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THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

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William Cass, P.E.
Commissioner

David Rodrigue, P.E.
Assistant Commissioner
Andre Briere, Colonel, USAF (RET)
Deputy Commissioner

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
State House
Concord, New Hampshire 03301

Bureau of TSMO
May 7, 2024

REQUESTED ACTION

Authorize the Department of Transportation to enter into contract with R&R Communications, Inc. (Vendor #154891), Swanzey, NH, on the basis of a sole bid of $249,150.00, for the purpose of providing statewide service and repairs to the Department's land mobile radio system, from the date of Governor and Council approval, through June 30, 2026. 85% Highway Funds, 14% Turnpike and 1% General Fund.

Funding is available as follows for FY 2025 and is contingent upon the availability and continued appropriation of funds for FY 2026, with the ability to adjust encumbrances through the Budget Office between State Fiscal Years if needed and justified.

		FY 2025	FY 2026
04-96-96-960515-3007 Highway Maintenance Bureau 024-500225 Contract Repairs; Machine, Equip.		$106,166.25	$106,166.25
04-96-96-961017-7027 Central Turnpike Maintenance 024-500225 Contract Repairs; Machine, Equip.		$8,536.19	$8,536.19
04-96-96-961017-7032 Blue Star Memorial Highway Maintenance 024-500225 Contract Repairs; Machine, Equip.		$4,826.28	$4,826.28
04-96-96-961017-7037 Spaulding Turnpike Maintenance 024-500225 Contract Repairs; Machine, Equip.		$4,246.28	$4,246.28
04-96-96-964010-2107 Aeronautics 024-500225 Contract Repairs; Machin-Equip		$800.00	$800.00
	Total	**$124,575.00**	**$124,575.00**

EXPLANATION

The Department of Transportation operates a statewide radio communications network that consists of mountain top repeaters, dispatch centers, control (base) stations, and land mobile radios that link toll, bridge maintenance, traffic operations, and highway maintenance facilities with field staff. For the longevity and viability of this communication system it is necessary that maintenance be performed. This contract is established to provide

regular maintenance inspections to the equipment as well as provide unscheduled and emergency maintenance, as needed at the contract prices bid.

A bid invitation was advertised in the Manchester Union Leader on March 31, 2024 and three local radio shops were e-mailed the bid invitation. The single bid was received from R&R Communications, Inc., and was lower than the Department's estimate. Attached is a copy of the bid tabulation. The Department is satisfied that the bid prices are reasonable and that R & R Communications, Inc. is capable of performing the required work.

This contract has been approved by the Attorney General as to form and execution and the Department has verified that the necessary funds are available. Copies of the fully executed contract are on file at the Secretary of State office and the Department of Administrative Services office, and subsequent to Governor and Council approval will be on file at the Department of Transportation.

Your approval of this contract is respectfully requested.

Sincerely,

William J. Cass, P.E.
Commissioner

Attachments

Notice: This agreement and all of its attachments shall become public upon submission to Governor and Executive Council for approval. Any information that is private, confidential or proprietary must be clearly identified to the agency and agreed to in writing prior to signing the contract.

AGREEMENT

The State of New Hampshire and the Contractor hereby mutually agree as follows:

GENERAL PROVISIONS

1. IDENTIFICATION.

State Agency Name Department of Transportation		1.2 State Agency Address NHDOT, 7 Hazen Drive, PO Box 483, Concord, NH 03301-0483	
1.3 Contractor Name R & R Communications Inc.		1.4 Contractor Address PO Box 10383, Swanzey, NH 03446	
1.5 Contractor Phone Number 603-3520-1825	1.6 Account Unit and Class Multiple Accounts, See attachment	1.7 Completion Date June 30, 2026	1.8 Price Limitation $249,150.00
1.9 Contracting Officer for State Agency Susan Klasen, P.E., Director of Operations		1.10 State Agency Telephone Number 603-271-6862	
1.11 Contractor Signature Jeffrey A Barden Date: 4/29/24		1.12 Name and Title of Contractor Signatory Jeff Barden, President	
1.13 State Agency Signature Susan Klasen Date: 5/9/24		1.14 Name and Title of State Agency Signatory Susan M Klasen, PE Director of Operations	
1.15 Approval by the N.H. Department of Administration, Division of Personnel *(if applicable)* By: Director, On:			
1.16 Approval by the Attorney General (Form, Substance and Execution) *(if applicable)* By: SB On: 6/21/2024			
1.17 Approval by the Governor and Executive Council *(if applicable)* G&C Item number: G&C Meeting Date:			

Contractor Initials J.B
Date 4/29/24

2. SERVICES TO BE PERFORMED. The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages contractor identified in block 1.3 ("Contractor") to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT B which is incorporated herein by reference ("Services").

3. EFFECTIVE DATE/COMPLETION OF SERVICES.

3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, if applicable, this Agreement, and all obligations of the parties hereunder, shall become effective on the date the Governor and Executive Council approve this Agreement, unless no such approval is required, in which case the Agreement shall become effective on the date the Agreement is signed by the State Agency as shown in block 1.13 ("Effective Date").

3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed.

3.3 Contractor must complete all Services by the Completion Date specified in block 1.7.

4. CONDITIONAL NATURE OF AGREEMENT.

Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds. In no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds by any state or federal legislative or executive action that reduces, eliminates or otherwise modifies the appropriation or availability of funding for this Agreement and the Scope for Services provided in EXHIBIT B, in whole or in part, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to reduce or terminate the Services under this Agreement immediately upon giving the Contractor notice of such reduction or termination. The State shall not be required to transfer funds from any other account or source to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

5. CONTRACT PRICE/PRICE LIMITATION/ PAYMENT.

5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT C which is incorporated herein by reference.

5.2 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8. The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance hereof, and shall be the only and the complete compensation to the Contractor for the Services.

5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement the liquidated amounts required or permitted by N.H. RSA 80.. through RSA 80:7-c or any other provision of law.

5.4 The State's liability under this Agreement shall be limited to monetary damages not to exceed the total fees paid. The Contractor agrees that it has an adequate remedy at law for any breach of this Agreement by the State and hereby waives any right to specific performance or other equitable remedies against the State.

6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/EQUAL EMPLOYMENT OPPORTUNITY.

6.1 In connection with the performance of the Services, the Contractor shall comply with all applicable statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal employment opportunity laws and the Governor's order on Respect and Civility in the Workplace, Executive order 2020-01. In addition, if this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all federal executive orders, rules, regulations and statutes, and with any rules, regulations and guidelines as the State or the United States issue to implement these regulations. The Contractor shall also comply with all applicable intellectual property laws.

6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of age, sex, sexual orientation, race, color, marital stat physical or mental disability, religious creed, national origin, gender identity, or gender expression, and will take affirmative action to prevent such discrimination, unless exempt by state or federal law. The Contractor shall ensure any subcontractors comply with these nondiscrimination requirements.

6.3 No payments or transfers of value by Contractor or its representatives in connection with this Agreement have or shall be made which have the purpose or effect of public or commercial bribery, or acceptance of or acquiescence in extortion, kickbacks, or other unlawful or improper means of obtaining business.

6.4. The Contractor agrees to permit the State or United States access to any of the Contractor's books, records and accounts for the purpose of ascertaining compliance with this Agreement and all rules, regulations and orders pertaining to the covenants, terms and conditions of this Agreement.

7. PERSONNEL.

7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.

7.2 The Contracting Officer specified in block 1.9, or any successor, shall be the State's point of contact pertaining to this Agreement.

Contractor Initials N.B
Date 4/29/24

8. EVENT OF DEFAULT/REMEDIES.

8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of fault"):

8.1.1 failure to perform the Services satisfactorily or on schedule;

8.1.2 failure to submit any report required hereunder; and/or

8.1.3 failure to perform any other covenant, term or condition of this Agreement.

8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:

8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) calendar days from the date of the notice; and if the Event of Default is not timely cured, terminate this Agreement, effective two (2) calendar days after giving the Contractor notice of termination;

8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;

8.2.3 give the Contractor a written notice specifying the Event of Default and set off against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any Event of Default; and/or

8.2.4 give the Contractor a written notice specifying the Event of Default, treat the Agreement as breached, terminate the Agreement and pursue any of its remedies at law or in equity, or both.

9. TERMINATION.

9.1 Notwithstanding paragraph 8, the State may, at its sole discretion, terminate the Agreement for any reason, in whole or in part, by thirty (30) calendar days written notice to the Contractor that the State is exercising its option to terminate the Agreement.

9.2 In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall, at the State's discretion, deliver to the Contracting Officer, not later than fifteen (15) calendar days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. In addition, at the State's discretion, the Contractor shall, within fifteen (15) calendar days of notice of early termination, develop and submit to the State a transition plan for Services under the Agreement.

10. PROPERTY OWNERSHIP/DISCLOSURE.

10.1 As used in this Agreement, the word "Property" shall mean all data, information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.

10.2 All data and any Property which has been received from the State, or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.

10.3 Disclosure of data, information and other records shall be governed by N.H. RSA chapter 91-A and/or other applicable law. Disclosure requires prior written approval of the State.

