

SHORT TERM SPECTRUM MANAGER LEASE AGREEMENT

This Short Term Spectrum Manager Lease Agreement (the “Lease Agreement”) is entered into as of October 12, 2020 (the “Effective Date”), by and between CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS, a Delaware general partnership, with its principal offices located at One Verizon Way, Basking Ridge, NJ 07920 (“Lessor”), and THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LAB LLC, a Maryland limited liability corporation, with its principal offices located at 11100 Johns Hopkins Road, Laurel, MD 20723 (“Lessee”) (each a “Party”, and collectively the “Parties”).

W I T N E S S E T H

WHEREAS, Lessor holds the cellular and Personal Communication Service (“PCS”) licenses issued by the Federal Communications Commission (the “FCC”) specified in Part 1 of Schedule I attached hereto (collectively, the “Licenses”);

WHEREAS, Lessor and Lessee are collaborating on a project, pursuant to which Lessee will need to lease certain of Lessor’s rights under the Licenses to utilize the portions of the spectrum covered by the Licenses in the markets identified in Part 2 of Schedule I (the “Markets”, with such portions of the spectrum in the Markets being referred to as the “Leased Spectrum”);

WHEREAS, Lessor and Lessee desire to enter into this Lease Agreement in order to: (i) grant Lessee the non-exclusive right to use the Leased Spectrum for the Term (as defined hereafter); (ii) establish the terms under which Lessee shall demonstrate new wireless technologies in the Markets utilizing the Leased Spectrum (the “System”); and (iii) memorialize the respective rights and responsibilities of Lessor and Lessee with respect to the Leased Spectrum consistent with the Communications Act of 1934, as amended, and the rules, regulations and policies of the FCC (the “Communications Laws”) and the terms and conditions set forth herein.

NOW THEREFORE, in consideration of the mutual promises contained herein, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. Agreement to Lease.

- (a) Spectrum Usage Rights. Subject to the terms and conditions set forth herein, including Schedule II, Lessor hereby grants Lessee non-exclusive rights to use the Leased Spectrum throughout the Term (the “Spectrum Usage Rights”).
- (b) Permitted Use. Lessee shall use the Leased Spectrum during the Term to (i) trial the new technologies prior to the demonstration period and (ii) conduct a demonstration to show the advantages over current technologies, in each case, as set forth on Schedule II, or as may be consented to in writing by Lessor (which, for the avoidance of doubt, can be provided via email).

- (c) Scope of Spectrum Usage Rights. Subject to (i) the review, supervision, and ultimate control of Lessor regarding matters reasonably impacting Lessor's ability to meet its obligations as an FCC licensee with respect to the Licenses as set forth in Section 3, (ii) any use restrictions applicable to the Licenses; and (iii) the terms and conditions of this Lease Agreement, the Spectrum Usage Rights granted to Lessee include the right to (in each case, to the extent applicable and necessary for the furtherance of the Permitted Use set forth in Section 1(b)):
- (i) design, construct, operate and maintain the System in accordance with this Lease Agreement;
 - (ii) identify, obtain and maintain, in its own name, full legal right to all of its own real and personal property necessary to deploy or operate the System;
 - (iii) obtain and maintain, in its own name, appropriate zoning approval for the System;
 - (iv) purchase, in its own name, or otherwise provide, install, operate and maintain all equipment necessary or appropriate for the construction, testing, or operation of the System;
 - (v) provide administrative, legal, accounting, billing, credit, collection, insurance, purchasing, clerical and such other general services as may be necessary or appropriate for the construction, testing, maintenance and operation of the System;
 - (vi) provide operational, engineering, maintenance, repair and such other technical services as may be necessary for the construction, testing, maintenance and operation of the System;
 - (vii) control access to and from any facilities used in the System;
 - (viii) conduct and manage the affairs of the System, including the making of all ordinary business decisions in furtherance of the day-to-day operation of the System;
 - (ix) determine and carry out all policy decisions relating to the facilities of the System, subject to such oversight by Lessor as is reasonably necessary to ensure compliance with applicable technical and service rules under the Communications Laws;
 - (x) hire, supervise, and dismiss all personnel employed in the operation of the System (other than employees hired by Lessor for the purpose of carrying out Lessor's duties with respect to the License and the Leased Spectrum);

- (xi) undertake all financial obligations, including payment of expenses arising out of the operation of the System, and securing all financing for the construction and operation of the System;
 - (xii) receive all monies and profits from the operation of the System;
 - (xiii) obtain OCNs, ACNA, NXX codes and federal identification numbers, negotiate wireless interconnection agreements with incumbent local exchange carriers, and secure requisite approvals/certifications from any required governmental authority to the extent necessitated by the proposed operations;
 - (xiv) make determinations as to the scope, marketing, and other terms and conditions of services to be provided to Lessee's customers on the Systems;
 - (xv) take all other actions that it deems necessary or desirable in the design, construction, testing, maintenance, marketing, and operation of the System or otherwise carry out any of the foregoing items; and
 - (xvi) hire agents, contractors or other third parties to perform any of the foregoing activities, subject to Lessee's supervision, on Lessee's behalf.
- (d) Lessor's Use of Spectrum. Throughout the Term, Lessor shall have the right to use the Leased Spectrum. Lessor shall consult with Lessee before using the Leased Spectrum so as to select portions, to the extent possible, that do not conflict with Lessee's plans for use of the Leased Spectrum. In connection therewith, Lessor shall give written notice to Lessee of any portion it intends to use before commencing the use thereof, and shall not use any portion that Lessee objects in writing except to the extent, if any, that there is no other portion satisfactory to Lessee that reasonably could be used instead by Lessor. The Parties shall coordinate with each other to avoid interference and other issues with respect to their respective uses of the Leased Spectrum in accordance with applicable provisions of the Communications Laws. From and after the date of this Lease Agreement through the expiration of the Term, Lessor shall not enter into any other agreement (including any agreement for the lease, partition, disaggregation, underlay use, time sharing or similar document) with any other Person with respect to the Leased Spectrum; provided, however, that nothing in this Section 1(d) is intended to restrict or prohibit Lessor's rights to sell, transfer, assign or encumber the License or to enter into any transaction which would result in a transfer of control of Lessor.
- (e) Spectrum Use by Lessor for Compliance. Notwithstanding anything else to the contrary in this Lease Agreement, Lessor shall be entitled, subject to its obligations set forth in Section 1(d), when applicable, but otherwise within Lessor's reasonable sole discretion, to use the Leased Spectrum when taking actions it deems necessary to comply with the Communications Laws, including regulations concerning the

