE (WTBN WATER TOWER)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	729-745	80.0	ERICSSON RRUS 11 [B12 (LTE) (2X40)]	241/73	60/18
T MOBILE (WTBN WATER TOWER)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	746-757	80.0	ERICSSON RRUS 11 [B13 (2 PORT)]	236/72	59/18
T MOBILE (WTBN WATER TOWER)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	791-821	80.0	ERICSSON RRUS 11 [B20 (LTE) (2X40)]	222/68	56/17
T MOBILE (WTBN WATER TOWER)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	862-869	80.0	ERICSSON RRUS 11 [B26A (CDMA/LTE) (2X40)]	204/62	51/16
T MOBILE (WTBN WATER TOWER)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.7	869-894	80.0	ERICSSON RRUS 11 [B5 (WCDMA/LTE) (2X40)]	202/62	51/15
T MOBILE (WTBN WATER TOWER)	COMMSCOPE HBXX-9014DS	PANEL	20.2	1930-1990	80.0	ERICSSON RRUS 11 [B2 (WCDMA/LTE) (2X40)]	136/42	34/10
T MOBILE (WTBN WATER TOWER)	COMMSCOPE HBXX-9014DS	PANEL	20.2	1930-1995	80.0	ERICSSON RRUS 11 [B25 (CDMA/LTE) (2X40)]	136/42	34/10
T MOBILE (WTBN WATER TOWER)	COMMSCOPE HBXX-9014DS	PANEL	20.2	2110-2155	80.0	ERICSSON RRUS 11 [B4 (WCDMA/LTE) (2X40)]	125/38	31/9
T MOBILE (WTBN WATER TOWER)	COMMSCOPE HBXX-9014DS	PANEL	20.2	2110-2170	80.0	ERICSSON RRUS 11 [B1 (WCDMA/LTE) (2X40)]	125/38	31/9

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SYSTEM SPECIFICATIONS AND HAZARDS OF ELECTROMAGNETIC RADIATION TO
PERSONNEL AND FUEL SAFE SEPARATION DISTANCES