11. CONTRACTOR'S RELATION TO THE STATE. In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.

12. ASSIGNMENT/DELEGATION/SUBCONTRACTS.

12.1 Contractor shall provide the State written notice at least fifteen (15) calendar days before any proposed assignment, delegation, or other transfer of any interest in this Agreement. No such assignment, delegation, or other transfer shall be effective without the written consent of the State.

12.2 For purposes of paragraph 12, a Change of Control shall constitute assignment. "Change of Control" means (a) merger, consolidation, or a transaction or series of related transactions in which a third party, together with its affiliates, becomes the direct or indirect owner of fifty percent (50%) or more of the voting shares or similar equity interests, or combined voting power of the Contractor, or (b) the sale of all or substantially all of the assets of the Contractor.

12.3 None of the Services shall be subcontracted by the Contractor without prior written notice and consent of the State.

12.4 The State is entitled to copies of all subcontracts and assignment agreements and shall not be bound by any provisions contained in a subcontract or an assignment agreement to which it is not a party.

13. INDEMNIFICATION. The Contractor shall indemnify, defend, and hold harmless the State, its officers, and employees from and against all actions, claims, damages, demands, judgments, fines, liabilities, losses, and other expenses, including, without limitation, reasonable attorneys' fees, arising out of or relating to this Agreement directly or indirectly arising from death, personal injury, property damage, intellectual property infringement, or other claims asserted against the State, its officers, or employees caused by the acts or omissions of negligence, reckless or willful misconduct, or fraud by the Contractor, its employees, agents, or subcontractors. The State shall not be liable for any costs incurred by the Contractor arising under this paragraph 13. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the State's sovereign immunity, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

Contractor Initials N.B

Date 4/29/24

14. INSURANCE.

14.1 The Contractor shall, at its sole expense, obtain and continuously maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:

14.1.1 commercial general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than $1,000,000 per occurrence and $2,000,000 aggregate or excess; and

14.1.2 special cause of loss coverage form covering all Property subject to subparagraph 10.2 herein, in an amount not less than 80% of the whole replacement value of the Property.

14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or any successor, a certificate(s) of insurance for all insurance required under this Agreement. At the request of the Contracting Officer, or any successor, the Contractor shall provide certificate(s) of insurance for all renewal(s) of insurance required under this Agreement. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference.

15. WORKERS' COMPENSATION.

15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A *("Workers' Compensation")*.

15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. The Contractor shall furnish the Contracting Officer identified in block 1.9, or any successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.

16. WAIVER OF BREACH. A State's failure to enforce its rights with respect to any single or continuing breach of this Agreement shall not act as a waiver of the right of the State to later enforce any such rights or to enforce any other or any subsequent breach.

17. NOTICE. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.

18. AMENDMENT. This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State New Hampshire unless no such approval is required under the circumstances pursuant to State law, rule or policy.

19. CHOICE OF LAW AND FORUM.

19.1 This Agreement shall be governed, interpreted and construed in accordance with the laws of the State of New Hampshire except where the Federal supremacy clause requires otherwise. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party.

19.2 Any actions arising out of this Agreement, including the breach or alleged breach thereof, may not be submitted to binding arbitration, but must, instead, be brought and maintained in the Merrimack County Superior Court of New Hampshire which shall have exclusive jurisdiction thereof.

20. CONFLICTING TERMS. In the event of a conflict between the terms of this P-37 form (as modified in EXHIBIT A) and any other portion of this Agreement including any attachments thereto, the terms of the P-37 (as modified in EXHIBIT A) shall control.

21. THIRD PARTIES. This Agreement is being entered into for the sole benefit of the parties hereto, and nothing herein, express or implied, is intended to or will confer any legal or equitable right, benefit, or remedy of any nature upon any other person.

22. HEADINGS. The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

23. SPECIAL PROVISIONS. Additional or modifying provisions set forth in the attached EXHIBIT A are incorporated herein by reference.

24. FURTHER ASSURANCES. The Contractor, along with its agents and affiliates, shall, at its own cost and expense, execute any additional documents and take such further actions as may be reasonably required to carry out the provisions of this Agreement and give effect to the transactions contemplated hereby.

25. SEVERABILITY. In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.

26. ENTIRE AGREEMENT. This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire agreement and understanding between the parties, and supersedes all prior agreements and understandings with respect to the subject matter hereof.

Contractor Initials N.B
Date 4/29/24

EXHIBIT-A, Special Provision

Section-14. Insurance and Bond

To include comprehensive automobile liability insurance covering all motor vehicles including owned, hired, borrowed and non-owned vehicles, in amounts not less than $1,000,000.00 combined single limit for bodily injury and property damage. (amend 14.1.1).

EXHIBIT-B

SECTION-1, Scope of Services

1) Provide all labor, equipment, repair parts, software, transportation and lodging (prior approval for lodging required) necessary for maintaining the Department's statewide land mobile radio (LMR) communication equipment to meet specifications of item #2. The Statewide LMR system is comprised of Harris (formerly M / A COM Inc.), Motorola Inc., Icom Inc., Kenwood, Tait, Bosch Telex Communications, and Cambium microwave equipment. The system as of March 30, 2024, consists of the equipment outlined in the Dispatch, UHF & VHF land mobile, VHF-Aeronautic, and VHF-Marine equipment tables. See Pages-___, ___, ___, and ___ of Exhibit-B.

   These types and quantities may increase or decrease during the contract period as specified by the Department's current durable inventory. The contracted services shall be provided for all such equipment not otherwise covered or restricted by manufacturers' or point of sale warranty but also limited to LMR equipment owned by the Department.

   Note: The term ***unscheduled*** shall be synonymous with word ***unplanned*** when reference is made to maintenance, service, and or repair. The term ***failed*** shall be synonymous with a system or equipment end item that no longer functions or meets specifications as defined by item #2

2) Specifications in addition to original manufacturer's shall include the commissioning data or system acceptance, normal performance specifications, normal device functionality, previous acceptance level, as built diagrams, owner preferred (documented) configuration settings, and applicable Federal Communications Commission (FCC) authorization(s).

3) Provide requested service and or **unscheduled repair** to failed radio equipment governed by Federal Code of Regulation (CFR) 47, Part-80, **Maritime** and Part-87, **Aviation** services by retention of a FCC licensed repair technician with a valid first or second class radiotelegraph operator's license or a general radiotelephone operators license See item # 15 for more details.

4) Provide for ***annual*** physical and **preventive maintenance inspections (PMI) of the land-mobile radio system dispatch equipment, repeater stations, control stations, remote controls**, and **solar charged battery banks**, completing all necessary adjustments ***tasks and documentation*** outlined in applicable NHDOT PMI task lists to meet specifications as summarized in item #2 at the ***fixed price*** as submitted in Exhibit-C, Sections 1, 2 and 3. The minimum-required preventive maintenance task list(s) is included in.

5) Provide for **Preventive Maintenance Inspections (PMI)** of Department designated mobile and portable radios on a 24-month interval including all associated equipment at their assigned location or mutually agreeable site(s), completing all necessary updates and PMI ***tasks and documentation*** to meet specifications as summarized in item #2 at the ***fixed (unit) price*** as submitted in Exhibit-C, Section-1. The minimum-required preventive maintenance task inspection list(s) is included in.

6) Contractor shall contact NHDOT, Communications Supervisor the ***same*** business day for Department generated issue number(s) for problem(s) discovered during PMIs that are cause for repair outside the scope of a PMI. Additionally, for problems found but ***not*** corrected on the spot during the scheduled PMI, the contractor shall report this and seek an Issue number for scheduling and job tracking purposes on the day of discovery or as soon as practical immediately following.

7) Contractor shall stock at their own expense and have readily available common replacement parts for Department owned equipment and is responsible to facilitate timely on-site repairs to the most prevalent model(s) LMR mobile and portable radio equipment with these parts. Parts not made available for repair ***on the day of discovered need*** shall be reported to Communications Supervisor through the Department's job reporting system with explanation of reason(s) for non-availability and an explanation of when the part will be made available for use and repair of Department owned LMR equipment.

8) Provide for **unscheduled repairs to a failed repeater system**, including but not limited to: repairs to the tower-mounted antenna and cable system, repeater transceiver equipment, antenna combiner or receiver multi-coupler equipment, repairs to restore alternating current (AC) power at communications sites from the power supplying wall outlet to the radio equipment, and repairs necessary to maintain or restore direct current (DC) power at the Mount Cardigan repeater site, Orange NH, that consists of wet-cell storage batteries, solar panels, propane-powered generator and related load management equipment thus meeting the specifications as summarized in item #2 at ***cost(s) per hour*** as specified in Exhibit-C, Section-4 and Section-6.

9) Provide for **unscheduled repairs to failed control (base) stations** including but not limited to: repairs to control station equipment, repairs to failed station tower-mounted antenna systems, and repairs necessary to restore electric power from the AC power-supplying wall outlet to the communications equipment to meet specifications as summarized in item #2 at a ***cost per hour*** as specified in Exhibit-C, Section-6.

