



## PROFESSIONAL SERVICES AGREEMENT

### **Bear Communications, Inc. dba BearCom**

City-Wide Radio System and Wireless Broadband Video Network Maintenance Services

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is made and entered into this 1<sup>st</sup> day of January 2022 (hereinafter, the "Effective Date"), by and between the CITY OF SAN FERNANDO, a municipal corporation ("CITY") and Bear Communications, Inc. dba BearCom, a Corporation (hereinafter, "CONSULTANT"). For the purposes of this Agreement CITY and CONSULTANT may be referred to collectively by the capitalized term "Parties." The capitalized term "Party" may refer to CITY or CONSULTANT interchangeably.

NOW, THEREFORE, for and in consideration of the mutual covenants and conditions herein contained, CITY and CONSULTANT agree as follows:

### **I. ENGAGEMENT TERMS**

- 1.1 **SCOPE OF SERVICES:** Subject to the terms and conditions set forth in this Agreement and all exhibits attached and incorporated hereto, CONSULTANT agrees to perform the services and tasks set forth in the **Exhibit "1"** and **Exhibit "2"** (hereinafter referred to as the "**Scope of Services**"). CONSULTANT further agrees to furnish to CITY all labor, materials, tools, supplies, equipment, services, tasks and incidental and customary work necessary to competently perform and timely complete the services and tasks set forth in the Scope of Services. For the purposes of this Agreement the aforementioned services and tasks set forth in the Scope of Services shall hereinafter be referred to generally by the capitalized term "Work."
- 1.2 **TERM:** This Agreement shall have a term of 60 months (5 years) commencing from January 1, 2022. Nothing in this Section shall operate to prohibit or otherwise restrict the CITY's ability to terminate this Agreement at any time for convenience or for cause
- 1.3 **COMPENSATION:**
- A. CONSULTANT shall perform the various services and tasks set forth in the Scope of Services in accordance with the compensation schedule which is:
- |            |                       |                       |
|------------|-----------------------|-----------------------|
| 1) Year 1: | \$12,191.39 per month | \$146,296.68 per year |
| 2) Year 2: | \$12,557.13 per month | \$150,685.56 per year |
| 3) Year 3: | \$12,933.85 per month | \$155,206.20 per year |
| 4) Year 4: | \$13,321.86 per month | \$159,862.32 per year |
| 5) Year 5: | \$13,721.52 per month | \$164,658.24 per year |
- (hereinafter, the "Approved Rate Schedule")
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- B. Section 1.3(A) notwithstanding, CONSULTANT's total compensation during the Term of this Agreement or any extension term shall not exceed the budgeted aggregate sum of \$776,709 (hereinafter, the "Not-to-Exceed Sum"), unless such added expenditure is first approved by the CITY acting in consultation with the City Manager and the Finance Director. In the event CONSULTANT's charges are projected to exceed the Not-to-Exceed Sum prior to the expiration of the Term or any single extension term, CITY may suspend CONSULTANT's performance pending CITY approval of any anticipated expenditures in excess of the Not-to-Exceed Sum or any other CITY-approved amendment to the compensation terms of this Agreement.
- 1.4 PAYMENT OF COMPENSATION: Following the conclusion of each calendar month, CONSULTANT shall submit to CITY an itemized invoice indicating the services and tasks performed during the recently concluded calendar month, including services and tasks performed and the reimbursable out-of-pocket expenses incurred. If the amount of CONSULTANT's monthly compensation is a function of hours worked by CONSULTANT's personnel, the invoice shall indicate the number of hours worked in the recently concluded calendar month, the persons responsible for performing the Work, the rate of compensation at which such services and tasks were performed, the subtotal for each task and service performed and a grand total for all services performed. Within thirty (30) calendar days of receipt of each invoice, CITY shall notify CONSULTANT in writing of any disputed amounts included in the invoice. Within forty-five (45) calendar day of receipt of each invoice, CITY shall pay all undisputed amounts included on the invoice. CITY shall not withhold applicable taxes or other authorized deductions from payments made to CONSULTANT.
- 1.5 ACCOUNTING RECORDS: CONSULTANT shall maintain complete and accurate records with respect to all matters covered under this Agreement for a period of three (3) years after the expiration or termination of this Agreement. CITY shall have the right to access and examine such records, without charge, during normal business hours. CITY shall further have the right to audit such records, to make transcripts therefrom and to inspect all program data, documents, proceedings, and activities.
- 1.6 ABANDONMENT BY CONSULTANT: In the event CONSULTANT ceases to perform the Work agreed to under this Agreement or otherwise abandons the undertaking contemplated herein prior to the expiration of this Agreement or prior to completion of any or all tasks set forth in the Scope of Services, CONSULTANT shall deliver to CITY immediately and without delay, all materials, records and other work product prepared or obtained by CONSULTANT in the performance of this Agreement. Furthermore, CONSULTANT shall only be compensated for the reasonable value of the services, tasks and other work performed up to the time of cessation or abandonment, less a deduction for any damages, costs or additional expenses which CITY may incur as a result of CONSULTANT's cessation or abandonment.

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**II. PERFORMANCE OF AGREEMENT**

- 2.1 CITY'S REPRESENTATIVES: The CITY hereby designates the City Manager and the Police Chief (hereinafter, the "CITY Representatives") to act as its representatives for the performance of this Agreement. The City Manager shall be the chief CITY Representative. The CITY Representatives or their designee shall act on behalf of the CITY for all purposes under this Agreement. CONSULTANT shall not accept directions or orders from any person other than the CITY Representatives or their designee.
- 2.2 CONSULTANT REPRESENTATIVE: CONSULTANT hereby designates Mary Carry, General Manager to act as its representative for the performance of this Agreement (hereinafter, "CONSULTANT Representative"). CONSULTANT Representative shall have full authority to represent and act on behalf of the CONSULTANT for all purposes under this Agreement. CONSULTANT Representative or his designee shall supervise and direct the performance of the Work, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Work under this Agreement. Notice to the CONSULTANT Representative shall constitute notice to CONSULTANT.
- 2.3 COORDINATION OF SERVICE; CONFORMANCE WITH REQUIREMENTS: CONSULTANT agrees to work closely with CITY staff in the performance of the Work and this Agreement and shall be available to CITY staff and the CITY Representatives at all reasonable times. All work prepared by CONSULTANT shall be subject to inspection and approval by CITY Representatives or their designees.
- 2.4 STANDARD OF CARE; PERFORMANCE OF EMPLOYEES: CONSULTANT represents, acknowledges and agrees to the following:
- A. CONSULTANT shall perform all Work skillfully, competently and to the highest standards of CONSULTANT's profession;
  - B. CONSULTANT shall perform all Work in a manner reasonably satisfactory to the CITY;
  - C. CONSULTANT shall comply with all applicable federal, state and local laws and regulations, including the conflict of interest provisions of Government Code Section 1090 and the Political Reform Act (Government Code Section 81000 et seq.);
  - D. CONSULTANT understands the nature and scope of the Work to be performed under this Agreement as well as any and all schedules of performance;

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- E. All of CONSULTANT's employees and agents possess sufficient skill, knowledge, training and experience to perform those services and tasks assigned to them by CONSULTANT; and
  - F. All of CONSULTANT's employees and agents (including but not limited to subcontractors and subconsultants) possess all licenses, permits, certificates, qualifications and approvals of whatever nature that are legally required to perform the tasks and services contemplated under this Agreement and all such licenses, permits, certificates, qualifications and approvals shall be maintained throughout the term of this Agreement and made available to CITY for copying and inspection.

The Parties acknowledge and agree that CONSULTANT shall perform, at CONSULTANT's own cost and expense and without any reimbursement from CITY, any services necessary to correct any errors or omissions caused by CONSULTANT's failure to comply with the standard of care set forth under this Section or by any like failure on the part of CONSULTANT's employees, agents, contractors, subcontractors and subconsultants. Such effort by CONSULTANT to correct any errors or omissions shall be commenced immediately upon their discovery by either Party and shall be completed within seven (7) calendar days from the date of discovery or such other extended period of time authorized by the CITY Representatives in writing and in their sole and absolute discretion. The Parties acknowledge and agree that CITY's acceptance of any work performed by CONSULTANT or on CONSULTANT's behalf shall not constitute a release of any deficiency or delay in performance. The Parties further acknowledge, understand and agree that CITY has relied upon the foregoing representations of CONSULTANT, including but not limited to the representation that CONSULTANT possesses the skills, training, knowledge and experience necessary to perform the Work skillfully, competently and to the highest standards of CONSULTANT's profession.

- 2.5 ASSIGNMENT: The skills, training, knowledge and experience of CONSULTANT are material to CITY's willingness to enter into this Agreement. Accordingly, CITY has an interest in the qualifications and capabilities of the person(s) who will perform the services and tasks to be undertaken by CONSULTANT or on behalf of CONSULTANT in the performance of this Agreement. In recognition of this interest, CONSULTANT agrees that it shall not assign or transfer, either directly or indirectly or by operation of law, this Agreement or the performance of any of CONSULTANT's duties or obligations under this Agreement without the prior written consent of the CITY. In the absence of CITY's prior written consent, any attempted assignment or transfer shall be ineffective, null and void and shall constitute a material breach of this Agreement.