maintenance of the License and any applicable substantial service requirements or required renewal showings.

- (f) Security Interest. Lessee shall not pledge, mortgage, hypothecate or otherwise grant a security interest, encumber or create a lien in its right to use the Leased Spectrum or in the Spectrum Usage Rights granted hereunder.

2. Obligations of Lessee.

- (a) General Obligations. Subject to the review, supervision and ultimate control of Lessor over matters reasonably impacting the License and Lessor's ability to meet its obligations as set forth in Section 3, Lessee shall be obligated to:
 - (i) promptly provide Lessor (at Lessor's request) such information regarding the construction completed by Lessee as is necessary to enable Lessor to timely certify satisfaction of any build-out requirement for the License;
 - (ii) cooperate with and aid Lessor with whatever actions Lessor is required to take, if any, in order to obtain the approvals or consents of any governmental authorities with respect to this Lease Agreement;
 - (iii) construct and operate the System on the Leased Spectrum consistent with the Communications Laws, FAA laws and regulations, the laws and regulations of any other governmental body, this Lease Agreement, and the terms and conditions of the License (including eligibility, basic and character qualifications requirements, foreign ownership, use restrictions, and regulations intended to prevent harmful interference to any other licensed spectrum user entitled to interference protection under the Communications Laws);
 - (iv) satisfy the eligibility, qualification and all other requirements imposed on spectrum lessees under spectrum manager leasing arrangements pursuant to 47 C.F.R. § 1.9020, including, but not limited to, the general eligibility rules set forth in 47 C.F.R. § 1.9020(d)(2);
 - (v) comply with any and all applicable requirements of the License or arising under the Communications Laws or other applicable laws, including, but not limited to those relating to: radiofrequency (RF) safety rules for human exposure; the Communications Assistance for Law Enforcement Act (CALEA), 47 U.S.C. §§ 229, 1001 *et seq.*, 47 C.F.R. Part 64, Subparts V and W; Equal Employment Opportunity (EEO), 47 C.F.R. §§ 1.815, 22.321; Telecommunications Relay Service (TRS), 47 U.S.C. § 225, 47 C.F.R. Part 64, Subpart F; North American Numbering Plan (NANP), 47 U.S.C. § 251(e), 47 C.F.R. Part 52; and universal service funds, 47 U.S.C. § 254, 47 C.F.R. §§ 54.706, 54.709;

- (vi) satisfy the FCC's E-911 requirements set forth in 47 C.F.R. § 20.18 to the extent that they may be applicable to Lessee's operation of the System;
- (vii) comply with the FCC's "open platform" (i.e., "open access") requirements for devices and applications in the Upper 700 MHz C-Block stated in 47 C.F.R. § 27.16, and the Second Report and Order in the FCC's WC Docket No. 06-150, et al., "Service Rules for the 698-746, 747-762, and 777-792 MHz Bands" (FCC 07-132, released Aug. 20, 2007); and
- (viii) take whatever actions are reasonably necessary to resolve any interference-related matters arising from operation of any System it may construct and operate on the Leased Spectrum, including, but not limited to, any conflicts between Lessee and any other licensed spectrum user.

(b) Equipment.

- (i) Lessee shall purchase, install and maintain at its own expense, all equipment, including but not limited to, towers, transmission lines, antennas, microwave facilities, transmitters and related equipment that is necessary for its operations utilizing the Leased Spectrum ("Lessee Equipment"). Lessee may pledge the Lessee Equipment as security or otherwise create encumbrances on the Lessee Equipment as Lessee deems appropriate.
- (ii) Upon the termination of this Lease Agreement, Lessee shall promptly terminate the use of any transmitting equipment which is operating on the Leased Spectrum.

(c) FCC Compliance. Lessee acknowledges and agrees that Lessor shall be primarily responsible for ensuring that the License and the Leased Spectrum are utilized in full compliance with the Communications Laws, including, but not limited to, responsibility for all interactions with the FCC related to the License and the Leased Spectrum, but that Lessee shall be independently responsible for compliance with the Communications Laws applicable to the Leased Spectrum or Lessee as a result of Lessee's status as a service provider, and any other applicable laws. Lessee acknowledges that Lessee shall remain independently responsible to Lessor and the FCC for complying with the foregoing, and agrees that it shall not construct or operate any facility utilizing the Leased Spectrum in a manner inconsistent with, contrary to, or in violation of, these requirements. Lessee hereby represents and warrants that it is familiar with the Communications Laws and further covenants and agrees that it shall use commercially reasonable efforts to operate on and utilize the Leased Spectrum at all times in compliance with the Communications Laws applicable to the Leased Spectrum.