10) Provide for **unscheduled repairs** to failed control (base) station **antenna and grounding systems** with various mounting configurations that are ***not*** tower mounted, such as but not limited to, antennae that are accessible from a ladder, rooftop, and or any antenna mounting structures not considered a tower and not at the ***rate(s)*** identified for Section-4, but equal to the bid rate of unscheduled repairs to control (base) stations at a cost per hour as specified in Exhibit-C, Section-6, "Base Stations"

11) Provide for **routine and emergency** unscheduled **repairs to failed dispatch locations** including but not limited to: repairs to dispatch location radios or radio remote control equipment, console or remote control premises wiring, evaluation of end to end performance and functionality of leased telecommunications lines that comprise the dispatch communication network, repairs necessary to restore electric power at dispatch locations sites from the AC power-supplying wall outlet to the communications equipment to meet the specifications as summarized in item #2 at a ***cost per hour*** as specified in Exhibit-C, Section-6.

12) Provide for **unscheduled repairs to desktop (radio) remote controls** including but not limited to: repairs to remote controls, interconnection cables & connectors, premise wiring, evaluation of end to end performance and functionality of leased telecommunications lines, reporting of faulty leased lines, and repairs necessary to restore electric power at the desktop remote site from the AC power-supplying wall outlet to the communications equipment thus meeting the specifications as summarized in item #2 at a ***cost per hour*** as specified in Exhibit-C, Section-6.

13) Provide for **unscheduled repairs to failed mobile radios** at their assigned locations, or at the Department's prerogative, a mutually agreeable site. Repairs to failed mobile radio equipment to include but are not limited to; transceiver, microphone, internal / external speaker, mobile antenna system, interconnection cables, connectors, power conditioners, DC to DC converters, DC power cables and connectors, repairs necessary to restore electrical power from battery (or pre-designated point of origin) to radio equipment thus meeting the specifications as summarized in item #2 at a ***cost per hour*** as specified in Exhibit-C, Section-6.

Note: The Department owns and operates approximately 75-each, 24-volt vehicles

14) **Provide for unscheduled repairs to failed portable radios** at contractor repair facility or mutually agreeable location. Restoring portable radio equipment to specifications as summarized in item #2 at a ***cost per hour*** as specified in Exhibit-C, Section-6.

15) Provide for **unscheduled repairs to Aeronautic Unicoms** and or **Marine radios** at their assigned locations, or at the Department's prerogative, a mutually agreeable site. Repairs to failed equipment to include but not limited to transceiver, microphone, internal / external speakers, antenna system connectors, surge protection, repairs necessary to restore electrical power to radio equipment from the AC power-supplying wall outlet to the communications equipment meeting specifications as summarized in item #2 at a ***cost per hour*** as specified in Exhibit-C, Section-6.

16) Results of all PMI inspections, requested evaluations, unscheduled repairs, adjustments or contractor recommendations shall be forwarded in a Microsoft compatible electronic document within ***4-Calendar days*** of contractor action to NH DOT, Communications Supervisor. Handwritten records will only be excepted under conditions when standard forms of internet telecommunications are unavailable such as during a declared emergency.

a) Electronic documents shall be stand alone for unscheduled repairs and the resulting resolution report, required measurements, and notes.
b) Electronic documents for PMIs may be a composite document for all like LMR equipment such as the repeaters, mobiles, portables, that is updated, that the Communications Supervisor is alerted to on a shred drive on on-going basis.
c) Electronic documents for dispatch systems shall be separate document for all dispatch locations but will include a variety of LMR equipment types and documented tasks.
d) Electronic Documents shall be searchable for document title, dates, words, locations, names, and serial numbers.
e) All electronic documents shall be editable upon receipt by Department for updating, correction, and storage purposes.

f) Electronic documents for ***unscheduled maintenance*** shall include but not be limited to; issue number, title of job as conveyed to contractor through DOT job correspondence, and subsequent revisions of titles, work location, equipment model number, original manufactures serial number, date the service was initially requested, date(s) service was rendered, repair or replacement parts used, the repair technician's name or identification number, and all documented measurements and tasks otherwise required during preventive maintenance activities, and finally a brief (reported or found) problem resolution report.

g) Electronic document for ***scheduled maintenance (PMI)*** shall include location the work was performed, last date equipment was inspected or repaired, the newly completed PMI inspection date, the model number and serial number of equipment, the technician's name or identification number, documented results of <u>all</u> required preventive maintenance inspection and testing tasks and readings, identified with inspection task item number, and free form comment(s)

17) ***On-site response*** to unscheduled maintenance request by Department shall be no greater than thirty 32 hours or four (4) normal business days (weather and travel conditions permitting). Department shall transmit issue numbers for all such requested work. Contractor shall credit the Department 4-hours of contracted bid rate (per applicable radio equipment type and travel rate) for each eight (8) hours of delay in on-site response after thirty-two (32) business hours.

18) ***Immediate on-site response***, of less than twenty-four (24) hours is required for ***emergency*** repairs to Items-3, 8, 9, 10, 11, and 12 as requested by the Department. The Department will exercise discretion over prioritizing multiple service requests or failures. Contractor shall credit Department Eight (8) hours of contracted rate (per applicable radio equipment type and travel rate) for every four (4) hours of delay in immediate response after twenty-four (24) hours. Other unscheduled repairs shall be within normal (contractor) working hours and shall be performed in accordance to item #14, weather and traveling conditions permitting, unless otherwise requested by Contractor then authorized or waived by the Department. That authorization may be obtained from the Communications Supervisor or Bureau of TSMO Administrator

19) Provide for ***installation*** of Department spares for mission critical communication end item components. The use & distribution of supplied Departmental spares shall be at the discretion and authorization of the Department's Communication Supervisor.

20) Provide for (computer) drafting of radio equipment configuration files, and file transfer of equipment configuration files, firmware, software, and or feature updates upon request, that are not part of file transfers as required by scheduled maintenance, at a ***cost per hour*** as specified in Exhibit-C, Section-6.

21) Provide mobile radio, antenna, and associated power system installations for trunk & dash mounted mobile radios and accessories at vehicles' assigned location or location designated by Department for a fixed rate as specified in Exhibit-B, Section -5 (with travel allowance specified in Exhibit –C, Section -6.

22) Provide for new or replacement **installations or inspections** of existing fixed base or repeater **antennae** with (NHDOT) standardized grounding, bonding and electrical surge protection systems by retention of a tower crew certified in tower climbing and personnel rescue at hourly rate that covers labor and travel cost per person with all personnel required to complete a specified installation, replacement or inspection at ***cost(s) per hour*** as specified in Exhibit-C, Section-4.

23) Travel allowances (rate) **to** the job site(s) for installation work and unscheduled maintenance shall be computed **from** the Contractor's or Subcontractor's ***closest*** repair facility or location traveled from, whichever is closer that are located within the State of New Hampshire or closest NH state border if travel begins outside of NH, and shall be identified by the hourly rate in Exhibit –C, Section-6 that covers all cost self-identified by contractor for a combination of vehicle(s) and personnel. Travel allowance shall not be calculated for scheduled maintenance inspections or unscheduled maintenance performed in conjunction with scheduled inspections for repeater sites. The applicable bid hourly or flat rate shall be calculated for non-scheduled maintenance work while on site. However, the contractor is encouraged self-schedule and perform scheduled maintenance on all other fixed location, mobile and portable LMR assets due for PMIs while on-site performing unscheduled maintenance.

24) ***Annual*** physical inspections and preventive maintenance for all equipment locations including District and Bureau offices ***shall be scheduled by the contactor*** and shall result in the least disruption to ongoing operations as determined by District Engineer or Bureau Administrator. Contractor shall provide 48-hour advanced notice to the District Office for repeater and dispatch equipment preventive maintenance inspections.

25) To what extent a failed equipment will permit, Contractor shall first ***document results*** of performed PMI procedures on failed equipment ***prior*** to undertaking other repairs necessary to restore equipment to conditions and specifications as outlined in item #2.

26) Repair costs for parts and labor covered under ongoing or remaining manufacturers' warrantees are not included in this contract.

27) Where equipment repair involves a combined part and labor cost that is greater than (>) one-half (1/2) the (equal equipment) ***replacement cost,*** the contractor shall contact the NH DOT Communications Supervisor prior to facilitating repair.

28) The Department reserves the right to make additions and / or deletions to this Scope of Services as required by budgetary restraints, State and Federal regulation, or unrealized requirements.

29) The Department requests that bidders for this contract provide the following information which is believed to be critical in the overall maintenance of the Department's radio system. Failure to provide this information may result in the disqualification of the request for bid submission.

a. A ***brief profile of the contractor's employees*** that would be charged with maintenance and repair of the Department's radio system. This information should include at a minimum, employees name, job title, experience, qualifications, and FCC issued General Radio Telephone Operators (GROL) license number. Additionally, profile should describe any specific experience or training employee has maintaining or installing, Motorola Inc., Harris Inc., (formerly M / A Com Inc.) Bird TX / RX Systems Inc., Bosch Telex Communications Inc., Cambium Networks Inc., equipment as well as all varieties of communications consoles and portable radios.

b. A ***description of repair facilities***, radio and telecommunications test equipment, specialized repair and installation equipment, computer equipment, computer software, and service vehicles including all-terrain vehicles (ATV) and snowmobiles.