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- 2.6 **CONTROL AND PAYMENT OF SUBORDINATES; INDEPENDENT CONTRACTOR:** The Work shall be performed by CONSULTANT or under CONSULTANT's strict supervision. CONSULTANT will determine the means, methods and details of performing the Work subject to the requirements of this Agreement. CITY retains CONSULTANT on an independent contractor basis and not as an employee. CONSULTANT reserves the right to perform similar or different services for other principals during the term of this Agreement, provided such work does not unduly interfere with CONSULTANT's competent and timely performance of the Work contemplated under this Agreement and provided the performance of such services does not result in the unauthorized disclosure of CITY's confidential or proprietary information. Any additional personnel performing the Work under this Agreement on behalf of CONSULTANT are not employees of CITY and shall at all times be under CONSULTANT's exclusive direction and control. CONSULTANT shall pay all wages, salaries and other amounts due such personnel and shall assume responsibility for all benefits, payroll taxes, Social Security and Medicare payments and the like. CONSULTANT shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: Social Security taxes, income tax withholding, unemployment insurance, disability insurance, workers' compensation insurance and the like.
- 2.7 **REMOVAL OF EMPLOYEES OR AGENTS:** If any of CONSULTANT's officers, employees, agents, contractors, subcontractors or subconsultants is determined by the CITY Representatives to be uncooperative, incompetent, a threat to the adequate or timely performance of the tasks assigned to CONSULTANT, a threat to persons or property, or if any of CONSULTANT's officers, employees, agents, contractors, subcontractors or subconsultants fail or refuse to perform the Work in a manner acceptable to the CITY, such officer, employee, agent, contractor, subcontractor or subconsultant shall be promptly removed by CONSULTANT and shall not be re-assigned to perform any of the Work.
- 2.8 **COMPLIANCE WITH LAWS:** CONSULTANT shall keep itself informed of and in compliance with all applicable federal, State or local laws to the extent such laws control or otherwise govern the performance of the Work. CONSULTANT's compliance with applicable laws shall include without limitation compliance with all applicable Cal/OSHA requirements.
- 2.9 **NON-DISCRIMINATION:** In the performance of this Agreement, CONSULTANT shall not discriminate against any employee, subcontractor, subconsultant, or applicant for employment because of race, color, creed, religion, sex, marital status, sexual orientation, national origin, ancestry, age, physical or mental disability or medical condition.
- 2.10. **INDEPENDENT CONTRACTOR STATUS:** The Parties acknowledge, understand and agree that CONSULTANT and all persons retained or employed by CONSULTANT are, and shall at all times remain, wholly independent contractors and are not officials, officers, employees, departments or subdivisions of CITY. CONSULTANT shall be solely responsible

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for the negligent acts and/or omissions of its employees, agents, contractors, subcontractors and subconsultants. CONSULTANT and all persons retained or employed by CONSULTANT shall have no authority, express or implied, to bind CITY in any manner, nor to incur any obligation, debt or liability of any kind on behalf of, or against, CITY, whether by contract or otherwise, unless such authority is expressly conferred to CONSULTANT under this Agreement or is otherwise expressly conferred by CITY in writing.

**III. INSURANCE**

3.1 DUTY TO PROCURE AND MAINTAIN INSURANCE: Prior to the beginning of and throughout the duration of the Work, CONSULTANT will procure and maintain policies of insurance that meet the requirements and specifications set forth under this Article. CONSULTANT shall procure and maintain the following insurance coverage, at its own expense:

- A. Commercial General Liability Insurance: CONSULTANT shall procure and maintain Commercial General Liability Insurance ("CGL Coverage") as broad as Insurance Services Office Commercial General Liability coverage (occurrence Form CG 0001) or its equivalent. Such CGL Coverage shall have minimum limits of no less than One Million Dollars (\$1,000,000.00) per occurrence and Two Million Dollars (\$2,000,000.00) in the general aggregate for bodily injury, personal injury, property damage, operations, products and completed operations, and contractual liability.
- B. Automobile Liability Insurance: CONSULTANT shall procure and maintain Automobile Liability Insurance as broad as Insurance Services Office Form Number CA 0001 covering Automobile Liability, Code 1 (any auto). Such Automobile Liability Insurance shall have minimum limits of no less than One Million Dollars (\$1,000,000.00) per accident for bodily injury and property damage.
- C. Workers' Compensation Insurance/ Employer's Liability Insurance: A policy of workers' compensation insurance in such amount as will fully comply with the laws of the State of California and which shall indemnify, insure and provide legal defense for both CONSULTANT and CITY against any loss, claim or damage arising from any injuries or occupational diseases occurring to any worker employed by or any persons retained by CONSULTANT in the course of carrying out the Work contemplated in this Agreement.
- D. Errors & Omissions Insurance: For the full term of this Agreement and for a period of three (3) years thereafter, CONSULTANT shall procure and maintain Errors and Omissions Liability Insurance appropriate to CONSULTANT's profession. Such coverage shall have minimum limits of no less than One Million Dollars (\$1,000,000.00) per occurrence and shall be endorsed to include contractual liability.

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- 3.2 **ADDITIONAL INSURED REQUIREMENTS:** The CGL Coverage and the Automobile Liability Insurance shall contain an endorsement naming the CITY and CITY's elected and appointed officials, officers, employees, agents and volunteers as additional insureds.
- 3.3 **REQUIRED CARRIER RATING:** All varieties of insurance required under this Agreement shall be procured from insurers admitted in the State of California and authorized to issue policies directly to California insureds. Except as otherwise provided elsewhere under this Article, all required insurance shall be procured from insurers who, according to the latest edition of the Best's Insurance Guide, have an A.M. Best's rating of no less than A:VII. CITY may also accept policies procured by insurance carriers with a Standard & Poor's rating of no less than BBB according to the latest published edition the Standard & Poor's rating guide. As to Workers' Compensation Insurance/ Employer's Liability Insurance, the CITY Representatives are authorized to authorize lower ratings than those set forth in this Section.
- 3.4 **PRIMACY OF CONSULTANT'S INSURANCE:** All policies of insurance provided by CONSULTANT shall be primary to any coverage available to CITY or CITY's elected or appointed officials, officers, employees, agents or volunteers. Any insurance or self-insurance maintained by CITY or CITY's elected or appointed officials, officers, employees, agents or volunteers shall be in excess of CONSULTANT's insurance and shall not contribute with it.
- 3.5 **WAIVER OF SUBROGATION:** All insurance coverage provided pursuant to this Agreement shall not prohibit CONSULTANT or CONSULTANT's officers, employees, agents, subcontractors or subconsultants from waiving the right of subrogation prior to a loss. CONSULTANT hereby waives all rights of subrogation against CITY.
- 3.6 **VERIFICATION OF COVERAGE:** CONSULTANT acknowledges, understands and agrees, that CITY's ability to verify the procurement and maintenance of the insurance required under this Article is critical to safeguarding CITY's financial well-being and, indirectly, the collective well-being of the residents of the CITY. Accordingly, CONSULTANT warrants, represents and agrees that its shall furnish CITY with original certificates of insurance and endorsements evidencing the coverage required under this Article on forms satisfactory to CITY in its sole and absolute discretion. **The certificates of insurance and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms provided by the CITY if requested.** All certificates of insurance and endorsements shall be received and approved by CITY as a condition precedent to CONSULTANT's commencement of any work or any of the Work. Upon CITY's written request, CONSULTANT shall also provide CITY with certified copies of all required insurance policies and endorsements.

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**IV. INDEMNIFICATION**

- 4.1 The Parties agree that CITY and CITY's elected and appointed officials, officers, employees, agents and volunteers (hereinafter, the "CITY Indemnitees") should, to the fullest extent permitted by law, be protected from any and all loss, injury, damage, claim, lawsuit, cost, expense, attorneys' fees, litigation costs, or any other cost arising out of or in any way related to the performance of this Agreement. Accordingly, the provisions of this indemnity provision are intended by the Parties to be interpreted and construed to provide the CITY Indemnitees with the fullest protection possible under the law. CONSULTANT acknowledges that CITY would not enter into this Agreement in the absence of CONSULTANT's commitment to indemnify, defend and protect CITY as set forth herein.
- 4.2 To the fullest extent permitted by law, CONSULTANT shall indemnify, hold harmless and defend the CITY Indemnitees from and against all liability, loss, damage, expense, cost (including without limitation reasonable attorneys' fees, expert fees and all other costs and fees of litigation) of every nature arising out of or in connection with CONSULTANT's performance of work hereunder or its failure to comply with any of its obligations contained in this Agreement, except such loss or damage which is caused by the sole negligence or willful misconduct of the CITY.
- 4.3 CITY shall have the right to offset against the amount of any compensation due CONSULTANT under this Agreement any amount due CITY from CONSULTANT as a result of CONSULTANT's failure to pay CITY promptly any indemnification arising under this Article and related to CONSULTANT's failure to either (i) pay taxes on amounts received pursuant to this Agreement or (ii) comply with applicable workers' compensation laws.
- 4.4 The obligations of CONSULTANT under this Article will not be limited by the provisions of any workers' compensation act or similar act. CONSULTANT expressly waives its statutory immunity under such statutes or laws as to CITY and CITY's elected and appointed officials, officers, employees, agents and volunteers.
- 4.5 CONSULTANT agrees to obtain executed indemnity agreements with provisions identical to those set forth here in this Article from each and every subcontractor or any other person or entity involved by, for, with or on behalf of CONSULTANT in the performance of this Agreement. In the event CONSULTANT fails to obtain such indemnity obligations from others as required herein, CONSULTANT agrees to be fully responsible and indemnify, hold harmless and defend CITY and CITY's elected and appointed officials, officers, employees, agents and volunteers from and against any and all claims and losses, costs or expenses for any damage due to death or injury to any person and injury to any property resulting from any alleged intentional, reckless, negligent, or otherwise wrongful acts, errors or omissions of CONSULTANT's subcontractors or any other person or entity involved by, for, with or on behalf of CONSULTANT in the performance of this Agreement. Such costs and expenses shall include reasonable attorneys' fees incurred by counsel of CITY's choice.