(d) Notification of Violations or Material Changes; Cooperation. Lessee shall promptly notify Lessor of the occurrence of any violation of the Communications Laws of which it becomes aware, and of the initiation of any litigation, investigation,

proceeding or inquiry with regard to Lessee or the Leased Spectrum by the FCC or any other governmental authority. In the event that the FCC or other governmental authority initiates an investigation or inquiry concerning Lessee in connection with this Lease Agreement or any of Lessee's actions or operations hereunder, Lessee agrees to cooperate with Lessor, the FCC, or other governmental authority.

3. Obligations of Lessor.

- (a) Oversight of Lessee's Operations on the Leased Spectrum. Throughout the Term, Lessor shall have the right to take all actions as are necessary to ensure that Lessee's operation of the System complies with the Communications Laws, this Lease Agreement, and the terms and conditions of the License (including conformance with applicable license eligibility, basic qualifications, character qualifications and technical requirements, and use and foreign ownership restrictions). Lessee hereby acknowledges Lessor's right to take such actions as are necessary to meet this obligation, and that Lessor may:
- (i) periodically (and at Lessor's sole cost) monitor and oversee Lessee's use of the Spectrum Usage Rights to ensure Lessee operates the System in conformance with technical and use rules applicable to the License;
 - (ii) take all actions that are reasonably necessary to ensure that Lessee's operation of the System complies with the Communications Laws, including regulations intended to prevent harmful interference to any other licensed spectrum users entitled to interference protection under the Communications Laws;
 - (iii) require that Lessee immediately implement any modification or coordination that Lessor determines to be reasonably necessary to resolve harmful interference or any interference-related matters arising from operation of the System, including any conflicts between Lessee and any other licensed spectrum user entitled to interference protection under the Communications Laws, which actions may include, but are not limited to, suspending or terminating the operation of the System until the interference-related matters can be remedied;
 - (iv) make determinations as to whether particular circumstances give rise to the requirement of filing an application or notification in accordance with Section 6(b), and if so, with Lessee's cooperation, make such filing or notification;
 - (v) take whatever actions are reasonably necessary to ensure that all facilities comprising the System and all other actions of Lessee relating to the System's facilities or the Leased Spectrum comply with all applicable radiofrequency (RF)

safety rules for human exposure promulgated by the FCC or any other governmental authority; and

- (vi) interface with the FCC on matters related to the License.
- (b) Maintenance of License. Lessor shall take such commercially reasonable actions as are necessary to maintain the License in full force and effect throughout the Term. To the extent that any License will expire during the Term, Lessor agrees to take such steps as are commercially reasonable to prosecute an application for the renewal of such License and, provided such steps are taken by Lessor, it is expressly acknowledged by Lessee that Lessor's failure to obtain renewal of the License shall not be deemed a breach of this Lease Agreement and shall not give rise to any rights or claims by Lessee by reason of the termination of this Lease Agreement as a result of such non-renewal. Lessor shall satisfy all of the requirements imposed on lessors under spectrum manager leasing arrangements by 47 C.F.R. § 1.9020.
- (c) FCC Interactions. Throughout the Term, Lessor shall be the primary interface with the FCC on all matters directly relating to the License and the Spectrum Usage Rights granted under this Lease Agreement; provided, however, that nothing contained herein shall restrict Lessee from interfacing with the FCC on policy matters not solely relating to Lessee's use of the Leased Spectrum or on matters imposed under the Communications Laws on Lessee as a result of its provision of communications services to its customers on the System or on inquiries specifically directed to Lessee by the FCC. Upon reasonable advance request, Lessee may, and at the request of Lessor, Lessee shall attend any meetings with the FCC which involve or relate to Lessee's use of the Leased Spectrum.
- (d) Notifications of Violations or Material Changes; Cooperation. Lessor shall notify Lessee of the occurrence of any event or the initiation of any litigation, investigation, proceeding or inquiry by the FCC or any governmental authority which could reasonably be expected to have a material impact or result in a material change in its ownership of the Licenses or Lessee's operations under this Lease Agreement. In the event that the FCC or any other governmental authority initiates an investigation or inquiry concerning Lessor or Lessee in connection with this Lease Agreement or any of the performances rendered hereunder, Lessor agrees to cooperate with Lessee, the FCC, or other governmental authority. Lessor shall ensure that its use, or the use by any third parties, of Lessor's spectrum not being leased by Lessee will not create harmful radio frequency interference with Lessee's use of the Leased Spectrum and if any such harmful interference is identified by Lessee, Lessor will be responsible at its sole cost and expense to immediately take commercially reasonable efforts to cease any operations causing such interference and promptly modify its use of such spectrum as necessary to eliminate the interference.

- (e) Use of Agents by Lessor. Any obligations of Lessor hereunder may be conducted, and any rights of Lessor hereunder enforced, by any agents as Lessor may deem necessary or appropriate.

4. Control of License and Leased Spectrum. Any other provision of this Lease Agreement to the contrary notwithstanding, during the Term hereof, Lessor shall remain in *de jure* and *de facto* control of the Licenses and the Leased Spectrum under the Communications Act. This Lease Agreement (i) does not and shall not vest in Lessee, or constitute, create or have the effect of constituting or creating, *de facto* or *de jure* control, direct or indirect, over Lessor or the Licenses, which ownership or control remains exclusively and at all times in Lessor and (ii) does not and shall not constitute the transfer, assignment, or disposition in any manner, voluntary or involuntary, directly or indirectly, of the Licenses or the transfer of control of Lessor within the meaning of Section 310(d) of the Communications Laws for spectrum leasing purposes. During the Term, Lessee shall not take any action inconsistent with or contrary to Lessor's *de jure* and *de facto* control, as those terms are construed by the FCC, over the Leased Spectrum and the Licenses. During the Term, Lessee shall not hold itself out to the public as the owner of any License. Lessee hereby acknowledges and accepts that the Spectrum Usage Rights created hereunder are subject to FCC oversight and enforcement.