Note: The ***successful bidder***, shall provide a certificate of calibration traceable to National Institute Standards & Technologies (NIST) ***for each*** piece of electronic test equipment intended for use maintaining Department's radio system that is to be used to measure parameters governed by ► FCC regulations and licensee authorizations such as, (RF) power, frequency and bandwidth.

c. ***A description of the contractor's after hours service response plan*** including a commitment to a guaranteed (phone) call back time with an estimated time of travel to contractor's repair facility including State and Federal holidays.

d. The successful bidder /contractor shall be responsible for insuring all existing, and future, employees charged with maintenance of Department systems, subsystems, and components, are familiar with the task list(s) associated with each preventive maintenance routine, and Department required documentation routine he or she shall be charged with performing.

e. A list of no less than two (2) radio communication systems comprised of the same equipment type and complexity maintained by Contractor with contact information of references shall be submitted for consideration.

30) Billing for services will be presented to the Department's bureaus as detailed in Exhibit-C, Section-8.

EXHIBIT-B

SECTION-2, PREVENTIVE MAINTENANCE TASK LISTS

Annual* and *bi-annual physical inspections and preventive maintenance to be performed on each type of land-mobile radio equipment shall include, but not be limited to, the following inspection items. The preventive maintenance inspection (PMI) is to be completed during an initial inspection and if any follow-up repairs or corrective action outside the scope of task list are required, this action should be ***self-scheduled*** and completed as soon as practical. Work request numbers shall be requested and obtained from Department's Communications Supervisor or designee to track the follow-up unscheduled maintenance or repairs. The following types of corrective action shall be indicative of ***preventive maintenance***; cleaning, tightening, securing and retying cables, replacing electrical or radio frequency (RF) connections, removing foreign debris & cleaning components or sub-assemblies, measurement, recalibration, adjustment of operating parameters of end item equipment. Replacement of worn or broken indicators and controls, replacement of broken or worn-out antenna whips, loading coils, microphone parts or assembles. Writing updated radio equipment configuration file. PMI reports shall be submitted to the Communications Supervisor, or designee within 4 business days. The report shall contain contractor provided technical readings and notes on Department approved electronic document. Updates to documents information shall be communicated to Department Communications Supervisor through a work request response email per occurrence. All costs for travel time, including the use of on and off-road vehicle(s), for physical inspections and preventive maintenance shall be included in the unit bid price for the PMI of the specific equipment type.

I. Repeater(s) & Site

A. Mechanical Inspection to Include:

1. Visual inspection of antenna and cable system from ground with visual magnification aid. i.e. binoculars. Photographs may be requested from Department.

    a. Inspect antenna mount attachments
    b. Inspect cable attachment to tower or fixture
    c. Inspect for any signs of ice or other forms of damage to cables.
    d. Inspect for loose, corroded, detached ground or bonding connection.
    e. Inspect for physical mounting or electromagnetic field conflicts with co-site users.

2. Visual of infrastructure

    a. Inspect the antenna supporting structure for any obvious signs of wear, damage, vandalism or loose guy wires.
    b. Inspect equipment shelter for any obvious problems such as rodents, vandals, water leaks, and environmental controls that are detrimental to NH DOT equipment.
    c. Inspect ground and bonding connections between NH DOT equipment and external ground grid elements.

3. Visual inspection of repeater and antenna combiner system. (If applicable) Note on report any deficiencies

    a. Inspect cabinets for ease of access and security and integrity.
    b. Inspect all cables, RF and ground connectors internal to the shelter for tightness cleanliness and electrical integrity.
    c. Inspect for any signs of water or rodent damage.
    d. Insect for proper electrical breaker labeling and manual cutoff operation.
    e. Check for missing 50-ohm terminations on RX multi-coupler and TX combiner rack.
    f. Verify service literature and hand mic' is stored in DOT equipment cabinet.
    g. Replace worn out door seals
    h. Inspect cabinet electric fans and clean air filters. Note completion of cleaning task.
    i. Inspect under (old style) RF power Amplifier cover, clean inside PA removing all dust and debris. Note completion
    j. ▼Check for posting of transmitter's current Federal Communications Commission (FCC) authorization.

Please Note on the PMI report <u>any</u> items they warrant further inspection, major corrective action, or notification to responsible party. Contractor shall follow-up, follow through on corrective actions that are part of PMI.

As suggested by Contractor and or requested by NHDOT, Contractor shall perform closer inspection of tower mounted antenna system(s) by means of their choosing.

The New Hampshire Department of Natural and Cultural Resources, (NH DNCR) Division of Forest and Lands is the communications site manager for all NH Department of Transportation repeater sites with the exception of the locations listed below. Specific points of contact for each exception site and tower vary but shall be provided by Department. Existing site standards shall be provided to contractor.

Moose Mountain- New Hampshire Public Broadcasting System.
Mount Ascutney- Electronic Communications Association, Inc.
Mount Uncanoonuc- Town of Goffstown (Police)
Mount Whittier- Property Management, Whittier Communications Inc.
Mount Whittier – Tower, Blue Sky Towers, LLC

B. Electrical Inspection to Include (Document as found values prior to adjustment)

i. Power Supplies (PS)

1. Measure and record AC line voltage at PS outlet.
2. Measure and record the supply DC voltage while in standby and while under load (transmitting)

ii. Transmitter measurements- Adjust as required

1. ► Measure and record RF power output from transmitter

(TX) power amplifier (PA).

2. Calculate and record voltage standing wave ratio (VSWR) between TX and combiner or duplexer cavity.
3. Measure and record RF power at the output of combiner cavity.
4. Calculate and record the VSWR between the output cavity or duplexer and TX antenna cable.

$$VSWR = \frac{1 + \sqrt{\frac{P_{rev}}{P_{fwd}}}}{1 - \sqrt{\frac{P_{rev}}{P_{fwd}}}}$$

Where P_{rev} = reverse power
P_{fwd} = forward power

5. ► Measure and record repeater voice frequency modulation

(FM) deviation.

6. ► Measure and record repeater continuous tone coded sub-

audible squelch (CTCSS) FM deviation

g. ► Measure and record carrier frequency of operation (error)
h. Investigate PA alarm light. (if applicable)

iii. Receiver Measurements-Adjust as necessary

1. Measure and record receiver (RX) sensitivity through RX multi-coupler or duplexer.
2. Measure and record the signal level needed for the RXer to achieve 12-dB SNR without antenna system and terminated into a load.
3. Using a directional coupler, measure and record both signal levels needed to achieve 12-dB signal-to-noise ratio (SNR) through RX multi-coupler or duplexer **with and without** RX site antenna. See Diagram-1
4. Observe and note any co-channel users or adjacent channel interference that occurs while CTCSS decode is disabled.
5. Calculate and record the difference (if any) in decibel signal level between the two SNR readings in step b.