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- 4.6 CITY does not, and shall not, waive any rights that it may possess against CONSULTANT because of the acceptance by CITY, or the deposit with CITY, of any insurance policy or certificate required pursuant to this Agreement. This hold harmless and indemnification provision shall apply regardless of whether or not any insurance policies are determined to be applicable to the claim, demand, damage, liability, loss, cost or expense.
- 4.7 This Article and all provisions contained herein (including but not limited to the duty to indemnify, defend and hold free and harmless) shall survive the termination or normal expiration of this Agreement and is in addition to any other rights or remedies which the CITY may have at law or in equity.

**V. TERMINATION**

- 5.1 TERMINATION WITHOUT CAUSE: CITY may terminate this Agreement at any time for convenience and without cause by giving CONSULTANT a minimum of five (5) calendar days prior written notice of CITY's intent to terminate this Agreement. Upon such termination for convenience, CONSULTANT shall be compensated only for those services and tasks which have been performed by CONSULTANT up to the effective date of the termination. CONSULTANT may not terminate this Agreement except for cause as provided under Section 5.2, below. If this Agreement is terminated as provided herein, CITY may require CONSULTANT to provide all finished or unfinished Documents and Data, as defined in Section 6.1 below, and other information of any kind prepared by CONSULTANT in connection with the performance of the Work. CONSULTANT shall be required to provide such Documents and Data within fifteen (15) calendar days of CITY's written request. No actual or asserted breach of this Agreement on the part of CITY pursuant to Section 5.2, below, shall operate to prohibit or otherwise restrict CITY's ability to terminate this Agreement for convenience as provided under this Section.

5.2 EVENTS OF DEFAULT; BREACH OF AGREEMENT:

- A. In the event either Party fails to perform any duty, obligation, service or task set forth under this Agreement (or fails to timely perform or properly perform any such duty, obligation, service or task set forth under this Agreement), an event of default (hereinafter, "Event of Default") shall occur. For all Events of Default, the Party alleging an Event of Default shall give written notice to the defaulting Party (hereinafter referred to as a "Default Notice") which shall specify: (i) the nature of the Event of Default; (ii) the action required to cure the Event of Default; (iii) a date by which the Event of Default shall be cured, which shall not be less than the applicable cure period set forth under Sections 5.2.B and 5.2C below or if a cure is not reasonably possible within the applicable cure period, to begin such cure and diligently prosecute such cure to completion. The Event of Default shall constitute a breach of this Agreement if the defaulting Party fails to cure the Event of Default within the applicable cure period or any extended cure period allowed under this Agreement.

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- B. CONSULTANT shall cure the following Events of Defaults within the following time periods:
- i. Within three (3) business days of CITY's issuance of a Default Notice for any failure of CONSULTANT to timely provide CITY or CITY's employees or agents with any information and/or written reports, documentation or work product which CONSULTANT is obligated to provide to CITY or CITY's employees or agents under this Agreement. Prior to the expiration of the 3-day cure period, CONSULTANT may submit a written request for additional time to cure the Event of Default upon a showing that CONSULTANT has commenced efforts to cure the Event of Default and that the Event of Default cannot be reasonably cured within the 3-day cure period. The foregoing notwithstanding, CITY shall be under no obligation to grant additional time for the cure of an Event of Default under this Section 5.2 B.i. that exceeds seven (7) calendar days from the end of the initial 3-day cure period; or
  - ii. Within fourteen (14) calendar days of CITY's issuance of a Default Notice for any other Event of Default under this Agreement. Prior to the expiration of the 14-day cure period, CONSULTANT may submit a written request for additional time to cure the Event of Default upon a showing that CONSULTANT has commenced efforts to cure the Event of Default and that the Event of Default cannot be reasonably cured within the 14-day cure period. The foregoing notwithstanding, CITY shall be under no obligation to grant additional time for the cure of an Event of Default under this Section 5.2B.ii that exceeds thirty (30) calendar days from the end of the initial 14-day cure period.

In addition to any other failure on the part of CONSULTANT to perform any duty, obligation, service or task set forth under this Agreement (or the failure to timely perform or properly perform any such duty, obligation, service or task), an Event of Default on the part of CONSULTANT shall include, but shall not be limited to the following: (i) CONSULTANT's refusal or failure to perform any of the services or tasks called for under the Scope of Services; (ii) CONSULTANT's failure to fulfill or perform its obligations under this Agreement within the specified time or if no time is specified, within a reasonable time; (iii) CONSULTANT's and/or its employees' disregard or violation of any federal, state, local law, rule, procedure or regulation; (iv) the initiation of proceedings under any bankruptcy, insolvency, receivership, reorganization, or similar legislation as relates to CONSULTANT, whether voluntary or involuntary; (v) CONSULTANT's refusal or failure to perform or observe any covenant, condition, obligation or provision of this Agreement; and/or (vii) CITY's discovery that a statement representation or warranty by CONSULTANT relating to this Agreement is false, misleading or erroneous in any material respect.

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- C. CITY shall cure any Event of Default asserted by CONSULTANT within forty-five (45) calendar days of CONSULTANT's issuance of a Default Notice, unless the Event of Default cannot reasonably be cured within the 45-day cure period. Prior to the expiration of the 45-day cure period, CITY may submit a written request for additional time to cure the Event of Default upon a showing that CITY has commenced its efforts to cure the Event of Default and that the Event of Default cannot be reasonably cured within the 45-day cure period. The foregoing notwithstanding, an Event of Default dealing with CITY's failure to timely pay any undisputed sums to CONSULTANT as provided under Section 1.4, above, shall be cured by CITY within five (5) calendar days from the date of CONSULTANT's Default Notice to CITY.
- D. CITY, in its sole and absolute discretion, may also immediately suspend CONSULTANT's performance under this Agreement pending CONSULTANT's cure of any Event of Default by giving CONSULTANT written notice of CITY's intent to suspend CONSULTANT's performance (hereinafter, a "Suspension Notice"). CITY may issue the Suspension Notice at any time upon the occurrence of an Event of Default. Upon such suspension, CONSULTANT shall be compensated only for those services and tasks which have been rendered by CONSULTANT to the reasonable satisfaction of CITY up to the effective date of the suspension. No actual or asserted breach of this Agreement on the part of CITY shall operate to prohibit or otherwise restrict CITY's ability to suspend this Agreement as provided herein.
- E. No waiver of any Event of Default or breach under this Agreement shall constitute a waiver of any other or subsequent Event of Default or breach. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel, or otherwise.
- F. The duties and obligations imposed under this Agreement and the rights and remedies available hereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. In addition to any other remedies available to CITY at law or under this Agreement in the event of any breach of this Agreement, CITY, in its sole and absolute discretion, may also pursue any one or more of the following remedies:
  - i. Upon written notice to CONSULTANT, the CITY may immediately terminate this Agreement in whole or in part;
  - ii. Upon written notice to CONSULTANT, the CITY may extend the time of performance;

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iii. The CITY may proceed by appropriate court action to enforce the terms of the Agreement to recover damages for CONSULTANT's breach of the Agreement or to terminate the Agreement; or

iv. The CITY may exercise any other available and lawful right or remedy.

CONSULTANT shall be liable for all legal fees plus other costs and expenses that CITY incurs upon a breach of this Agreement or in the CITY's exercise of its remedies under this Agreement.

G. In the event CITY is in breach of this Agreement, CONSULTANT's sole remedy shall be the suspension or termination of this Agreement and/or the recovery of any unpaid sums lawfully owed to CONSULTANT under this Agreement for completed services and tasks.

5.3 SCOPE OF WAIVER: No waiver of any default or breach under this Agreement shall constitute a waiver of any other default or breach, whether of the same or other covenant, warranty, agreement, term, condition, duty or requirement contained in this Agreement. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel, or otherwise.

5.4 SURVIVING ARTICLES, SECTIONS AND PROVISIONS: The termination of this Agreement pursuant to any provision of this Article or by normal expiration of its term or any extension thereto shall not operate to terminate any Article, Section or provision contained herein which provides that it shall survive the termination or normal expiration of this Agreement.