5. Coordination; Oversight.

(a) Coordination. In order to enable Lessor to assure itself that Lessee's activities on the Leased Spectrum and the operation of the System complies with the Communications Laws, Lessee and Lessor, at Lessor's request, shall meet periodically (but not more than monthly) to discuss matters reasonably relating to Lessee's construction and operation of the System. Upon Lessor's request, Lessee shall provide Lessor with reasonable access to Lessee's books and records with respect to construction and operation of the System showing (i) all technical and operational information related to the use of the Leased Spectrum by the System, and (ii) any and all other records necessary, convenient or incidental to construction, maintenance or operation of the System; provided, however, that Lessee shall not be required to provide trade secret or other confidential or competitive information if such information is not reasonably necessary for Lessor to meet its oversight responsibilities under the Communications Laws.

(b) Right of Access. Lessor shall have the right, upon at least twenty-four (24) hours advance written notice to Lessee, to inspect any facility comprising the System that utilizes the Leased Spectrum during normal business hours and to take any action it deems reasonably necessary to fulfill its obligations under this Lease Agreement or the Communications Laws. Lessee shall have the right to require that an escort selected by Lessee accompany Lessor to any on-site visit to Lessee's facilities. The foregoing notwithstanding, Lessor shall have the right to access any facility that is part of the System upon the shortest advance notice possible under the circumstances in the event of an emergency, including but not limited to, any instance of

objectionable interference to any other licensed frequency users entitled to interference protection under the Communications Laws, and Lessor shall notify Lessee as soon as practicable of Lessor's access during such emergency. At the FCC's request, the FCC shall have access to any facility that is part of the System at any time and from time to time in accordance with the FCC's access policies.

6. Applications/Notifications.

- (a) Lease Agreement Notification. Lessor shall prepare and file with the FCC all forms and related exhibits, certifications and other documents necessary to satisfy the FCC's requirements for "spectrum manager" lease notifications, as set forth in 47 C.F.R. § 1.9020(e) ("FCC Lease Agreement Notification") within ten (10) business days following the Effective Date. Each Party covenants and agrees that it shall fully cooperate with the other, and do all things reasonably necessary to timely submit the FCC Lease Agreement Notification to the FCC and shall promptly file or provide the other Party with all other information which is required to be provided to the FCC in furtherance of the transactions contemplated hereby. Lessor further covenants and agrees to include in any application for the renewal of each License a request to extend and renew this Lease Agreement for the renewal period as provided in Section 7 of this Lease Agreement. Any fees associated with the filing of the FCC Lease Agreement Notification shall be paid by Lessee. Any other fees associated with the preparation of the FCC Lease Agreement Notification shall be paid by the Party that incurred such fees. Any fees associated with the filing of renewal applications for the License shall be paid by Lessor.
- (b) New Sites or Modified Sites. To the extent that any construction of, or modification to, any part of the System by Lessee could require the prior filing with, notification to, or approval of the FCC, another governmental authority or a non-governmental third party (including any state historic preservation officer), then Lessee shall not undertake such construction or modification until the Parties have determined if any of the following are required: (i) frequency coordination; (ii) submission of an environmental assessment; (iii) international or Interdepartment Radio Advisory Committee (IRAC) coordination; (iv) radio quiet zone reporting; (v) notification to the Federal Aviation Administration; or (vi) any waivers of the Communications Laws (each a "Facility Filing"). If a Facility Filing is necessary, Lessee shall promptly prepare and provide to Lessor all necessary application forms, exhibits, filing fees and other materials necessary for Lessor to make such submission in its own name. Lessor shall make such filings promptly, and in any event not more than five (5) business days following its receipt or such earlier day as required under applicable law; provided, however, that if Lessor reasonably believes that such filing is incomplete, then Lessor may instead return such filing to Lessee with a reasonable explanation of those matters that require further preparation. No construction or modification to the System shall occur unless and until any required Facility Filings

are made and, if required by applicable law, approved by the party with whom they are filed.

- (c) Compliance Applications. Lessor shall be solely responsible for filing any on-going compliance reports required by the FCC or any other governmental authority as a result of its ownership of the Licenses and Lessee's use of the Leased Spectrum. Should Lessee believe that a compliance filing is required, Lessee shall notify Lessor, and if such filing is in fact required, Lessor shall thereafter take all actions required to timely file such report.

7. Term; Early Termination.

- (a) Term. Other than the rights and obligations in Sections 1(d) and 6(a) (which rights and obligations shall become effective on the date of this Lease Agreement), the rights and obligations created under this Lease Agreement shall become effective on the date (the "Lease Commencement Date") that is twenty-one days following the filing of the initial FCC Lease Agreement Notification, and shall continue until December 31, 2020 (the "Initial Term", and together with any Renewal Term, the "Term").
- (b) Termination upon Sale of the License. This Lease Agreement shall automatically terminate with respect to the Licenses upon the sale, transfer or assignment of such Licenses to any other person or entity. Lessor shall, to the extent not prohibited by any applicable law or contractual arrangement, endeavor to provide Lessee with notice of such sale, transfer or assignment prior to such termination; provided, however, the failure to provide any such notice shall not be deemed to be a failure by Lessor to perform any of its covenants or agreements contained in this Lease Agreement or a breach of this Lease Agreement.
- (c) Termination upon Change of Manager. This Lease Agreement shall terminate if, for any reason, Lessor (or an affiliate controlled by Lessor) ceases to be the managing party for Lessee. Lessor shall, to the extent not prohibited by any applicable law or contractual arrangement, endeavor to provide Lessee with notice prior to such termination; provided, however, the failure to provide any such notice shall not be deemed to be a failure by Lessor to perform any of its covenants or agreements contained in this Lease Agreement or a breach of this Lease Agreement.
- (d) Termination of the License; Renewals. This Lease Agreement shall automatically terminate as to the Leased Spectrum subject to any License upon the termination of such License, either by reason of the non-renewal at the end of its initial license term, by reason of the express actions of the FCC or otherwise in accordance with its terms; provided, however, that the Term shall automatically be extended (i) if the Parties mutually agree in writing to extend the term of any License and not less than twenty-one (21) days prior to the commencement date of such extended term (the "Renewal Term"), Lessor and Lessee notify the FCC of the extension of Lessee's intent to

operate during such Renewal Term, and (ii) during the pendency of the FCC's consideration of any application for the renewal of such License.