► Denotes FCC license parameter
▼ Denotes Site Standard

Signal to Noise test setup with Directional Coupler

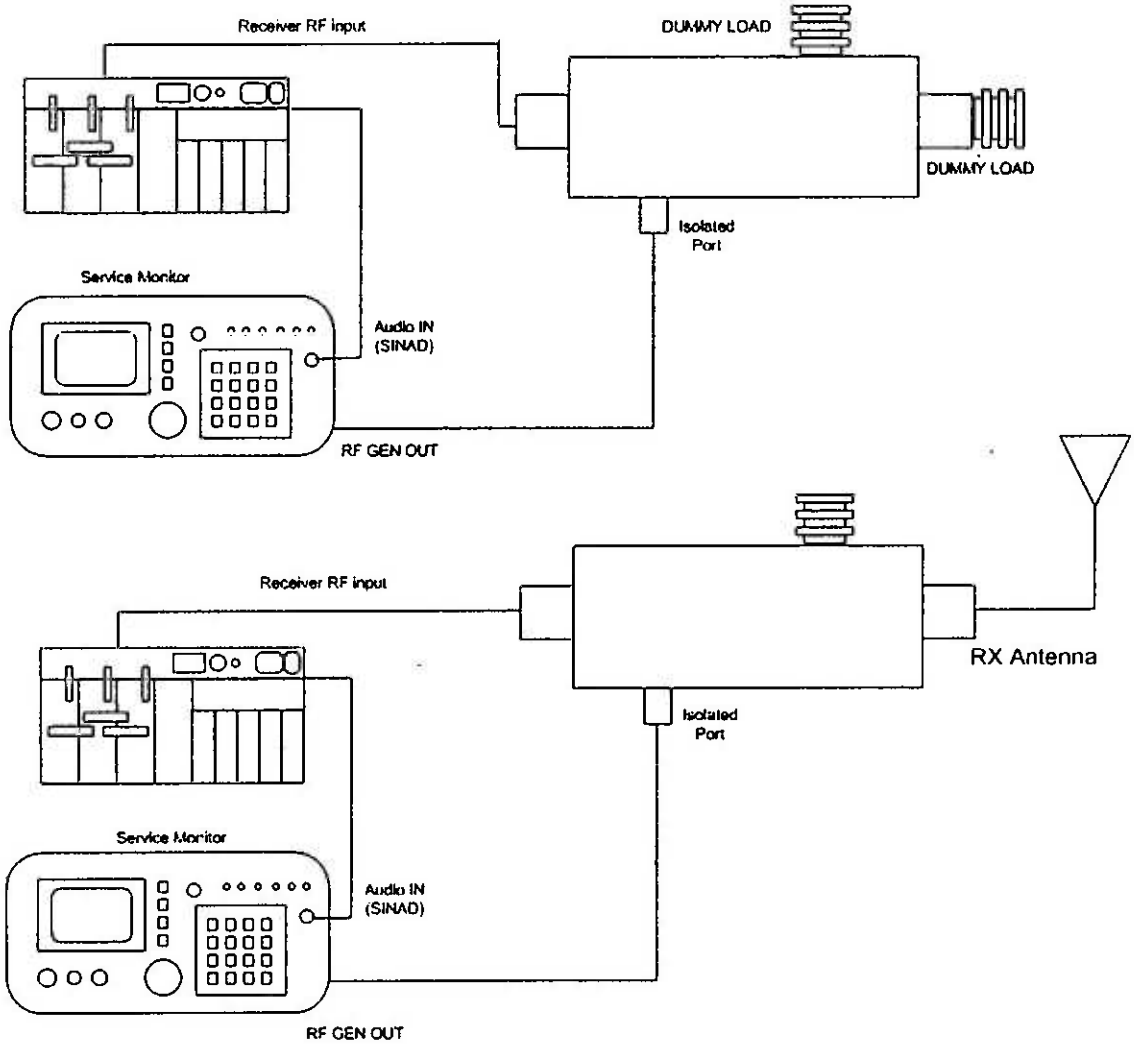

Diagram-I

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II. **Base Stations** Either Harris Inc., Mastr III, M7100, Motorola XTL2500 or Kenwood; TK5820, TK 5810, and NX-5000. In addition to stand-alone locally operated base radios, this inspection routine shall be used for local and remote dispatch base stations associated with Dispatch Center preventive maintenance inspections.

A. Mechanical Inspection to Include:

1. Visual inspection of antenna and cable system from ground level with visual magnification aid. i.e. binoculars

    a. Inspect antenna mount attachment(s)
    b. Inspect cable attachments to mounting fixture and building facility.
    c. Inspect for any signs of damage to exposed RF cable(s).
    d. Inspect for loose, corroded, detached ground or bonding connections of antenna system and base radio.
    e. Check for presence of a Polyphaser ® in antenna system
    f. Note on inspection report the specific type (s) and estimated length of antenna system cable (s).
    g. ► Record on inspection report the polarization of the antenna.
    h. ► Record on inspection report the height, in feet at the tip of the antenna to nearest foot.

2. Visual of infrastructure

    a. Inspect the antenna supporting structure for any obvious signs of wear, damage. Record model number of antenna if known.
    b. Inspect ground and bonding connections between equipment and external ground field elements.
    c. Verify presence of an earth terminal ground rod that antenna system is attached to. Note exceptions
    d. Inspect wall or ceiling outlet that provides commercial power to base station.
    e. Inspect RF cable entry port weather seal. Maintain as needed.

3. Visual of Local and Remote Base Station

   a. Inspect for any signs of rodent or water damage.
   b. Inspect radio alternating current (AC) power cord and plug.
   c. Inspect telco interconnect wiring (for remote base)
   d. Inspect telco ethernet wiring associated with RoIP bridge and premise connection.
   e. Inspect main RF cable, RF cable stub and connector that attaches to radio. Insure mini UHF tightness.
   f. Check for presence of a test microphone at remote sites. (leave mic' disconnected from base at remote sites)
   g. Check physical condition of microphone at local and remote control station.
   h. Note on report if radio power supply is bonded to central electrical ground via electric cord. (i.e. no 3-prong adaptors)
   i. Check electric outlet for Ground Fault with test light
   j. Note on report if Chassis of station is bonded to site ground
   k. Clean inside and outside equipment as needed.
   l. ▼Verify the FCC transmitter authorization (License) is not expired if posted, remove outdated expired hardcopies, and notify Communication Supervisor of the need for an updated copy for posting.

B. Electrical Inspection to Include (Document ***as found*** values prior to changes or adjustment)

   1. Power Supply

      a. Measure and **record** AC input voltage
      b. Measure and **record** the DC voltage while in standby and while transmitting.

   2. Software / Firmware

      a. As requested, read radio program file and save (until deemed unneeded) preserving any features function unique to radio
      b. **Record** a configuration ***file name*** for the radio.
      c. Update file, with appropriate configuration or change and edit as requested by NHDOT.
      d. Update flash version as necessary.
      Kenwood TK5820 as recommended by manufacturer.
      f. Kenwood NX 5820 as recommended by manufacturer.
      d. **Record** version found and version used for update.

3. Transmitter (TX) measurements- Adjust as required. Document *as found* and *as corrected* values.

   a. Verify local push-to-talk (PTT) TX operation.
   a. ► Measure and **record** RF power output from transmitter.
   b. Calculate and **record** voltage standing wave ratio (VSWR) between TX and antenna cable.
   c. ► Measure and **record** TX voice frequency modulation (FM) deviation.
   d. ► Measure and **record** TX CTCSS only FM deviation.
   e. ► Measure and **record** error of carrier frequency of operation.
   f. With assistance if needed, verify **remote** TX channel selection and TX PTT operation for <u>all</u> base channels when operated remotely.

4. Receiver (RX) measurements & Scan operation

   a. Measure and **record** in dB RX sensitivity at antenna jack.
   b. Verify CTCSS decode, decode enable / disable operation.
   c. While CTCSS decode is disabled, over-modulate a test frequency with a 1-kHz test tone and **record** what level of (over) modulation the RX is unable to demodulate.
   d. Verify local and remote scan disable and enable, if applicable.
   e. Verify scan, scan resume operation.
   f. Verify power-up default settings if applicable. (channel, scan, volume audio level etc.)
   g. Check for and Note any adjacent channel interference or co-channel user activity.
   h. When applicable, note the least amount of modulation of receive test signal that can be used to achieve a data (RX busy) indication on the RoIP bridge. Note, RF carrier only may achieve a data (RX busy) indication in some cases

► Denotes FCC license parameter
▼ Denotes Site Requirement

5. Radio over IP remote control operation, when applicable

   a. Note and **record** model and serial numbers of the RoIP bridge under test.

   b. Inspect and use user display information and user selection controls, ensure proper operation, note any deficiencies.

   c. Note and **record** hardware and software version found in the menu of display.

   d. Use telco' PTT handset to locally / remote control and verify transmit operation of the base radio when RoIP bridge is collocated with base radio.

      i. Insure proper push to talk indication.
      ii. Measure and **record** voice modulation deviation of radio transmitter under test.
      iii. Coordinate voice transmit test count with remote radio. operator, measure and record remote transmit. modulation achieved by remote operator.

III. Dispatch Equipment

A. Visual of infrastructure all locations

1. Inspect all 120-volt power source, check for proper electric breaker labeling and manual cutoff operation. Label breaker panel as needed.
2. Inspect 12-volt power supplies and wiring for PC console, HB4 plus headset adaptor, and each Bosch, Telex IP-223 / 224, IP-2002 and local dispatch base(s).
3. Verify uninterruptible power source (UPS) operation.
4. Inspect any & all associated premise telecommunications network wires up to local Ethernet Switch and or landline Demarcation point.

B. General Inspection of Bosch PC Console equipment at Enfield and Bedford.

1. Inspect PC monitor for quality and cleanliness correct and clean as necessary.
2. With forced air, remove debris from beneath keys on keyboard.
3. Inspect physical condition and action of user controls, keys, buttons, displays, foot-switch, and microphone as applicable.
4. Inspect condition of interconnection cabling. Tie up and bundle and protect all cables as necessary.

B. General Inspection of Bosch IP -2002, remote control, District-1, District-3, District-6.

1. Verify power-on state leads to normal operation.
2. Verify the display operates correctly
3. Verify receive quality and level control of audio with received voice test
4. Verify all push-to-talk operations available on IP-2002
5. Verify transmit voice quality by monitoring test transmission with a radio. Voice test should be conducted multiple times over period of time to insure digital cell modem signals have good quality of service. Note quality of audio issues related to either the RoIP equipment or carrier service.

C. Electrical Measurements- Adjust as necessary

1. With 1,000 Hz test tone, measure and record in decibels (dB) the minimum audio signal level necessary to generate busy data generation on both channels of all IP-223 or IP-224. Note radio channel-name.
2. Measure and record in dB the average voice level during transmit on each wire line of each console channel. Perform functional test with Telex test handset.
4. Obtain IP-223 / 224 web page and verify and record revision number of firmware.
1. Update IP-223 or IP-224 firmware if necessary. Note if updated

D. Functional Test

1. Verify UPS operation by simulated AC power interruption 3-minutes. (District-2 and District-5)
2. Inspect and note UPS battery service date as marked on battery(s)

E. Specific to Swanzey Dispatch Location

1. General Inspection of 3-Telex, C-6200

   a. Inspect display for legibility and accuracy. Correct as necessary.
   b. Inspect physical condition and action of user controls, keys, buttons, displays, foot-switch, and microphone.
   c. Inspect for any corrosive damage to exterior console positions.
   d. Inspect condition of interconnection power and data cabling.
   e. Check time clock(s) for local time accuracy.