**VI. MISCELLANEOUS PROVISIONS**

6.1 DOCUMENTS & DATA; LICENSING OF INTELLECTUAL PROPERTY: All Documents and Data shall be and remain the property of CITY without restriction or limitation upon their use or dissemination by CITY. For purposes of this Agreement, the term "Documents and Data" means and includes all reports, analyses, correspondence, plans, drawings, designs, renderings, specifications, notes, summaries, strategies, charts, schedules, spreadsheets, calculations, lists, data compilations, documents or other materials developed and/or assembled by or on behalf of CONSULTANT in the performance of this Agreement and fixed in any tangible medium of expression, including but not limited to Documents and Data stored digitally, magnetically and/or electronically. This Agreement creates, at no cost to CITY, a perpetual license for CITY to copy, use, reuse, disseminate and/or retain any and all copyrights, designs, and other intellectual property embodied in all Documents and Data. CONSULTANT shall require all subcontractors and subconsultants working on behalf of CONSULTANT in the performance of this Agreement to agree in



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writing that CITY shall be granted the same right to copy, use, reuse, disseminate and retain Documents and Data prepared or assembled by any subcontractor or subconsultant as applies to Documents and Data prepared by CONSULTANT in the performance of this Agreement.

- 6.2 **CONFIDENTIALITY:** All data, documents, discussion, or other information developed or received by CONSULTANT or provided for performance of this Agreement are deemed confidential and shall not be disclosed by CONSULTANT without prior written consent by CITY. CITY shall grant such consent if disclosure is legally required. Upon request, all CITY data shall be returned to CITY upon the termination or expiration of this Agreement. CONSULTANT shall not use CITY's name or insignia, photographs, or any publicity pertaining to the Work in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of CITY.
- 6.3 **FALSE CLAIMS ACT:** CONSULTANT warrants and represents that neither CONSULTANT nor any person who is an officer of, in a managing position with, or has an ownership interest in CONSULTANT has been determined by a court or tribunal of competent jurisdiction to have violated the False Claims Act, 31 U.S.C., Section 3789 et seq. and the California False Claims Act, Government Code Section 12650 et seq.
- 6.4 **NOTICES:** All notices permitted or required under this Agreement shall be given to the respective Parties at the following addresses, or at such other address as the respective Parties may provide in writing for this purpose:

**CONSULTANT:**

Bear Communications, Inc. dba  
BearCom  
2601 Manhattan Beach Boulevard,  
Redondo Beach, Ca 90278  
Attn: Mark Carry, General Manager  
Phone: 424-675-7116 x40215  
Email: mark.carry@bearcom.com

**CITY:**

City of San Fernando  
San Fernando Police Department  
910 First Street, San Fernando, Ca. 91340  
Attn: Anthony Vairo, Police Chief  
Phone: 818-898-1250  
Fax: 818-365-7764]

Such notices shall be deemed effective when personally delivered or successfully transmitted by facsimile as evidenced by a fax confirmation slip or when mailed, forty-eight (48) hours after deposit with the United States Postal Service, first class postage prepaid and addressed to the Party at its applicable address.

- 6.5 **COOPERATION; FURTHER ACTS:** The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as is reasonably necessary, appropriate or convenient to achieve the purposes of this Agreement.

**PROFESSIONAL SERVICES AGREEMENT**

CONTRACT NO. 2041

City-Wide Radio System and Wireless Broadband Video Network Maintenance Services

Page 14 of 16

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- 6.6 **SUBCONTRACTING**: CONSULTANT shall not subcontract any portion of the Work required by this Agreement, except as expressly stated herein, without the prior written approval of CITY. Subcontracts (including without limitation subcontracts with subconsultants), if any, shall contain a provision making them subject to all provisions stipulated in this Agreement, including provisions relating to insurance requirements and indemnification.
- 6.7 **CITY'S RIGHT TO EMPLOY OTHER CONSULTANTS**: CITY reserves the right to employ other contractors in connection with the various projects worked upon by CONSULTANT.
- 6.8 **PROHIBITED INTERESTS**: CONSULTANT warrants, represents and maintains that it has not employed nor retained any company or person, other than a *bona fide* employee working solely for CONSULTANT, to solicit or secure this Agreement. Further, CONSULTANT warrants and represents that it has not paid nor has it agreed to pay any company or person, other than a *bona fide* employee working solely for CONSULTANT, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, CITY shall have the right to rescind this Agreement without liability. For the term of this Agreement, no member, officer or employee of CITY, during the term of his or her service with CITY, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.
- 6.9 **TIME IS OF THE ESSENCE**: Time is of the essence for each and every provision of this Agreement.
- 6.10 **GOVERNING LAW AND VENUE**: This Agreement shall be interpreted and governed according to the laws of the State of California. In the event of litigation between the Parties, venue, without exception, shall be in the Los Angeles County Superior Court of the State of California. If, and only if, applicable law requires that all or part of any such litigation be tried exclusively in federal court, venue, without exception, shall be in the Central District of California located in the City of Los Angeles, California.
- 6.11 **ATTORNEYS' FEES**: If either Party commences an action against the other Party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing Party in such litigation shall be entitled to have and recover from the losing Party reasonable attorneys' fees and all other costs of such action.
- 6.12 **SUCCESSORS AND ASSIGNS**: This Agreement shall be binding on the successors and assigns of the Parties.
- 6.13 **NO THIRD PARTY BENEFIT**: There are no intended third party beneficiaries of any right or obligation assumed by the Parties. All rights and benefits under this Agreement inure exclusively to the Parties.

**PROFESSIONAL SERVICES AGREEMENT**

CONTRACT NO. 2041

City-Wide Radio System and Wireless Broadband Video Network Maintenance Services

Page 15 of 16

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- 6.14 CONSTRUCTION OF AGREEMENT: This Agreement shall not be construed in favor of, or against, either Party but shall be construed as if the Parties prepared this Agreement together through a process of negotiation and with the advice of their respective attorneys.
- 6.15 SEVERABILITY: If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.
- 6.16 AMENDMENT; MODIFICATION: No amendment, modification or supplement of this Agreement shall be valid or binding unless executed in writing and signed by both Parties, subject to CITY approval. The requirement for written amendments, modifications or supplements cannot be waived and any attempted waiver shall be void and invalid.
- 6.17 CAPTIONS: The captions of the various articles, sections and paragraphs are for convenience and ease of reference only, and do not define, limits, augment, or describe the scope, content, or intent of this Agreement.
- 6.18 INCONSISTENCIES OR CONFLICTS: In the event of any conflict or inconsistency between the provisions of this Agreement and any of the exhibits attached hereto, the provisions of this Agreement shall control.
- 6.19 ENTIRE AGREEMENT: This Agreement including all attached exhibits is the entire, complete, final and exclusive expression of the Parties with respect to the matters addressed herein and supersedes all other agreements or understandings, whether oral or written, or entered into between CITY and CONSULTANT prior to the execution of this Agreement. No statements, representations or other agreements, whether oral or written, made by any Party which are not embodied herein shall be valid or binding. No amendment, modification or supplement to this Agreement shall be valid and binding unless in writing and duly executed by the Parties pursuant to Section 6.15, above.
- 6.20 COUNTERPARTS: .This Agreement shall be executed in three (3) original counterparts each of which shall be of equal force and effect. No handwritten or typewritten amendment, modification or supplement to any one counterparts shall be valid or binding unless made to all three counterparts in conformity with Section 6.16, above. One fully executed original counterpart shall be delivered to CONSULTANT and the remaining two original counterparts shall be retained by CITY.

**(SIGNATURE PAGE TO FOLLOW)**

PROFESSIONAL SERVICES AGREEMENT

CONTRACT NO. 2041

City-Wide Radio System and Wireless Broadband Video Network Maintenance Services

Page 16 of 16

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed the day and year first appearing in this Agreement, above.

CITY OF SAN FERNANDO

Bear Communications, Inc. dba BearCom

By: 

DocuSigned by:  
Nick Kimball  
1044FC0C27C7409

Nick Kimball, City Manager

By: 

DocuSigned by:  
Mark Carry  
CA07EDCD433E400

Name: AÀÄÄÄÄÄÄÄÄ

APPROVED AS TO FORM

Title: ÁÄÄÄÄÄÄÄÄÄÄÄÄÄ

By: 

DocuSigned by:  
Richard Padilla  
9C6760504A9F4FC

Richard Padilla  
Assistant City Attorney

Request For Proposal to the City of San Fernando

EXHIBIT "A"

CONTRACT NO. 2041

# City-Wide Radio System and Wireless Broadband Video Network Maintenance Services

City of San Fernando  
C/O City Clerk's Office  
117 Macneil Street.  
San Fernando, CA 91340  
Attn: Julia Fritz, City Clerk

Submitted by:

Bear Communications, Inc.  
2601 Manhattan Beach Blvd.  
Redondo Beach, CA 90278

Contact: Mark Carry, General Manager  
(424) 675-7116

Submission Date: November 12, 2021 before 5:00 PM



**BEARC-M**<sup>®</sup>  
Always On

CITY OF  
**San Fernando**  
HISTORIC & VISIONARY



November 9, 2021

San Fernando Police Department  
910 First Street  
San Fernando, CA 91340

Attn: Chief Anthony Vairo  
Re: Response to RFP – City-Wide Radio System and  
Wireless Broadband Video Network Maintenance Services

Dear Chief Vairo:

It is my pleasure to submit the enclosed response to your RFP.