- (e) Termination upon Termination by the FCC for Lessee Actions. This Lease Agreement shall terminate upon any order of the FCC revoking, canceling, or terminating this Lease Agreement or Lessee's rights hereunder, including, but not limited to, by reason of Lessee's failure to comply with any FCC rule, regulation or policy applicable to spectrum leases, generally, or the Lease Agreement, specifically, or any other applicable law.
- (f) Termination upon Termination by the FCC for Lessor Actions. This Lease Agreement shall terminate as to the Leased Spectrum subject to any License upon any order of the FCC revoking, canceling, or terminating Lessor's rights hereunder, including, but not limited to, by reason of Lessor's failure to comply with any FCC rule, regulation or policy applicable to spectrum leases, generally, or the Lease Agreement or such License specifically, or any other applicable law.
- (g) Termination for Material Breach. This Lease Agreement may be terminated by either Party if the other Party is in material breach hereof and such other Party, having been given written notice of such breach, fails to cure it within thirty (30) days following receipt of said notice.
- (h) Effect of Termination. Termination of this Lease Agreement for any reason shall not relieve any Party of any liability which at the time of termination has already accrued to such Party or which thereafter may accrue in respect of any act or omission prior to such termination or the survival of any right, duty or obligation of any Party which is expressly stated elsewhere in this Lease Agreement to survive termination hereof.
- (i) Suspension. Lessee shall suspend its operations at the direction of either (i) the FCC or (ii) Lessor to the extent that such suspension as directed by Lessor is in accordance with the FCC's suspension policies.

8. Payments.

- (a) Consideration. Consideration to Lessor for the execution of this Lease Agreement includes the payment by Lessee to Lessor of the sum of \$10.00, receipt of which is hereby acknowledged by Lessor.
- (b) Regulatory Fees. Lessee shall be responsible for paying to Lessor (or directly to the FCC if permitted), at least fifteen (15) days before they may be due, all required FCC regulatory fees accruing by reason of Lessee's operation of the System on the Leased Spectrum, except for any such fees that may be assessed directly on Lessee by reason of its operation of the System (which fees shall be paid by Lessee directly to the FCC).

- (c) Sales and Use Taxes. Lessee shall be responsible for billing, collecting, reporting, and remitting any and all sales or use taxes due and payable that are directly related to Lessee's use of the Leased Spectrum and the services provided thereon.

9. Express Covenants and Agreements (FCC). Anything contained herein to the contrary notwithstanding, the Parties agree that the following FCC requirements shall apply:

- (a) Lessee must comply at all times with applicable rules set forth in the Communications Laws and any other applicable laws. This Lease Agreement may be revoked, cancelled, or terminated by Lessor or by the FCC if Lessee fails to comply with the applicable requirements;
- (b) If any License is revoked, cancelled or terminated, or otherwise ceases to be in effect, Lessee has no continuing authority or right to use the Leased Spectrum unless otherwise authorized by the FCC;
- (c) This Lease Agreement is not an assignment, sale, or transfer of the License or any portion thereof;
- (d) This Lease Agreement shall not be assigned to any entity that is ineligible or unqualified to enter into a spectrum leasing arrangement under the Communications Laws; and
- (e) Lessor shall not consent to an assignment of this Lease Agreement unless such assignment complies with applicable Communications Laws.

10. Representations and Warranties.

- (a) Each of the Parties hereto represents and warrants to the other, with respect to facts and issues relating to it, that:
 - (i) it is duly organized and in good standing under the laws of the jurisdiction of its organization and has full power and authority to carry out all of the transactions contemplated hereby;
 - (ii) it shall comply with all material laws, including state, local and federal rules and regulations governing the business, ownership, management and operations under this Lease Agreement; and
 - (iii) all requisite resolutions and other authorizations necessary for the execution, delivery, performance and satisfaction of this Lease Agreement by it have been duly adopted and complied with.
- (b) Lessor further represents and warrants to Lessee that it is the duly authorized holder of the FCC License.

(c) Lessee further represents and warrants to Lessor that it meets the requisite eligibility and qualification requirements applicable to Lessor as licensee of the License including, but not limited to: (i) not being a person subject to denial of Federal Benefits under the Anti-Drug Abuse Act of 1988, and (ii) satisfying applicable foreign ownership eligibility requirements as set forth in Sections 310(a) and 310(b) of the Communications Act (“Qualified and Eligible Lessee”). Lessee acknowledges that Lessor is hereby relying, and shall have the right to so rely, upon Lessee’s representations and warranties to Lessor hereunder and Lessee’s certification to the FCC that Lessee satisfies the requisite eligibility and qualification requirements contained in the FCC Lease Agreement Notification. The Parties hereby acknowledge that the foregoing representations and warranties and certification of Lessee was a material inducement to Lessor entering into this Lease Agreement and a condition precedent to the execution and delivery of this Lease Agreement by Lessor. Lessee covenants and agrees that it shall be a Qualified and Eligible Lessee throughout the Term, and that it shall promptly notify Lessor of any act or omission that causes Lessee to cease being, or that could reasonably result in Lessee ceasing to be, a Qualified and Eligible Lessee.