2. Functional Check

   a. Verify all available push-to-talk (PTT) functions of console and audio with microphone.
   b. Verify TX indications of both consoles on all channels used.
   c. Verify channel mute-functions.
   d. Verify all channel bank and channel selection operation.
   e. Verify any cross muting or interlock operation.
   f. Verify audio volume adjustment / settings

 Initials [illegible] Date: 4/27/[illegible]

NHDOT Dispatch Equipment Schedule for Annual Preventive Maintenance

Lancaster District-1	Lancaster Office Local Base Station-1 Local Base Station-2	Mt Prospect, Lancaster Remote Base Station-1	Telex IP 2002 Remote IP223
Enfield District-2	Enfield Office Remote Base Station-1 Local Base VHF Station-2	Moose Mountain, Hanover Remote Base Station-1 Remote Base Station-2	Two PC Consoles Bosch C-soft
Gilford District -3	Gilford Office Local Base Station -1 Local Base Station -2	Tamworth Patrol Section Remote Base Station -1	Telex IP-2002 Remote IP-223
Swanzey District-4	Swanzey Office Remote Base Station-1	Route 9, Westmoreland RWIS site Remote Base Station-1	3-Telex 6200 Consoles 2- IP-223
Bedford District-5	Bedford Office Remote Controlled / local Base Station	Bedford Office Radio Shelter Remote Base Station-1 Remote Base Station-2	Two PC Consoles Bosch C-Soft
Durham District-6	Durham Office Local Base Station -1 Local Base Station -2	Turnpike, Rochester Maint. Section Remote Base Station - 1	Suitcase Telex IP 2002 Disp. 2nd Control Head
Portsmouth Bridge Maintenance	Ranger Way Office Local VHF Base Station-1		No Console
Portsmouth Lift Bridge	Sara M. Long Bridge 1- Local LMR Base 1- Marine Radio Base		No Console 2nd Control Head
Portsmouth Lift Bridge	Memorial Bridge 1- Local LMR Base 1- Marine Radio Base		No Console 2nd Control Head

Revised March 2024

Initials AB Date: 4/2/24

IV. Portable Radios, including accessories.

A. Mechanical Inspection to Include

1. **Record** manufacture's Serial number
2. **Record** manufacturer's model, make or trade name.
3. Inspect chassis, display, escutcheon, battery case, antenna, and carrying case and speaker microphone when applicable.
4. Inspect battery contact plating, **Note** metal composition and condition
5. Inspect charger (battery) pocket for cleanliness Clean as needed
6. **Record** overall assessment of portable condition: New, fair, good, poor.
7. **Record** specific attributes that contribute to the condition such as damage, stress, cleanliness, corrosion, wear, etc.
8. Check for presence of (NHDOT) date inscription on battery case.
9. Clean all items as needed.
10. Add or Replace 16-channel label as needed.
    Bureau specific channel labels to be provided by Department.

B. Verify current conformance to Department's 16-Channel Frequency plan. Reprogram and update as needed.

C. Test and Measurement

1. Portable Transceiver

   a. Functional Check

      I. Will radio 'power up'?
      II. Will radio transmit a carrier?
      III. Will radio transmit a modulated carrier?
      IV. Will radio provide a receive indication?
      V. Will radio provide recovered receive audio?
      VI. Verify proper functions of applicable user controls

         A. ON-Off /Volume
         B. Channel monitor
         C. Channel / channel bank selection
         D. Scan, Scan channel add and delete
         E. Hi-Low power setting
         F. Back-Light, if applicable

Reference Item #27-Scope of Services when a portable radio fails a functional check. Where equipment repair involves a combined part and labor cost that is greater than (>) one-half (1/2) the (equal equipment) ***replacement cost,*** the contractor shall contact the NH DOT Communications Supervisor prior to facilitating a repair.

b. Receiver Test and Measurement

I. Measure and **record** in dB the receiver sensitivity at a 50 Ω input point to the receiver.
* Alternatively a radiated sensitivity test may be employed when a suitable RF connection adaption is not available. However, test and result must be repeatable.

II. Verify proper receiver indications.

III. Verify proper CTCSS decode.

IV. Verify proper CTCSS decode enable and disable

V. Verify proper Scan indication.

VI. Verify proper Scan-receive operation.

c. Transmit Test and Measurement-document *as found* and *as corrected* values

I. Measure and record HI output power.

II. Measure and record Low output power.

III. Measure and record voice modulation level.

IV. Measure and record CTCSS modulation level

V. Measure & record carrier frequency error either:

2. Battery

   a. Measure and record terminal voltage after a charge time of ½-Hour.
   b. Document
      I. the Model number of the battery
      II. the milli-ampere hour rating the battery
      III. Month and year inscribed on battery

   c. Removed from service and dispose of any and all batteries with inscriptions or OEM markings indicating a service date of greater than 48-months
   d. Inscribe replacement battery(s) with current service date month and year (MM /YYYY).
   e. Replacement battery(s) shall be charged to full potential prior to return of the portable radio to the end user when practical.

D. Replacement batteries requested by the Department and bureaus independent of those provided during contractor PMI routine shall be inscribed with a service date, month and year. (MM /YYYY)

V. Mobile Radios

A. Mechanical Inspection to Include:

1. Visual inspection for damage or wear.

   a. Inspect mobile antenna MOT roof mount and O-ring. Apply silicon as needed to rubber O-ring
   b. **Document by photograph** any alternative method of mobile antenna installation that does not incorporate a proper antenna ground plane by placement of roof mount or by L-bracket mounting for all styles of UHF and VHF antenna. Requirement not applicable to no –ground plane type - antenna
   c. **Document by photograph** any secondary mobile antenna that is too close to State radio antenna and not related to DOT LMR radio service, such as but not limited to scanner, CB, scanner receiver, cellular or other transmitter.
   d. Inspect mobile antenna loading coil and whip, replace as needed.
   e. Inspect complete antenna for any signs of physical, weather or ultra-violet damage. Replace applicable parts
   f. Inspect antenna RF connector for looseness proper installation. Note: Mini UHF cannot be finger-tightened, this connector requires torque tool
   g. Inspect exposed portions of antenna cable for damage.
   h. Inspect main DC power wire and connectors for condition, damage or corrosion. Open unscheduled maintenance job if replacement of wire run is necessary.
   i. Inspect interconnection and option cables for condition, damage or corrosion.
   j. Verify that unused slack in interconnection, power cabling, and accessory cables are not vulnerable to physical damage or corrosion. *Attention to option cable connector of M7100
   k. Inspect for secure mounting of all radio components and accessories. Tighten or remount any component that are loose or have become unmounted.
   l. Inspect overall condition of main radio components: transceiver, control head, microphone. Note on inspection report
   m. Verify that the main (DC) power wire is fused at a practical and safe distance from point of connection to battery or pre-designated source of power. (Preferably l-foot)
   n. Inspect radio main lead direct current (DC) ground connection for corrosion. Relocate, rework as necessary.

B. Software / Firmware

a. Read radio program file title and ensure accuracy for Bureau and versioning.
b. Program radio with latest applicable Code plug program file. as needed.
c. Verify or update MDC encode number (h-number of vehicle)

i. Add MDC encode number if not present.
ii. Correct encode number when encode number does not match H-number of vehicle.

d. Motorola XTL2500 firmware update will not be part of a PMI and shall be considered unscheduled maintenance due to the time needed to transfer file(s).

C. Functional Checks and Corrosion Control

1. Functional Check

a. Verify radio is configured for "switched ignition" on –off operation. **Record** any exceptions to not working with Key per user request.
b. Verify power –on option button.
c. Operate all manual controls and verify proper travel and functions of user controls.
d. Verify proper scan and monitor enable / disable with microphone.
e. Verify microphone push-to-talk transmit indication and operation.
f. Verify proper voice operation of microphone.
g. Verify proper speaker operation.

2. Corrosion Control

a. Remove any paint or corrosion inhibitor from brass MOT mount found during visual inspection.
b. Perform any corrective action required for main DC power connection to source power.
c. Perform any corrective action required for main DC ground up to and including re-locating ground point. Apply anti-oxide if needed.
d. Clean external surfaces of radio components. Remove dust debris, sand or grime.

D. Electrical Measurements

1. Direct Current (DC) voltage

   a. Verify proper voltage and current power source at point of supply. **Record** vehicles standby operating voltage
   b. Verify DC to DC converter output voltage & current if applicable.
   c. **Record** if DC to DC converter is configured for 24-volt 'switched ignition' or master switch isolation from battery.

2. Radio Frequency measurements, ► Denotes FCC license parameter

   a. Transmitter (TX) -adjust, repair or correct as necessary.