Bear Communications, Inc., dba BearCom, is a major provider of engineering, installation, maintenance, and warranty for Motorola Solutions, Inc. products, including repeaters, base stations, portable radios, mobile radios, paging systems, large communications consoles, dispatch centers, point-to-point, point-to-multi point, broadband, mesh networking and security closed circuit television. We have serviced Southern California customers for 40 years!

BearCom is proud to claim a 40-year relationship with Motorola, Inc.

We are the highest-level Motorola Solutions, Inc. service provider with a "Service Elite Specialist" (SES) rating and our technicians are certified by the Electronics Technicians Association of America (ETA). All our service monitors are re-calibrated annually, which ensures accurate / comparable readings from year-to-year for each piece of equipment serviced. We utilize JD Edwards to account for all labor and parts required for each repair; therefore, we can assist you in evaluating your equipment that may have higher than normal repair issues or that is subjected to non-normal use by the end user.

BearCom technicians are members of the L.A. Clean Card program, and all technicians, installers and sales personal are TWIC certified.

In closing, I thank you for the opportunity to respond to your bid request. My staff at BearCom is eager to continue to provide the San Fernando Police Department with the highest level of professional service in our industry. If you have any questions, please do not hesitate to call me at any time at 424-675-7116 x40215. I also invite you to visit our Redondo Beach headquarters office at any time.

I look forward to a positive reply to our proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Carry", is written over a light gray background.

Mark Carry  
General Manager  
[Mark.carry@bearcom.com](mailto:Mark.carry@bearcom.com)

## EXECUTIVE SUMMARY

BearCom is a Motorola Service Elite Specialist (formerly known as a Premier Service Partner) and we have many years of experience engaged in providing major systems to Motorola and large governmental agencies. We are heavily invested in our talent to provide work in our core business of supporting, installing, configuring and maintaining Two Way Communications Systems and Wireless Broadband Network Systems.

BearCom is the current provider for maintenance on these two systems, and having designed and installed both systems, is uniquely qualified to provide ongoing system support and maintenance.

## SCOPE OF SERVICES

Coverage will be 24 hour, 7 days per week, and 365 days a year, with 2 hours on site response, traffic permitting, for critical failures for both the Two-Way Radio and Wireless Broadband Systems.

Our main shop, located at 2601 Manhattan Beach Blvd., Redondo Beach, CA is located 33.2 miles from 117 Macneil St., San Fernando, CA 91340, putting us within your 40-mile requirement and allowing us to meet your 2 hour or better response time for critical failures.

Radio Maintenance shall include all parts, labor and travel required to repair and maintain the City-Wide Trunk Radio Communications System, MDC, and other related equipment, that has become defective through normal wear and use. All equipment must be currently supported by the Manufacturer and subject to the available of parts from the Manufacturer.

Annual PMI of all Fixed Equipment.

Coverage for replacement of portable accessories, limited to batteries, antenna, and belt clips (one per covered unit per year if needed and accompanied by a portable radio, excludes non-Motorola, non-rechargeable, AA or Mercury batteries).

Includes programming and updating all code plugs for the mobile and portable radios.

Includes Hi-Tech Infrastructure Repair with Advanced Replacement on the MCC5500 Consoles, Nice Logging Recorder Gold Package.

All technicians responding to service calls on your Two-Way Communications System are trained and familiar with your new Trunked Radio System.

John Malin, Connor Hart, Luke Henry, Greg Leeser (Certificates are included)

Wireless Broadband Network maintenance support will include all parts and labor to repair any defective items which are currently supported by the Manufacturer, including technical support for related software issues.

Systems and procedures are already in place to log into your system remotely to diagnose and repair equipment.

Jack Szymanski (Certificate included)

Spares are limited to what is already on hand.

BearCom currently holds a Low-level Electrical Communications License (C7) # 763369 Exp. 5-31-2023.

BearCom is also registered with the Dept of Industrial Relations – DIR# 1000007462.



# OVERVIEW

## Your Team

BearCom is America's only nationwide wireless equipment dealer and integrator. We are headquartered in Dallas, Texas and have more than 80 branches across the United States and Canada. We're here to help you!

**Mark Carry, General Manager**

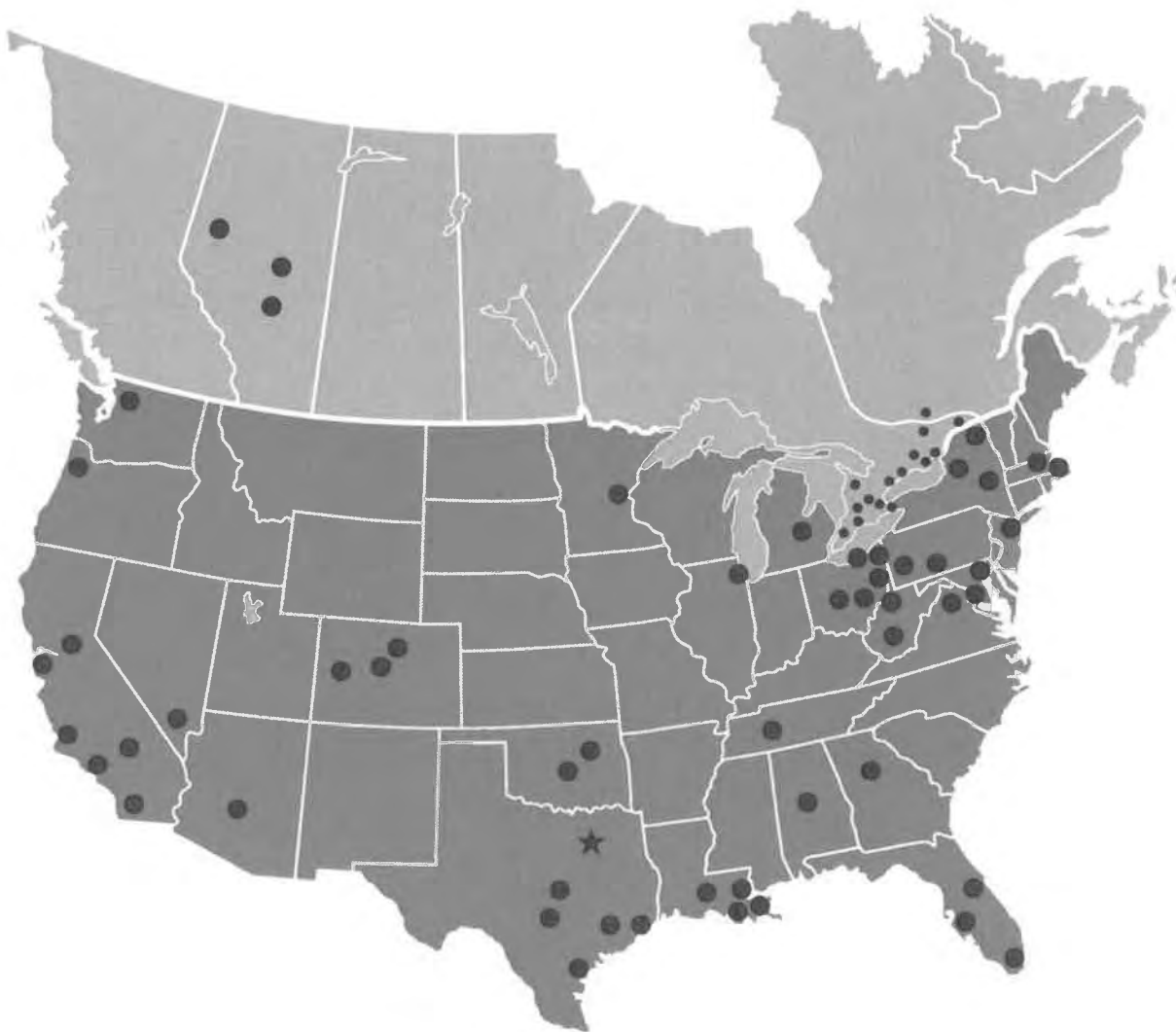
Email: [mark.carry@bearcom.com](mailto:mark.carry@bearcom.com)

Phone: 424-675-7116 x40215

**John Malin, Service Manager**

Email: [john.malin@bearcom.com](mailto:john.malin@bearcom.com)

Phone: 424-675-7116 x40250



## BEAR COMMUNICATIONS, INC.

Bear Communications, Inc., dba BearCom, has been servicing Southern California's communications and security needs for 40 years. We are dedicated to providing the highest level of communications sales, service and technical expertise to public safety, federal government agencies and businesses throughout Southern California.

In May 1981, BearCom began servicing the rapidly growing Two-Way radio industry becoming an "Authorized Motorola Service Station." As the industry has grown, so has Bear Communications!