11. Indemnification.

- (a) Lessee shall indemnify, defend and hold harmless Lessor and its affiliates, their respective successors and assigns, and the partners, shareholders, directors, members, managers, officers, employees and agents of any and all of the foregoing (the “Lessor Indemnified Persons”), from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, proceedings, costs, expenses and disbursements of any kind or nature whatsoever (including reasonable attorneys’ fees, costs of investigation, fines, judgments and amounts paid in settlement) (“Losses”) incurred or suffered by any Lessor Indemnified Person arising out of, in connection with, or relating to (i) any breach of any of the representations or warranties made by Lessee in this Lease Agreement, (ii) any failure by Lessee to perform any of its covenants or agreements contained in this Lease Agreement, or (iii) any claims by third parties arising out of, in connection with or relating to Lessee’s use of the Leased Spectrum, its exercise of the Spectrum Usage Rights, or its operation of the System or any part thereof, including any equipment utilized therein, after the Lease Commencement Date except, in each case, to the extent such breach or failure, as applicable, was caused by a breach of this Lease Agreement by Lessor or any act or omission of Lessor. Lessor acknowledges and agrees that its sole and exclusive remedy with respect to the claims for breach of representations or warranties contained in this Lease Agreement shall be pursuant to the indemnification provisions set forth in this Section.
- (b) Lessor shall indemnify, defend and hold harmless Lessee and its affiliates, their respective successors and assigns, and the partners, shareholders, directors, members, managers, officers, employees and agents of any and all of the foregoing (the “Lessee

Indemnified Persons”), from and against any and all Losses incurred or suffered by any Lessee Indemnified Person arising out of, in connection with, or relating to (i) any breach of any of the representations or warranties made by Lessor in this Lease Agreement, (ii) any failure by Lessor to perform any of its covenants or agreements contained in this Lease Agreement, or (iii) any claims by third parties arising out of, in connection with or relating to Lessor’s use of the Leased Spectrum or its operation of its wireless systems or any part thereof, including any equipment utilized therein, prior to the Effective Date, except, in each case, to the extent such breach or failure, as applicable, was caused by a breach of this Lease Agreement by Lessee or any act or omission of Lessee. Lessee acknowledges and agrees that its sole and exclusive remedy with respect to the claims for breach of representations or warranties contained in this Lease Agreement shall be pursuant to the indemnification provisions set forth in this Section.

- (c) In no event shall any Party be liable for indirect, special, exemplary, consequential or punitive damages, or loss of profits, arising out of a breach of this Lease Agreement, even if advised at the time of breach of the possibility of such damages, except for losses arising out of any grossly negligent, willful or fraudulent act or omission, or out of any breach of Section 11 (Indemnity) or Section 13(m) (Confidentiality).

12. Relationship. Nothing in this Lease Agreement shall be construed to render Lessor and Lessee partners or joint venturers or to impose upon any of them any liability as such. Additionally, nothing in this Lease Agreement shall be construed to render Lessee (including any of its employees or contractors) an agent or employee of Lessor, or render Lessor (including any of its employees or contractors) an agent or employee of Lessee.

13. Miscellaneous.

- (a) Document Inspection. Each Party shall retain a duly executed copy of this Lease Agreement (including any amendments thereto) in its files, and shall, upon request and subject to the provisions contained herein, provide the FCC or any other governmental body with a photocopy of this Lease Agreement.
- (b) Entire Agreement. This Lease Agreement constitutes the entire agreement between the Parties pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, understandings, negotiations and discussions, whether oral or written, of the Parties with respect to the subject matter hereof.
- (c) Amendments and Waivers. Any provision of this Lease Agreement may be amended or waived if, and only if, such amendment or waiver is in writing and signed (in the case of an amendment) by Lessor and Lessee or (in the case of a waiver) by the Party against whom the waiver is to be effective. No failure or delay by any Party in exercising any right, power or privilege hereunder shall operate as a waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege.

- (d) Remedies Cumulative. Except as otherwise provided herein, all rights, powers and remedies provided under this Lease Agreement or otherwise available in respect hereof at law or in equity shall be cumulative and not alternative, and the exercise or beginning of the exercise of any right, power, or remedy thereof by a Party shall not preclude the simultaneous or later exercise of any other such right, power or remedy by such Party.
- (e) Assignment. This Lease Agreement shall be binding upon and shall inure to the benefit of the Parties and their respective successors and permitted assigns. Neither this Lease Agreement nor all or any part of Lessee's rights and obligations hereunder may be assigned, subleased, delegated or otherwise transferred by Lessee without the express written consent of Lessor which may be withheld in its sole discretion. Lessor may assign this Lease Agreement to any person to whom it is selling, transferring or assigning the License or any part thereof. To the extent that Lessor consents to any assignment or sublease by Lessee, such assignee/sublessee shall enter into a written agreement pursuant to which it agrees to be bound by all of the terms and conditions of the Lease Agreement applicable to Lessee. In such event Lessor and the assignee/sublessee shall timely prepare and file appropriate FCC applications or notifications consistent with applicable requirements of the Communications Laws, and any such assignment or sublease shall not become effective until any required FCC consents have been obtained or the applicable waiting periods required have elapsed. Anything to the contrary in this Lease Agreement notwithstanding, in no event shall Lessor be deemed to have consented to an assignment or sublease: (i) not in compliance with the Communications Laws and any other applicable laws; (ii) made to a person or entity that is ineligible or unqualified to enter into a spectrum leasing arrangement under the Communications Laws; or (iii) made to a person or entity not in privity with Lessor. Any assignment or sublease shall be null and void if it is in violation of the foregoing restrictions.
- (f) Governing Law. This Lease Agreement shall be governed by and construed in accordance with the internal laws of the State of New York, without regard to principles of conflicts of law.
- (g) Notices. All notices or other communications hereunder shall be in writing and shall be deemed to have been duly given or made (i) upon delivery if delivered personally (by courier service or otherwise) or by overnight delivery, as evidenced by written receipt or other written proof of delivery (which may be a printout of the tracking information of a courier service that made such delivery), or (ii) by email, in each case to the applicable addresses set forth below (or such other address which either Party may from time to time specify):