      I. ► Measure and **record** in watts TX RF power output.
      II. Measure, calculate and record VSWR between TX and antenna.
      III. ► Measure and **record** TX carrier frequency error.
      IV. ► Measure and **record** TX voice modulation level
      V. Insure mini UHF connector is tightly connected when PMI is completed.

   b. Receiver (RX)

      I. Measure and **record** in dB the level necessary to break RX critical squelch.

2024 UHF EQUIPMENT COUNTS

District, Bureau, Rest Areas	Repeaters	Fixed Base	Disp. Base	Mobiles	Portables
District One	5	6	2	106	75
District Two	4	1	3	91	35
District Three	3	3	3	90	65
District Four	4	0	2	66	52
District Five	5	5	3	134	46
District Six	1	0	2	81	34
Commissioner's Office	0	0	0	2	0
Fuel Distribution	0	0	0	3	0
Bridge Design	0	0	0	3	0
Bridge Maintenance	0	0	3	67	38
Survey Section	0	0	0	0	38
Mechanical Services	0	5	0	27	3
Materials Research	0	0	0	0	4
Bureau of Traffic	0	0	0	2	4
Bureau of TSMO	9	1	20	2	4
Highway Maintenance	0	0	0	2	0
Bureau of Aeronautics	0	0	0	1	0
Rail and Transit	0	0	0	1	0
Bureau of Turnpikes	3	29	1	94	0
NH DNCR (Rest Areas)	0	8	0	0	0
Department Totals	34	58	39	772	398

As of March 2024

2024 VHF Equipment Counts

District or Bureau	Fixed Base	Mobile	Portable
District One	1	2	0
District Two	1	0	0
District Three	0	2	0
District Four	0	1	0
District Five	0	2	0
District Six	1	3	0
Commissioner's Office	0	2	0
Bridge Maintenance	4	7	15
Mechanical Services	0	0	0
Bureau of Traffic	0	0	0
Bureau of TSMO	0	2	1
Highway Maintenance	0	2	0
Aeronautics	0	1	2
Rail and Transit	0	4	3
Bureau of Turnpikes	0	0	0
Department Totals	7	28	21

As of March 2024

Aeronautics and Marine Radios

Aeronautics	Make	Model
BERLIN	ICOM	A200B
COLEBROOK	ICOM	A120 W
CONCORD	ICOM	A120 W
CLAREMONT	ICOM	A200B
FRANCONIA	ICOM	A200B
HAMPTON	ICOM	A200B
HAVERHILL	ICOM	A120 W
HILLSBORO	MENTOR	MB-10
KEENE	ICOM	A120 W
JAFFREY	ICOM	A120 W
LACONIA	ICOM	A200B
NEWPORT	ICOM	A200B
PLYMOUTH	ICOM	A200B
ROCHESTER	ICOM	A200B
TWIN MOUNTAIN	ICOM	A120 W
WHITEFIELD	ICOM	A200B

Marine	Make	Model
Hampton River Bridge	ICOM	IC-M502
Memorial Bridge	ICOM	IC-M502
Sara Mildred Long	ICOM	IC-M504a
Crew-15 Spare	ICOM	IC-M502

Revised March 2024

 Initials: T.P Date: 4/24/24

EXHIBIT-D

Section-1, Invoice and Billing Information

I. Invoices shall be delivered by one of the following methods:

A. As preferred, by email to the following address Bureau56@dot.nh.gov
B. As needed, hand delivered by contractor to Bureau of TSMO, 110 Smokey Bear Boulevard, Concord, NH.

II. Portable document format (PDF) Invoices shall be consistently transmitted with subject lines as specified.

A. All bureaus with exception of Turnpikes and Aeronautics

Email Subject Line: NHDOT, RMC, Invoice, Highway

B. Bureau of Turnpike Invoices

Email Subject Line: NHDOT, RMC, Invoice, Turnpikes

C. Bureau of Aeronautics invoices

Email Subject Line: NHDOT, RMC, Invoice, Aeronautics

III. Invoice(s) for all work performed from ***first*** day of each month to ***last*** day of each month shall be combined onto a single invoice. In addition to a letterhead identifying the Contractor by name, the invoice(s) shall contain the following information in a table or column format

A. A common invoice number for all corresponding DOT work request numbers
B. Date of invoice
C. DOT work request (WR) numbers
D. DOT work request ***title*** as received by email
E. Department ***Bureau*** work was performed for, if not identified by DOT WR title
F. A ***basic*** description of work performed with work ***site*** description.
G. Date(s) the work was accomplished by Contractor per work request
H. Contract cost at bid rates per work request for ***labor hours or unit cost***
I. Cost per work request for ***materials***
J. Contract cost at bid rates per work request for round trip ***travel hours,*** if applicable

IV. The NHDOT, Bureau of TSMO, Administrator shall make final determination of completeness maintenance or work action, per work order (number). Requested changes, revisions, deletion, or deferred payment (based upon incomplete work or continued system trouble) by the Department shall be handled in writing by the Administrator or their designee.

 Initials J.B Date: 4/29/24

V. Contractor shall establish a NET-30 terms for the Department.

VI. Successful Contractor shall provide ***accounts receivable*** contact information and any subsequent changes to that information as referenced in Section-2 that includes; name, title, mailing address, e-mail, and telephone number for mailing purposes and the resolution of all invoicing discrepancies.

SECTION-2, Contractor Contact Information

Maintenance Supervisor:

a) Name: Jim Barnes
b) Title: Maintenance Supervisor
c) Address PO Box 10383 Swanzey, NH 03446
d) Email: Jim253@randrcomm.com
e) Telephone number: 603-352-1825
f) Cell Telephone Number: 603-209-4825

Accounts Receivable:

a) Name: Evelyn French
b) Title Office Manager
c) Address PO Box 10383 Swanzey, NH 03446
d) Email: Evelyn259@randrcomm.com
e) Telephone number: 603-352-1825

 Initials A.B Date: 9/23/24

EXHIBIT-C

Section - 1 Preventive (scheduled) Maintenance Inspections

Sub-system	Cost Per Unit	# of Units	Total Yearly Cost
Generic Repeater PMI (no site)	$235.00	1	$235.00
Control Stations non-dispatch	$120.00	58	$6,960.00
Desktop Remote Controls	$35.00	2	$70.00
Mobile radios all vehicle types with or without DC to DC converters	$35.00	386	$13,510.00
Portable Radios	$35.00	200	$7,000.00
Sub-Total for Preventative Maintenance Inspections (PMI) ►			**$27,775.00**

Initials A.B Date: 4/22/24

EXHIBIT-C

Section-2

Dispatch Equipment Complete- System
See Dispatch Equipment Schedule and PMI Task Lists

Location	Location Detail	Site Bid Price
Lancaster District-1	Lancaster Office Remote site, Mt Prospect	$630.00
Enfield District-2	Enfield Office Remote site, Moose Mt.	$470.00
Gilford District -3	Gilford Office Remote site, Tamworth 302, NH Rt 16	$470.00
Swanzey District-4	Swanzey Office Remote site, Westmoreland, NH Rt 9	$315.00
Bedford District-5	Bedford office Co-located local site	$470.00
Durham District-6	Durham office Remote site, Rochester Spaulding TP	$315.00
Portsmouth Bridge Maintenance	Ranger Way Office only	$315.00
Portsmouth Bridge Maintenance	Portsmouth Sara Long Bridge	$470.00
Portsmouth Bridge Maintenance	Portsmouth Memorial Bridge	$470.00
	Disp. PMI Sub-Total This Page ►	$3,925.00

 Initials N.B Date: 1/28/24

EXHIBIT-C

Section-3 Repeater and Antenna System Preventive Maintenance

Site Name and Town	Equipment & Quantity	Antenna System	Price per site example $1.11	Access to site
Holden Hill, W. Stewarts Town	Ericsson Mastr III, 2 each	TX / RX Combiner	$500.00	Drive to Seasonal Road
Mt Washington,	Ericsson Mastr III, 2 each	TX / RX Combiner	$500.00	Drive to Seasonal Road
Mt Prospect Lancaster	Tait, 1 each	Duplexer	$270.00	Drive to Seasonal Road
Cannon Mountain, Franconia	Ericsson Mastr III, 3 each	TX / RX Combiner	$750.00	Drive to Park Tram and Hike
Mt Belknap, Gilford	Ericsson Mastr III, 3 each	TX / RX Combiner	$750.00	Drive to Park Seasonal Hike to summit
Mt Kearsage, Warner	Ericsson Mastr III, 3 each	TX / RX Combiner	$270.00	Drive to Park Hike to Summit
Moose Mt, Hanover	Ericsson Mastr III, 1 each	Duplexer	$500.00	Drive to Seasonal
Mt Ascutney, Winsor VT.	Ericsson Mastr III, 2 each	3rd Party Combiner	$500.00	Drive to Park Seasonal Hike to Summit
Mt Whittier, Tamworth	Ericsson Mastr III, 2 each	TX / RX Combiner	$500.00	Drive to Park Hike or ATV all year
Pitcher Mt., Stoddard	Tait, TB9100, 1 each	Duplexer	$270.00	Drive to Seasonal Hike to Fire tower
Hyland Hill, Westmoreland	Ericsson Mastr III, 1 each	Duplexer	$270.00	Drive to Seasonal Road
[illegible]er Park, Peterborough	Ericsson Mastr III, 3 each	TX / RX Combiner	$750.00	Drive to Seasonal Road
Warner Hill, Derry	Ericsson Mastr III, 1 each	Duplexer	$270.00	Drive to
Mt Uncanoonuc, Goffstown	Ericsson Mastr III, 1 Ea., Tait, 11 EA	TX / RX Combiner	$500.00	Drive to
Mt Uncanoonuc, Goffstown	Tait, 1 each		$270.00	Drive to
Hackett Hill, Hooksett	Ericsson Mastr III, 1 each	TX / RX Combiner	$270.00	Drive to
Hackett Hill, Hooksett	Ericsson Mastr III, 1 each		$270.00	Same
Mt Bluejob, Strafford	Tait, 1 Each, Mastr III 1 each	TX / RX Combiner	$500.00	Drive to Park Hike to summit
Mt Bluejob, Strafford	Ericsson Mastr III, 1 each		$270.00	Same
Sub-Total for Repeater Site Preventive Maintenance Inspections ►			**$8,180.00**	