BearCom also entered the electronic security industry by providing and servicing closed circuit video surveillance solutions. BearCom continues to be a major provider of closed-circuit surveillance products and services to several municipalities, federal agencies and local businesses.

BearCom has established a reputation as a leader in such technologies as Mesh Networking, Point-to-Point Communications and Microwave under-builds. By combining all of our technologies and competencies (engineering, 24 hour service, installation, tower climbing, sales and FCC licensing assistance) Bear Communications, Inc. has become the premier communications company in Southern California.

MOTOROLA SERVICE STATION AGREEMENT  
MOTOROLA SERVICE ELITE SPECIALIST  
MOTOROLA PROFESSIONAL & COMMERCIAL RADIO (PCR) AGREEMENT  
MOTOROLA PUBLIC SAFETY MANUFACTURER REPRESENTATIVE  
MOTOROLA UTILITY MANUFACTURER REPRESENTATIVE  
MOTOROLA FIXED WIRELESS VAR  
MOTOROLA WIRELESS FIELD ENGINEER – WiBB VAR Fixed  
JPS COMMUNICATIONS AUTHORIZED DEALER AGREEMENT  
TX/RX MASTER INTEGRATOR  
ZETRON AUTHORIZED RESELLER AND SERVICE AGREEMENT  
KENWOOD AUTHORIZED RESELLER  
TAIT/HARRIS AUTHORIZED RESELLER  
VERTEX AUTHORIZED RESELLER  
ONSSI AUTHORIZED RESELLER  
AVIGILON AUTHORIZED RESELLER  
CAMBIUM AUTHORIZED RESELLER

We are extremely proud of our employees! We believe very much in employee education. Bear Communications, Inc. invests heavily in Motorola and other manufacturer technical schooling for our technicians and account representatives. BearCom is a Motorola Service Elite Specialist (SES); an Elite Motorola Dealer; a multi year Motorola Pinnacle award winner; a Certified RF Communications Service Center (CSC); and our technicians hold CET certifications.

Our staff at BearCom is eager to provide you and your organization with the highest level of professional service in the industry. If your time permits, we encourage you to visit our local facility in Redondo Beach.

[www.bearcom.com](http://www.bearcom.com)

**RESELLER AGREEMENTS AND CONTRACTS**

**MOTOROLA SERVICE STATION AGREEMENT - 1981**

**MOTOROLA PREMIER SERVICE PARTNER**

**MOTOROLA AUTHORIZED MASTER DEALER AGREEMENT**

**MOTOROLA CENTRACOM-ELITE CONSOLE DEALER AGREEMENT**

**MOTOROLA PROFESSIONAL SERIES RADIO DEALER AGREEMENT**

**MOTOROLA SELECT SYSTEMS DEALER AGREEMENT**

**MOTOROLA PUBLIC SAFETY MANUFACTURERS REPRESENTATIVE**

**MOTOROLA UTILITY MANUFACTURERS REPRESENTATIVE**

**MOTOROLA FEDERAL AGENT**

**MOTOROLA FIXED WIRELESS VAR**

**MOTOROLA WIRELESS FIELD ENGINEER – WiBB VAR Fixed**

**SYMBOL AUTHORIZED RESELLER**

**PLANT-CML MASTER PURCHASE AND RESALE AGREEMENT**

**RECEPTORS CARD ACCESS RESELLER AGREEMENT**

**JPS COMMUNICATIONS AUTHORIZED DEALER AGREEMENT**

**TX/RX MASTER INTEGRATOR**

**ZETRON AUTHORIZED RESELLER AND SERVICE AGREEMENT**

**ONSSI AUTHORIZED RESELLER AND SERVICE AGREEMENT**

**GETAC AUTHORIZED RESELLER**

**SONY SECURITY AUTHORIZED RESELLER**

**AVIGILON AUTHORIZED RESELLER**

## ABOUT THE DEPARTMENTS AT BEARCOM

### Service Department:

Bear Communications, Inc. is an Authorized Motorola Service Elite Specialist (SES).

Our service department is comprised of nine (9) inter-departments:

- Two-Way mobile & fixed equipment shop repair
- Two-Way mobile & fixed equipment field repair
- Two-Way portable shop repair
- Special Products equipment repair shop
- Special Products equipment repair field
- Sites equipment repair
- Video Systems & Security repair shop
- Video Systems & Security repair field
- Broadband

Because of technical advancements in our industry, it is necessary to utilize the talents and assets of our technicians as specialist in certain product categories. You can be assured that any contract or subcontract for a project will be staffed with qualified employees, be it engineering, technical or installation.

Bear Communications also offers engineering service, installation and maintenance on Closed Circuit Video. Our system configurations range from the simple to large multi-camera, multi-monitor, and microprocessor-controlled configurations utilizing fiber optics and wireless transmission technology.

### Installation Department:

BearCom has a complete installation department to meet your needs. Antenna site and tower work, base stations, remotes and mobile installations are all done by trained employees who care what the job looks like when completed. Public Safety full car builds.

### Customer Service Department:

This department provides the highest level of customer satisfaction possible. The department is responsible for receiving equipment directly from customers and from our own technical field staff. Data input is accomplished through utilization of our JD Edwards software. JD Edwards provides a complete repair history for each S/N identifies if a radio is on a MA, in warranty or on an extended warranty and provides reporting as to the current status of a repair, cycle time, etc. Our Customer Service staff also takes a proactive role by notifying each customer when their radio must be sent to a repair facility or if there is a parts hold. We believe strongly in calling our customers before they call us.

### Rental Department:

BearCom has a complete radio rental department. We specialize in Motorola Two-Way equipment complete with all the accessories. If your customers need radio communications for one day or for several months, we can fulfill their needs anywhere in the United States!

**Antenna Sites Administration:**

BearCom has a vast experience in managing high level and low level sites throughout the Los Angeles area. We are equipped to offer turn-key service, handling all aspects of site management; marketing, propagation studies, tower and building maintenance, interference issues, billing, telephone, power, emergency power and collection.

**UHF / VHF Trunking:**

BearCom offers new communications technology in our VHF trunking system. Trunking is offered on Mt. Wilson, Palos Verdes and Santiago sites. Your customers can take advantage of wide area push-to-talk communications for only \$19.95 per month per radio. We exclusively use Motorola mobile and portable radios on our trunking systems!

**Maintenance Contract Offerings:**

BearCom was the first in our industry to offer 100% inclusive service agreements. Services include 24 X 7 coverage, 2-hour, traffic permitting, response, free battery replacement, antenna replacement, and belt clip replacement. Pick up and delivery of equipment at the customer location can be made a part of many service agreements. We help to take the burden off your customers! We will be more than happy to work with you in supplying a competitive quote to your customers!

**Sales Department:**

Recognized a leader in Motorola service and installation, Bear Communications was appointed in 1981 as one of the first dealers for Motorola Radius products. Additionally, BearCom was appointed one of the very first Motorola Full Line Dealers on the West Coast. Bear Communications, Inc. is an Authorized Dealer for the following product lines:

**Wireless Broadband:**

- a. Mesh Networking
- b. PIPS Automatic License Plate Recognition
- c. Point-to-Point licensed and non-licensed

**Two-Way Radio:**

- a. Motorola, full line communication products:
  - 1. Elite Dealer for Motorola Radio Solutions Track
  - 2. Authorized Agent of Motorola – Federal Reseller
  - 3. Motorola P25 Systems Track
  - 4. Motorola MR Track
  - 5. Motorola Solutions Elite Channel Partner
  - 6. Motorola Enterprise WINS
  - 7. Broadband
- b. Kenwood, full line two-way communications products
- c. Tait Electronics, full line two-way communications products
- d. Spectracom, time products
- e. SmartLink, provides backbone linking of conventional and trunking two-way repeaters
- f. Zetron Consoles

Two-Way Radio Wide Area Communications Provider:

- a. Bear Communications, Inc. VHF Trunking System. One-to-one or one-to-many at a fixed low monthly price.

Video Systems & Security Department:

- a. Sony, full line closed circuit TV and monitoring products
- b. Point To Point Microwave
- c. Point To Multi Point Microwave
- d. ML800 & 900 Computers
- e. ALPR
- f. MESH Networking
- g. ONSSI – Video Analytics
- h. Avigilon

**Be sure to look at our Web Site!**

[www.bearcom.com](http://www.bearcom.com)

**Organizational Structure****Executive Leadership Team**

Chief Executive Officer/President	Bob Craycraft
Chief Financial Officer	Greg Collins
Chief Administrative Officer	Carla Rolinc
Sr. VP of Sales and Marketing	Les Fry
Sr. VP of Service and Operations	Mike Smith
President - Canada	Ryan Pryznyk

**Redondo Beach Team**

Regional Vice President	Stanley Cameron
General Manager	Mark Carry
Service Manager	John Malin

## EXPERIENCE

In 1981, Bear Communications, Inc. began servicing the Two-Way radio industry as an "Authorized Motorola Service Station", providing engineering, installation, and maintenance for Motorola communications products including base stations, portable and mobile radios, paging systems, microwave systems, and large communications consoles. As the industry has grown, so has BearCom!