SYSTEM SPECIFICATIONS AND HERP/HERF SAFE SEPARATION DISTANCES

Antenna Location	Antenna Nomenclature	Antenna Type	Antenna Gain (dBi)	Transmitter Frequency (MHz)	Transmitter Max. Avg. Power (watts)	Transmitter Type	Separation Distances		
							Controlled HERP (feet/meters)	HERF (feet/meters)	Control Measures
WATER TOWER (ARGONNE HILL)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	729-745	80.0	ERICSSON RRUS 11 [B12 (LTE) (2X40)]	3/0.9	9.8/3	WTAH-1
WATER TOWER (ARGONNE HILL)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	746-757	80.0	ERICSSON RRUS 11 [B13 (2 PORT)]	3/0.9	9.8/3	WTAH-1
WATER TOWER (ARGONNE HILL)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	791-821	80.0	ERICSSON RRUS 11 [B20 (LTE) (2X40)]	3/0.9	9.8/3	WTAH-1
WATER TOWER (ARGONNE HILL)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	862-869	80.0	ERICSSON RRUS 11 [B26A (CDMA/LTE) (2X40)]	4.9/1.5	9.8/3	WTAH-1
WATER TOWER (ARGONNE HILL)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	869-894	80.0	ERICSSON RRUS 11 [B5 (WCDMA/LTE) (2X40)]	4.9/1.5	9.8/3	WTAH-1
WATER TOWER (ARGONNE HILL)	ANDREW TMBXX-6515-R2M	DUAL BAND	17.50	1930-1990	80.0	ERICSSON RRUS 11 [B2 (WCDMA/LTE) (2X40)]	7.9/2.4	9.8/3	WTAH-1
WATER TOWER (ARGONNE HILL)	ANDREW TMBXX-6515-R2M	DUAL BAND	17.50	1930-1995	80.0	ERICSSON RRUS 11 [B25 (CDMA/LTE) (2X40)]	7.9/2.4	9.8/3	WTAH-1
WATER TOWER (ARGONNE HILL)	ANDREW TMBXX-6515-R2M	DUAL BAND	17.50	2110-2155	80.0	ERICSSON RRUS 11 [B4 (WCDMA/LTE) (2X40)]	7.5/2.3	9.8/3	WTAH-1
WATER TOWER (ARGONNE HILL)	ANDREW TMBXX-6515-R2M	DUAL BAND	17.50	2110-2155	80.0	ERICSSON RRUS 11 [B1 (WCDMA/LTE) (2X40)]	7.5/2.3	9.8/3	WTAH-1
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE HBXX-9014DS	PANEL	20.20	1930-1990	80.0	ERICSSON RRUS 11 [B2 (WCDMA/LTE) (2X40)]	10/3.2	9.8/3	15-1
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE HBXX-9014DS	PANEL	20.20	1930-1995	80.0	ERICSSON RRUS 11 [B25 (CDMA/LTE) (2X40)]	10/3.2	9.8/3	15-1
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE HBXX-9014DS	PANEL	20.20	2110-2155	80.0	ERICSSON RRUS 11 [B4 (WCDMA/LTE) (2X40)]	10/3.1	9.8/3	15-1
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE HBXX-9014DS	PANEL	20.20	2110-2170	80.0	ERICSSON RRUS 11 [B1 (WCDMA/LTE) (2X40)]	10/3.1	9.8/3	15-1
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	729-745	80.0	ERICSSON RRUS 11 [B12 (LTE) (2X40)]	3/0.9	9.8/3	15-1
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	746-757	80.0	ERICSSON RRUS 11 [B13 (2 PORT)]	3/0.9	9.8/3	15-1
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	791-821	80.0	ERICSSON RRUS 11 [B20 (LTE) (2X40)]	3/0.9	9.8/3	15-1
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	862-869	80.0	ERICSSON RRUS 11 [B26A (CDMA/LTE) (2X40)]	4.9/1.5	9.8/3	15-1
15 (LIVERSEDGE HALL T MOBILE CELL SITE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	869-894	80.0	ERICSSON RRUS 11 [B5 (WCDMA/LTE) (2X40)]	4.9/1.5	9.8/3	15-1
MARS TOWER (T MOBILE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	729-745	80.0	ERICSSON RRUS 11 [B12 (LTE) (2X40)]	3/0.9	9.8/3	MARST-1
MARS TOWER (T MOBILE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	746-757	80.0	ERICSSON RRUS 11 [B13 (2 PORT)]	3/0.9	9.8/3	MARST-1
MARS TOWER (T MOBILE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	791-821	80.0	ERICSSON RRUS 11 [B20 (LTE) (2X40)]	3/0.9	9.8/3	MARST-1
MARS TOWER (T MOBILE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	862-869	80.0	ERICSSON RRUS 11 [B26A (CDMA/LTE) (2X40)]	4.9/1.5	9.8/3	MARST-1
MARS TOWER (T MOBILE)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	869-894	80.0	ERICSSON RRUS 11 [B5 (WCDMA/LTE) (2X40)]	4.9/1.5	9.8/3	MARST-1
MARS TOWER (T MOBILE)	COMMSCOPE HBXX-9014DS	PANEL	20.20	1930-1990	80.0	ERICSSON RRUS 11 [B2 (WCDMA/LTE) (2X40)]	10/3.2	9.8/3	MARST-1
MARS TOWER (T MOBILE)	COMMSCOPE HBXX-9014DS	PANEL	20.20	1930-1995	80.0	ERICSSON RRUS 11 [B25 (CDMA/LTE) (2X40)]	10/3.2	9.8/3	MARST-1
MARS TOWER (T MOBILE)	COMMSCOPE HBXX-9014DS	PANEL	20.20	2110-2155	80.0	ERICSSON RRUS 11 [B4 (WCDMA/LTE) (2X40)]	10/3.1	9.8/3	MARST-1
MARS TOWER (T MOBILE)	COMMSCOPE HBXX-9014DS	PANEL	20.20	2110-2170	80.0	ERICSSON RRUS 11 [B1 (WCDMA/LTE) (2X40)]	10/3.1	9.8/3	MARST-1