Initials T.B Date: 4/28/24

EXHIBIT-C

SECTION 4- ANTENNA SYSTEM INSTALLATION or INSPECTION

Personnel	Cost Per Hour	Estimated Hours Per Year	Total Cost Per Year
Tower Climber-1	$195.00	48	$9,360.00
Tower Climber -2	$195.00	48	$9,360.00
Installation Technician	$100.00	12	$1,200.00
System Technician	$100.00	12	$1,200.00
Subtotal yearly cost for Antenna System Installation ►			$21,120.00

Initials Q.B Date: 4/28/24

EXHIBIT-C

Section-5 Installation Rates for Mobile Radios with Accessories (per unit)

Vehicle Type	Radio Configuration	Estimated Number of Units Per Year	Cost per unit
Light Truck or Car	One (1) Trunk / Remote Mount	1	$270.00
Light Truck or Car	Two (2) Trunk / Remote Mounts	1	$370.00
Light Truck or Car	One (1) Multi-Band, Remote Mount, two (2) Transciver (2) Antenna	1	$425.00
Light Truck or Car	One (1) Dash Mount	1	$225.00
3-5 Ton Truck	One (1) Trunk / Remote Mount	1	$270.00
Heavy Equipment 24-volt	Dash Mount w/ 24 volt converten	1	$250.00
Radio removal all types	Single radio Both Dash and Remote mount	1	$140.00
		Sub-total yearly cost ►	**$1,950.00**

Accessories: Antennae, Standard Option Cables, DC Power Cables, Internal Speaker(s)

Initials T.B Date: 4/22/24

EXHIBIT-C

Section-6 Unscheduled Maintenance

Repairs & Misc.			
	Cost per Hour	Estimated number of Hours / Yearly	Yearly extended Cost
Repeaters	$105.00	100	$10,500.00
Base Stations	$105.00	50	$5,250.00
Dispatch Locations	$105.00	24	$2,520.00
Desk-top Remotes	$105.00	5	$525.00
Mobile Radios	$105.00	80	$8,400.00
Portable Radios	$105.00	20	$2,100.00
Marine / Aeronautics	$105.00	8	$840.00
file Preparation	$50.00	2	$100.00
Radio Programming	$50.00	30	$1,500.00
	Price Per Night	Estimated # of Nights Yearly	Estimated Yearly Cost
Lodging	$215.00	1	$215.00
	Price Adjusted for Minimum Hrs & OT	Estimated number of 4-hr Callouts Yearly	Estimated Yearly Cost
Emergency Callout	$175.00	1	$175.00
			Yearly Cost for replacement parts
Replacement Parts	This fixed cost shall be included in your Bid		$16,500.00
	Cost Per Hour	Estimated Yearly Hours	
Travel Rate for Vehicle	$65.00	100	$6,500.00
	Cost Per Hour	Estimated Yearly Hours	
Travel Rate for Tech's	$65.00	100	$6,500.00
		Yearly Sub-total Unscheduled Maintenance ►	$61,625.00

 Initials N.B Date: 4/28/24

EXHIBIT-C

Section-7 Bid Tabulation Table

Subtotal from Section-1	Page 1 of 7	Preventive Maintenance (PMI)	$27,775.00
Subtotal from Section-2	Page 2 of 7	Dispatch Preventive Maintenance	$3,925.00
Subtotal from Section-3	Page 3 of 7	Repeater "Site" PMI	$8,180.00
Subtotal from Section-4	Page 4 of 7	"Antenna" System Work	$21,120.00
Subtotal from Section-5	Page 5 of 7	Mobile radio Installations	$1,950.00
Subtotal from Section-6	Page 6 of 7	Unscheduled Maintenance	$61,625.00
		This is your annual Bid ►	**$124,575.00**

Initials A.B Date: 4/29/24

R & R Communications, Inc.
P.O. Box 383 Keene, New Hampshire 03431
3.352.1825 800.339.1825 FAX: 603.352.5697
randr@top.monad.net

R&R COMMUNICATIONS

Jeffrey A. Barden – President – 41 years of experience servicing, maintaining and installing Motorola, GE, TX-RX, Kenwood and various other brands of consoles, mobiles and Portable radios... Vega VOIP Certified – RF System design and Site Management.

Charles Shiland, CET – Practicing specialist of combined work and electronics training as a Two-Way Radio Technician. AST-R150256

James Barnes – Technician – 25 years of experience servicing, maintaining and installing Motorola, GE, TX-RX, Kenwood and various other brands of consoles, mobiles and Portable radios. Motorola ASTRO (APC025) Certified.

Scott Spreadbury – 18+ years Certified Tower Climber – Cert#1466-1728-10-ComTramUSA

Michael Striker – Technician – 38+ Years Experience servicing, maintaining, and installing GE, Motorola, TX/RX, Kenwood and various other brands of Consoles, Mobiles and Portable Radios. Motorola ASTRO, (APC025) Certified. Motorola trained – CETa Certified and experienced Tower Climber.

Jackson Stone – Installer -Technician – 22+ Years Installing GE, Motorola, Kenwood and various LMR Radio Equipment. Also proficient in repairs of all Portable Radios.

Evelyn French – 43+ Years Experience managing day-to day operations of Service, Sales and Office management.

Mitchell Strang – Installer – 34+ Yeas Heavy Equipment Repair and Maintenance – 3 Yrs Experience TwoWay Radio Installations and CDL Certified.

References: Carroll Concrete Products, - Contact Shawn Carroll, Jr. 603-863-1000
Advance Transit, Inc. Contact: Chris Andreasson- 802-295-1824

AFTER HOURS RESPONSE PLAN: VIA TELEPHONE -ONE(1) HOUR DISPATCH – TECHNICIAN WITHIN 4 HOURS.

Authorized Motorola
Radio Dealer

State of New Hampshire

Department of State

CERTIFICATE

I, David M. Scanlan, Secretary of State of the State of New Hampshire, do hereby certify that R. & R. COMMUNICATIONS, INC. is a New Hampshire Profit Corporation registered to transact business in New Hampshire on January 21, 1975. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: **17737**

Certificate Number: **0006679146**

IN TESTIMONY WHEREOF,

I hereto set my hand and cause to be affixed the Seal of the State of New Hampshire, this 30th day of April A.D. 2024.

David M. Scanlan

Secretary of State

CERTIFICATE OF VOTE

I, **Judith M. Barden**, Secretary of **R&R Communications, Inc.,** hereby **Certify,** I am the Duly Elected Secretary of R&R Communications, Inc., and that the following is a true copy of a vote taken at a meeting of the Board of Directors of said corporation duly called and held on April 19, 2024, at which meeting a quorum of the directors being present and voting. It was

"VOTED: To authorize Jeffrey A. Barden, President to meet with officials of New Hampshire Department of Transportation including the Communications Supervisor to discuss a contract for two-way radio maintenance/repair services for the State of New Hampshire Department of Transportation, and to execute any and all documents, contracts and agreements regarding said services. This authorization shall remain in full force from April 23, 2024 through June 30, 2024.

I further certify that said vote has not been amended or repealed and that Jeffrey A. Barden is the duly elected President of R&R Communications, Inc.

DATED: This 22th Day of April, 2024.

Judith M. Barden

Judith M. Barden, Secretary

(corporate seal)

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 4/22/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Kapiloff Insurance Agency, Inc.
417 Winchester St
Keene NH 03431

License#: PC-893147

CONTACT NAME:
PHONE (A/C, No, Ext): 603-352-2224 FAX (A/C, No): 603-357-1217
E-MAIL ADDRESS: documents@kapiloff.com

INSURED
R & R Communications Co., Inc.
PO Box 10383
Swanzey NH 03446

R&RCOMM-01

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Ohio Security Insurance Compan	24082
INSURER B : United Financial Casualty Co	11770
INSURER C : The Ohio Casualty Insurance Co	24074
INSURER D : Technology Insurance Company	42376
INSURER E : James River Insurance	
INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** 1087018779 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY			BKS55768773	1/1/2024	1/1/2025	EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 300,000
							MED EXP (Any one person)	$ 15,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	X POLICY PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
	OTHER:							$
	AUTOMOBILE LIABILITY			975962724	1/1/2024	1/1/2025	COMBINED SINGLE LIMIT (Ea accident)	$ 2,000,000
	ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / X SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
C	X UMBRELLA LIAB X OCCUR			USO55768773	1/1/2024	1/1/2025	EACH OCCURRENCE	$ 4,000,000
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$
	DED X RETENTION $ 10,000							$
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			TWC4380395	1/1/2024	1/1/2025	X PER STATUTE / OTH-ER	
	ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBEREXCLUDED? (Mandatory in NH) Y/N: Y	N/A					E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
E	Excess Liability			00151905-0	1/29/2024	1/1/2025	General Aggregate Each Occurrence	4,000,000 4,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Jeffrey and Judith Barden are Excluded Officers.

Installation Contract
New Hampshire Department of Transportation is listed as Additional Insured/Maintenance Contract

CERTIFICATE HOLDER

New Hampshire Department of Transportationof TSMO
PO Box 483
Concord NH 03302

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
Brittny Stockton

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