The following list represents just a sample of products and equipment that BearCom has experience in engineering, installing, and servicing:

### Consoles

- Dispatch Consoles and Mini Centracoms
- IPC / Positron Consoles
- Zetron Consoles
- Programming Capability
- Remotes – Local, DC, Tone, and Digital (all makes)
- Display Terminals
- Plant E-911
- K Core
- M Core
- MCC 7100
- MCC 7500

### Microwave

- 960mhz – 23gc
- Video
- Cambium

### Repeaters & Base Stations

- Analog – Trunking
- Digital
- DES Systems
- Signaling Systems

### Mobile, Portable and Fixed Products

- Hand-held (all models including DES)
- Repeaters
- Base Stations
- Consolettes
- MOTOTRBO (Digital Radios)

### Trunking Systems – All Types

### Rental

- Two Way Radios
- Repeaters
- Satellite Phones

### Vehicle Installation

- Police Vehicles / Full Car Builds
- Fire Vehicles / Full Car Builds
- Under Cover Vehicles / Full Car Builds
- Sirens
- Lightbars
- Wig Wags
- Computers



Public Safety  
Cranes  
Specialized Vehicles  
Marine

JPS Interoperability Equipment

MARS AND CLA-MARS Reporting

Antenna Site

Engineering  
Propagation Studies  
Coverage Map Generation  
Site Building Penetration  
Grounding  
Tower Climbing/Antenna Mounting  
System Design:  
Sites  
In-Building BDA's  
High-Level and Low-Level Tower Site Space for Rent

Data Products for In-Vehicle

Getac  
Sierra Wireless

Closed Circuit Television Security Systems

Monitors  
Cameras  
Multiplexers  
Hard Wired and Wireless Systems  
DVR's (Digital Video Recorders)  
Intelligent Software – ObjectVideo  
In-Car Camera Systems  
ONSSI  
Avigilon Systems

GPS Systems

Equipment and Installation  
GPS Monitoring Software  
GOS Hosting

Wide Area VHF Trunking System

Customer Owns the Radios and Pays a Small Fee Per Month  
Unlimited Use of Airtime  
Equipment Leasing Available  
System Covers the Entire Los Angeles Basin

Wireless Broadband

Motorola Motomesh DUO  
Mesh Networking  
Cambium (Non-line of site / point to point)  
Microwave Under Builds  
Symbol – E Ticket, etc.  
Card Access  
Automatic License Plate Recognition  
Firetide

**SIMILAR INSTALLS**

**San Fernando Police Department**

**Chief Tony Vairo**

**818-398-4260**

**Los Angeles Police Department – Housing Authority County of Los Angeles (HACLA)**

**James Stover**

**213-842-2339**

**VA – Greater Los Angeles Healthcare System**

**Robert Dalley, Emergency Manager**

**310-268-3031**

**CONTRACTORS STATE LICENSE BOARD**

STATE OF CALIFORNIA | DEPARTMENT OF CONSUMER AFFAIRS

P.O. BOX 26000, SACRAMENTO, CA 95826-0026



EXHIBIT "A"  
CONTRACT NO. 2041  
US POSTAGE \$000.51



ZIP 95827  
041L1

00763369  
BEAR COMMUNICATIONS INC  
4009 DISTRIBUTION DRIVE #200  
GARLAND, TX 75041

7504136124 C003



CONTRACTORS  
STATE LICENSE BOARD  
ACTIVE LICENSE



License Number **763369** Entity **CORP**  
Business Name **BEAR COMMUNICATIONS INC**

Classification(s) **C-7**

Expiration Date **05/31/2023**

[www.cslb.ca.gov](http://www.cslb.ca.gov)



Any change of business address/name must be reported to the Registrar within 90 days

This license is not transferrable, and shall be returned to the Registrar upon demand when suspended, revoked, or invalidated for any reason.

This pocket card is valid through the expiration date only.

If found, drop in any mailbox  
Postage guaranteed by:  
Contractors State License Board  
P.O. Box 26000, Sacramento, CA 95826

Licensee Signature

~~EXHIBIT 1A~~

CONTRACT NO. 2041

# Certified Service Center

## A Symbol of Quality Service

*Be it known by these present that*

## BEARCOM COMMUNICATIONS, INC.

Redondo Beach, CA

*has met the highest standards of achievement in its service facilities, staff and management as reviewed by the CSC Certification Board and is hereby designated a*



**RF Communications  
Service Center**

*Kevin Carter*

Kevin Carter, President

Consumer Electronics Association  
(CEA)  
1919 S Eads St  
Arlington VA 22202  
[www.cea.org](http://www.cea.org)  
703-907-7045

Electronics Technicians Association  
(ETA)  
5 Depot St  
Greencastle IN 46135  
[www.eta-inc.org](http://www.eta-inc.org)  
765-653-8262

Professional Service Association  
(PSA)  
71 Columbia St  
Cohoes NY 12047  
[www.psaworld.com](http://www.psaworld.com)  
888-777-8851

Enterprise Wireless Alliance  
(EWA)  
2121 Cooperative Way, Ste 200  
Herndon, VA 20171  
[www.enterprisewireless.org](http://www.enterprisewireless.org)  
703-797-5107

*Carla Hurtubise*

Carla Hurtubise, Secretary



**CERTIFIED  
SERVICE  
CENTER**

*A consortium of international  
organizations dedicated to  
achieving the highest levels of  
professional product service*

**Registration  
Number:**

**TX0157**

**Expiration:**

**June 4, 2023**

**MOTOROLA SOLUTIONS**

November 10<sup>th</sup> 2021

Bear Communications & Electronics  
2601 Manhattan Beach Blvd  
Redondo Beach, CA 90278

To Whom It May Concern:

This letter represents that Bear Communications & Electronics currently may use the following Motorola subcontractor service status designations while acting as a subcontractor to Motorola on a service contract:

Motorola Service Elite Specialist

As a Motorola Service Elite Specialist, Bear Communications & Electronics may, while acting as a Motorola subcontractor, perform maintenance, installation and warranty services for select Motorola products such as two-way radio systems, consoles, and subscriber units. Bear Communications & Electronics has a authorized service location in Redondo Beach, CA. Being a Motorola Service Elite Specialist means that Bear Communications & Electronics, meets Motorola's high level of service requirements including accreditation as a Certified Service Center by an industry recognized institution, and compliance with Motorola's internal Environmental Health and Safety policy. In addition, Motorola requires that a minimum number of a Service Partner's technicians achieve certification and meet rigorous training requirements necessary to perform certain services on both new and existing Motorola radio systems and subscribers.

Bear Communications & Electronics is also authorized to perform warranty repair services at the locations listed above. As such, Bear Communications & Electronics can, while acting as a Motorola subcontractor, perform warranty services for only those two-way radio products it is authorized by Motorola to resell.

Please note that the Motorola Service Elite Specialist designation expires on 12/31/2021 at which time it will be reviewed by Motorola.

Also please note that this designation is internal to Motorola and is only intended for use by Motorola to differentiate between its service subcontractors. The designation applies only when Motorola Service Elite Specialists are performing work under the direct supervision of Motorola as a subcontractor with access to Motorola technical support, and Motorola makes no representations about and accepts no responsibility for the ability or performance of such Service Elite Specialists when these entities are acting independently. This designation does not prohibit any Service Elite Specialist from offering independent services to a customer.

If you have any additional questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Scott Urban".

Scott Urban  
Service Partner Program  
Phone #: 847-576-8122  
Email: scotturban@motorolasolutions.com

## PROPOSED EQUIPMENT AND SERVICES

There is no new equipment proposed for the RFP.

See the attached "AS BUILT" for the Wireless Broadband Network System

**MAINTENANCE AND SUPPORT PROGRAM****A. INFRASTRUCTURE COVERAGE**

- Severity Level 1
- 24/7 with 2-hour response time, traffic permitting
- PMI Annually
- Hi-Tech Coverage – Infrastructure Repair with Advanced Replacement, if available
- Repairs will be Best Effort – subject to the availability of parts

**B. MOBILE RADIO COVERAGE**

- 8:00 A.M. to 5:00 P.M., Monday – Friday, excluding legal holidays
- Next business day response
- Repairs will be Best Effort – subject to the availability of parts

**C. PORTABLE RADIO COVERAGE**

- 8:00 A.M. to 5:00 P.M., Monday – Friday, excluding legal holidays; at the BearCom facility in Redondo Beach
- Battery replacement – One per radio per year when accompanied with radio
- Disposal of spent battery
- Belt clip replacement - One per radio per year when accompanied with radio
- Antenna replacement - One per radio per year when accompanied with radio
- Repairs will be Best Effort – subject to the availability of parts

**D. VIRTUAL PATROL SYSTEM**

- Severity Level 1
- 24 hours per day x 365 days per year
- Technician telephone response 1 hour
- 2 hour On-Site response
- PMI Annually
- Technical Support for Related Software
- Repairs will be Best Effort – subject to the availability of parts

**A. INFRASTRUCTURE COVERAGE**

BearCom will provide On-Site Infrastructure Response services, which will be facilitated by the customer placing a "Request for Service" telephone call to the BearCom office. If a service request is made after hours, on a weekend or on a holiday, the caller must use the BearCom "After Hours" menu on the telephone system. On-Site Response provides for an on-site technician response as determined by Table A below:

**Table A**

<b>Response</b>	
Current Coverage	24/7 with 2-hour response time, traffic permitting Annual PMI Hi-Tech Coverage – Infrastructure Repair with Advanced Replacement if available Repairs will be Best Effort – subject to the availability of parts

**1.0 Preventative Maintenance Inspection (PMI)**

Preventative Maintenance Inspections will provide operational test and alignment, on the customer's equipment (infrastructure or fixed network equipment only) to ensure the equipment meets original manufacturer's specifications, all of which are hereby incorporated by this reference. Infrastructure Preventative Maintenance Inspections will be performed during standard business days, 8:00 A.M. to 5:00 P.M., excluding legal holidays.