If to Lessor:

Cellco Partnership
One Verizon Way
Basking Ridge, NJ 07920
Attention: Philip Junker and Laszlo Herczku
Email: philip.junker@verizonwireless.com; and
laszlo.herczku@verizonwireless.com

With a required copy (which shall not itself constitute notice) to:

Cellco Partnership
One Verizon Way
Basking Ridge, NJ 07920
Attention: Sanil Padiyedathu
Email: sanil.padiyedathu@verizon.com

If to Lessee:

The Johns Hopkins Applied Physics Laboratory LLC
11100 Johns Hopkins Road
Laurel, MD 20723
Attention: Sean Brassard
Email: Sean.Brassard@jhuapl.edu

- (h) Expenses. Except as otherwise expressly provided in this Lease Agreement, each Party shall bear its own respective expenses (including, but not limited to, all compensation and expenses of counsel, financial advisors, consultants, actuaries and independent accountants) incurred in connection with the drafting and execution of this Lease Agreement. Lessee shall reimburse Lessor for any out of pocket expenses incurred by Lessor in connection with the submission of filings required to be made by virtue of its role as spectrum manager under this Lease Agreement.
- (i) Partial Invalidity. Wherever possible, each provision hereof shall be interpreted in such a manner as to be effective and valid under applicable law, but in case any one or more of the provisions contained herein shall, for any reason, be held to be invalid, illegal or unenforceable in any respect, such provision shall be ineffective only to the extent of such invalidity, illegality or unenforceability, without invalidating the remainder of such provision or any other provisions hereof, unless such a construction would be unreasonable. If the Lease Agreement or any portion thereof cannot be reasonably saved by rendering the contested provision or portions thereof

ineffective, the Parties shall use their commercially reasonable efforts to negotiate and agree upon a cure of the problem if reasonably possible.

- (j) Waiver of Jury Trial; Arbitration. EACH PARTY WAIVES ITS RIGHT TO A JURY TRIAL IN ANY COURT ACTION ARISING BETWEEN THE PARTIES, WHETHER UNDER OR OTHERWISE RELATED TO THIS LEASE AGREEMENT, AND WHETHER MADE BY CLAIM, COUNTERCLAIM, THIRD PARTY CLAIM OR OTHERWISE. If for any reason the jury waiver is held to be unenforceable, the Parties agree to binding arbitration for any dispute or any claim arising out of this Lease Agreement under any federal, state or local statutes, laws or regulations, under the applicable commercial rules of the American Arbitration Association and 9 U.S.C. § 1, et seq. The determination of the arbitrator shall be final, binding and conclusive upon the Parties and enforceable in a court of competent jurisdiction. The agreement of each Party to waive its right to a jury trial shall be binding on its successors and assigns.
- (k) Counterparts. This Lease Agreement may be executed and delivered (including by facsimile transmission or electronic transmission (in .pdf or .tiff)) in one or two counterparts, each of which shall be deemed an original, but both of which together shall constitute one and the same instrument.
- (l) Headings. The headings of the articles and sections herein are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Lease Agreement.
- (m) Confidentiality/No Public Announcement. Except as set forth in Section 13(a) hereof, no Party shall, without the approval of the other, make any press release or other public announcement concerning the transactions contemplated by this Lease Agreement or disclose the terms and conditions of this Lease Agreement to any third party, except as and to the extent that any such Party shall be so obligated by law, in which case the other Party shall be advised and the Parties shall use their reasonable efforts to cause a mutually agreeable release or announcement to be issued; provided, that the foregoing shall not preclude communications or disclosures necessary to implement or comply with the provisions of this Lease Agreement or to comply with accounting or Securities and Exchange Commission disclosure obligations or applicable FCC disclosure obligations.
- (n) Good Faith Efforts to Fulfill Obligations. The Parties agree to use their respective good faith efforts to fulfill all of their obligations under this Lease Agreement. In the event that additional agreements or modifications are necessary to effectuate the intent of this Lease Agreement, the Parties shall negotiate with each other in good faith. In no event, however, is either Party obligated to amend this Lease Agreement and/or enter into other agreements if the efforts to negotiate in good faith do not result in such an amendment or other agreement that is satisfactory to both Parties.