**SYSTEM SPECIFICATIONS AND HERP/HERF SAFE SEPARATION DISTANCES
(CONT.)**

Antenna Location	Antenna Nomenclature	Antenna Type	Antenna Gain (dBi)	Transmitter Frequency (MHz)	Transmitter Max. Avg. Power (watts)	Transmitter Type	Separation Distances		
							Controlled HERP (feet/meters)	HERF (feet/meters)	Control Measures
T MOBILE (WTBN WATER TOWER)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	729-745	80.0	ERICSSON RRUS 11 [B12 (LTE) (2X40)]	3/0.9	9.8/3	27203-1
T MOBILE (WTBN WATER TOWER)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	746-757	80.0	ERICSSON RRUS 11 [B13 (2 PORT)]	3/0.9	9.8/3	27203-1
T MOBILE (WTBN WATER TOWER)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	791-821	80.0	ERICSSON RRUS 11 [B20 (LTE) (2X40)]	3/0.9	9.8/3	27203-1
T MOBILE (WTBN WATER TOWER)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	862-869	80.0	ERICSSON RRUS 11 [B26A (CDMA/LTE) (2X40)]	4.9/1.5	9.8/3	27203-1
T MOBILE (WTBN WATER TOWER)	COMMSCOPE LNX-6515DS SERIES	PANEL	16.70	869-894	80.0	ERICSSON RRUS 11 [B5 (WCDMA/LTE) (2X40)]	4.9/1.5	9.8/3	27203-1
T MOBILE (WTBN WATER TOWER)	COMMSCOPE HBXX-9014DS	PANEL	20.20	1930-1990	80.0	ERICSSON RRUS 11 [B2 (WCDMA/LTE) (2X40)]	10/3.2	9.8/3	27203-1
T MOBILE (WTBN WATER TOWER)	COMMSCOPE HBXX-9014DS	PANEL	20.20	1930-1995	80.0	ERICSSON RRUS 11 [B25 (CDMA/LTE) (2X40)]	10/3.2	9.8/3	27203-1
T MOBILE (WTBN WATER TOWER)	COMMSCOPE HBXX-9014DS	PANEL	20.20	2110-2155	80.0	ERICSSON RRUS 11 [B4 (WCDMA/LTE) (2X40)]	10/3.1	9.8/3	27203-1
T MOBILE (WTBN WATER TOWER)	COMMSCOPE HBXX-9014DS	PANEL	20.20	2110-2170	80.0	ERICSSON RRUS 11 [B1 (WCDMA/LTE) (2X40)]	10/3.1	9.8/3	27203-1

8020
Ser B52/5702

RADIATION HAZARD CONTROL MEASURES

RADHAZ CONTROL MEASURES

ITEM	BUILDING	SOURCE	CONTROL MEASURE	QTY	INSTALLATION METHOD
15-1	15 - LIVERSEDGE HALL T-MOBILE CELL SITE	VARIOUS	TYPE 2 SIGN(S)	A/R	POST SIGNS AT EYE-LEVEL BEHIND ROOF ACCESS LADDER.
27203-1	27203 - WTBN WATER TOWER T-MOBILE CELL SITE	VARIOUS	TYPE 2 SIGN(S)	A/R	POST SIGNS AT EYE-LEVEL AT TOWER ACCESS POINTS.
MARST-1	MARS TOWER - E-LMR SITE 23	VARIOUS	TYPE 2 SIGN(S)	A/R	POST SIGNS AT EYE-LEVEL AT TOWER ACCESS POINTS.
WTAH-1	WATER TOWER - ARGONNE HILL	VARIOUS	TYPE 2 SIGN	1	POST SIGN AT EYE-LEVEL AT TOWER BASE.

A/R = As Required

8020
Ser B52/5808

DISTRIBUTION LIST

DISTRIBUTION LIST FOR HERO, HERP, AND HERF ANALYSIS FOR THE
INSTALLATION OF T MOBILE CELLULAR EQUIPMENT AT MCB QUANTICO, VA

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