(o) Force Majeure. Neither Party shall be liable for any delay or failure in performance of any part of this Lease Agreement to the extent that such delay is caused by reason of acts of God, wars, revolution, terrorism, civil commotion, acts of public enemy, embargo, acts of government in its sovereign capacity, labor difficulties, including without limitation, strikes, slowdowns, picketing or boycotts, or any other circumstances beyond the reasonable control and not involving any fault or negligence of the Party affected (“Condition”). If any such Condition occurs, (i) the Party affected, upon giving prompt notice to the other Party, will be excused from such performance on a day-to-day basis during the continuance of such Condition (and the other Party will likewise be excused from performance of its obligations on a day-to-day basis during the same period), provided, however, that the Party so affected will use commercially reasonable efforts to avoid or remove such Condition and both Parties will proceed as soon as is reasonably practicable with the performance of their obligations under this Lease Agreement whenever such causes are removed or cease (subject to the other Party’s rights under clause (ii) of this Section 13(o)); and (ii) the other Party will have the right, during the continuance of such Condition, and for a reasonable period of time following receipt of notice of the termination of such Condition, to secure alternative means (whether through an alternative provider or otherwise) to satisfy the obligations of the affected Party that are not being satisfied as a result of the Condition. The Parties agree that this Section 13(o) is not intended to be a waiver of any rights the Parties might otherwise have under applicable common law to terminate this Lease Agreement as a result of any Condition. The foregoing notwithstanding, no delay or other failure to perform shall be excused pursuant to this Section 13(o) by the acts or omissions of a Party’s subcontractors, material men, suppliers, or other third persons providing products or services to such Party, unless such acts or omissions are themselves the product of a Condition, and unless such delay or failure and the consequences thereof are beyond the reasonable control and without the fault or negligence of the Party claiming excusable delay or other failure to perform.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, each of the Parties hereto has duly executed this Lease Agreement as of the date first above written.

LESSOR:

LESSEE:

CELLCO PARTNERSHIP D/B/A
VERIZON WIRELESS

THE JOHNS HOPKINS UNIVERSITY
APPLIED PHYSICS LABORATORY LLC

By: Steven R. Smith

By: _____

Name: Steven R. Smith

Name: Timothy J. Galpin

Title: SVP

Title: Assistant Director, Programs

IN WITNESS WHEREOF, each of the Parties hereto has duly executed this Lease Agreement as of the date first above written.

LESSOR:

CELLCO PARTNERSHIP D/B/A
VERIZON WIRELESS

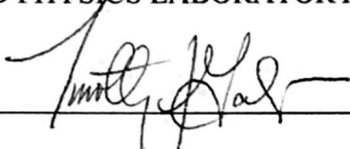
By: _____

Name: _____

Title: _____

LESSEE:

THE JOHNS HOPKINS UNIVERSITY
APPLIED PHYSICS LABORATORY LLC

By:  _____

Name: Timothy J. Galpin

Title: Assistant Director, Programs

SCHEDULE I

PART 1

LICENSES

Call Sign	Market Number	Name	Block	Frequencies
KNKA232	CMA014	Baltimore, MD	B	835-845MHz /880-890MHz
KNLF652	BTA029	Baltimore, MD	C	1895-1905 / 1975-1985MHz
WPZY693	BTA029	Baltimore, MD	C	1905-1910 / 1985-1990MHz

PART 2

THE MARKETS

The Markets shall comprise (i) the land and air located directly above either (a) the paved runway or (b) the three-mile track, in each case, as identified by the red lines in Map 1 below (such area, as determined by Lessee and consented to by Lessor in accordance with the notice requirements of Schedule II, the “APG Site”) and (ii) the land and air located directly above a 2,500 foot radius from Latitude: 39°10'18.72"N and Longitude: 76°53'45.54"W, as indicated by the yellow pin in Map 2 below (the “APL Test Site”).

Map 1:



Map 2:



SCHEDULE II
PERMITTED USE

In addition to any other limitations or requirements set forth in the Lease Agreement, Lessee shall use the Leased Spectrum in the Markets subject to the following:

Testing at APL Test Site:

1. Lessee shall be permitted to use the Leased Spectrum at the APL Test Site to conduct up to three separate tests between October 5, 2020 and October 9, 2020. Any such tests must occur between the hours of 11:00 pm and 6:00 am.
2. Lessee shall be permitted to use the Leased Spectrum at the APL Test Site to conduct one test between October 12, 2020 and October 16, 2020. Any such tests must occur between the hours of 11:00 pm and 6:00 am.

Testing at APG Site:

3. Lessee shall be permitted to use the Leased Spectrum at the APG Site to conduct up to two separate tests between October 19, 2020 and October 23, 2020. Any such tests must occur between the hours of 8:00 am and 4:00 pm.
4. Lessee shall be permitted to use the Leased Spectrum at the APG Site to conduct up to three separate tests and an interim demonstration between October 26, 2020 and October 30, 2020. Any such tests and demonstrations must occur between the hours of 8:00 am and 4:00 pm.
5. Lessee shall be permitted to use the Leased Spectrum at the APG Site to conduct one test between November 16, 2020 and November 20, 2020. Any such test must occur between the hours of 8:00 am and 4:00 pm.
6. Lessee shall be permitted to use the Leased Spectrum at the APG Site to conduct up to two separate tests between November 30, 2020 and December 4, 2020. Any such tests must occur between the hours of 8:00 am and 4:00 pm.
7. Lessee shall be permitted to use the Leased Spectrum at the APG Site to conduct up to three separate tests and the final demonstration between December 7, 2020 and December 11, 2020. Any such tests and demonstrations must occur between the hours of 8:00 am and 4:00 pm.

Prior to conducting any testing or demonstrations, Lessee shall notify Lessor in writing of such planned tests and/or demonstrations and only proceed with such activity after receiving written confirmation from Lessor that Lessee may proceed with such tests and/or demonstrations (which, for the avoidance of doubt, can be provided via email). Lessee agrees to comply with any restrictions or requirements imposed by Lessor at such time. Any testing performed by Lessee using the Leased Spectrum shall be limited to (i) a max DL (average power) transmit ERP of 5 dBm, with an antenna height no greater than 2 meters at the APL Test Site, and (ii) a max DL (average power) transmit ERP of 42 dBm, with an antenna height no greater than 15 feet at the APG Site, and in each case of (i) and (ii), Lessee shall use its best efforts to limit the UL's transmit power of the equipment used to the minimum needed to perform the tests.