**1.1 BearCom has the following responsibilities:**

- 1.1.1 Schedule the Annual PMI with the customer
- 1.1.2 Notify the Customer of any possible System downtime needed to perform this service.
- 1.1.3 Select and manage any subcontractors required to perform preventative maintenance on original equipment manufacturer (OEM) equipment.
- 1.1.4 Dispatch the technical resources upon receiving Customer date(s) for Infrastructure Preventative Maintenance Inspection to be performed.
- 1.1.5 Receive and log the following information from the customer to the JD Edwards system:
  - a) Dates to perform Infrastructure Preventative Maintenance Inspection.
  - b) Task number.
  - c) Site identification.
  - d) Customer and address.
  - e) Customer primary contact.
  - f) Access requirements.
  - g) Close Task Number upon receiving notice of completion from assigned technician or project manager.

**1.2 Have on hand equipment list including type and quantity.****1.3 Have on hand original equipment manufacturer (OEM) Equipment manuals for system specifications as available****1.4 Inspect and clean cabinets****1.5 Inspect:**

- 1.5.1 General circuitry.
- 1.5.2 Fault indicators.
- 1.5.3 Cables, connections and grounding.
- 1.5.4 Remove any dust, and/or foreign substances from the equipment.
- 1.5.5 Clean filters, if applicable.
- 1.5.6 Complete all preventative maintenance requirements and manufacturers specification
- 1.5.7 Measure, record and adjust the equipment parameters in accordance with the manufacturer's service manuals and the Rules and Regulations of the Federal Communications Commission (FCC), where applicable.
- 1.5.8 Consult equipment manuals for system specifications per system configuration.
- 1.5.9 Complete and sign (by technician) system specific Infrastructure Preventative Maintenance Inspection checklist:
  - a) Electronically file one copy of the system specific Infrastructure Preventative Maintenance Inspection checklist at the BearCom office.
  - b) Identify any service problems that require customer or BearCom action.
  - c) Schedule post PMI meeting with customer to discuss service problems or other issues that require specific action by BearCom or by customer.



**B. MOBILE RADIO COVERAGE****1.0 On-Site Mobile Radio Response**

On-Site Radio Response provides for BearCom to be on-site to analyze a problem with a mobile radio and to repair the radio on-site if possible. Response will be on the same day if possible, or the next business day, as the trouble call is received by BearCom. If a mobile radio cannot be repaired in the field, BearCom remove the radio and reinstall a FRU (Field Replacement Unit) if provided by the customer. BearCom will then take the radio to its facility to perform the repair, return and reinstall the radio, then give the FRU back to the customer.

- 1.1 8:00 A.M. to 5:00 P.M., Monday through Friday, excluding legal holidays
- 1.2 Next business day response
- 1.3 Repairs will be Best Effort – subject to the availability of parts

**C. PORTABLE RADIO COVERAGE**

Portable radio repair provides for BearCom to provide the labor and replacement parts to repair customer's portable radio. All portable radio repair work will be done at the BearCom facility in Redondo Beach and not at the customer location.

- 1. 8:00 A.M. to 5:00 P.M., Monday – Friday, excluding legal holidays. Customer brings equipment to the BearCom Redondo Beach facility.
- 2. Battery replacement, including disposal of spent battery. One battery per year per radio, when accompanied with radio if needed.
- 3. Battery disposal.
- 4. Belt clip replacement, one belt clip per radio per year when accompanied with radio if needed.
- 5. Portable antenna replacement, one antenna per year per radio when accompanied with radio if needed.
- 6. BearCom has the following responsibilities:
  - 6.1 Add the following customer information to the BearCom JD Edwards tracking system:
    - 6.1.1 Customer name, contact and address.
    - 6.1.2 System type and equipment descriptions.
    - 6.1.3 Site identification (site names, site ids, addresses and zip codes).
    - 6.1.4 Provide equipment list including type and quantity, when available.
  - 6.2 Provide an operational check of equipment to determine the nature of the problem.
  - 6.3 Restore equipment with external defects that can be restored without opening the radio case.
  - 6.4 Generate service ticket in JD Edwards.
  - 6.5 Repairs will be Best Effort – subject to the availability of parts.

**D. VIRTUAL PATROL SYSTEM****On-Site Response**

On-Site Response provides for BearCom to provide on-site response as determined by pre-defined severity levels and response times.

BearCom will provide On-Site Response services, which will be facilitated by the customer placing a "Request for Service" telephone call to the BearCom office. If a service request is made after hours, on a weekend or on a holiday, the caller must use the BearCom "After Hours" menu on the telephone system. On-Site Response provides for an on-site technician response as determined by pre-defined response levels set forth in Table A.

Table A - Severity Definitions

<b>Response Types</b>	
(A)Severity Level 1	24 hours per day x 365 days per year Technician telephone response 1 hour 2 – 4-hour On-Site response, traffic permitting Repairs will be Best Effort – subject to the availability of parts
(B)Severity Level 2	8:00 A.M. to 5:00 P.M. response Response during Standard Business Day, Monday – Friday Excludes legal holidays Same day response Repairs will be Best Effort – subject to the availability of parts
(C)Severity Level 3	8:00 A.M. to 5:00 P.M. response Response during Standard Business Day, Monday – Friday Excludes legal holidays Next business day response Repairs will be Best Effort – subject to the availability of parts

**Preventative Maintenance Inspection (PMI):**

BearCom will provide an Annual Preventative Maintenance Inspection (PMI) service to the customer.

Preventative Maintenance Inspections will provide operational test and alignment, on the customer's equipment to ensure the equipment meets original manufacturer's specifications, all of which are hereby incorporated by this reference. Preventative Maintenance Inspections will be performed during standard business days, 8:00 A.M. to 5:00 P.M., excluding legal holidays.

**1.0 BearCom has the following responsibilities:**

- 1.1 Schedule the PMI Annually with the customer
- 1.2 Notify the Customer of any possible System downtime needed to perform this service
- 1.3 Dispatch the technical resources upon receiving Customer date(s) for Preventative Maintenance Inspection to be performed

- 1.4 Receive and log the following information from the customer to the JD Edwards system:
  - 1.4.1 Dates to perform Infrastructure Preventative Maintenance Inspection
  - 1.4.2 Task number
  - 1.4.3 Site identification
  - 1.4.4 Customer and address
  - 1.4.5 Customer primary contact
  - 1.4.6 Access requirements
  - 1.4.7 Close Task Number upon receiving notice of completion from assigned technician or project manager
- 1.5 Have on hand equipment list including type and quantity.
- 1.6 Have on hand original equipment manufacturer (OEM) Equipment manuals for system specifications as available
- 1.7 Inspect and clean cabinets
- 1.8 Inspect:
  - 1.8.1 General circuitry
  - 1.8.2 Fault indicators
  - 1.8.3 Cables, connections and grounding
  - 1.8.4 Remove any dust, and/or foreign substances from the equipment
  - 1.8.5 Clean filters, if applicable
  - 1.8.6 Complete all preventative maintenance requirements and manufacturers specification
  - 1.8.7 Measure, record and adjust the equipment parameters in accordance with the manufacturer's service manual
  - 1.8.8 Consult equipment manuals for system specifications per system configuration
  - 1.8.9 Complete and sign (by technician) system specific Infrastructure Preventative Maintenance Inspection checklist:
    - 1.8.9.1 Electronically file one copy of the system specific Preventative Maintenance Inspection checklist at the BearCom office
    - 1.8.9.2 Identify any service problems that require customer or BearCom action
    - 1.8.9.3 Schedule post PMI meeting with customer to discuss service problems or other issues that require specific action by Bearcom or by customer

## INSTRUCTIONS FOR PLACING A REQUEST FOR SERVICE

To service the needs of our customers, our office hours are from 8:00 a.m. to 5:00 p.m., Monday through Friday, excluding Weekends and Legal Holidays.

If service is required during regular business hours, **simply call 424-675-7116, ext. 40261** for our “dispatch” office. Our friendly personnel will promptly handle your needs and schedule a field technician to your facility. We will always strive to provide same day service; however, on rare occasions we may have to schedule your service for the next business day.

If service is required after normal business hours, on Weekends and/or Legal Holidays, **simply call 800-750-7234, dial 9**. Please leave a detailed message, including your name, call back phone number and a description of the radio problem and a service technician will return your call within 30 minutes. If site response is required, a technician will be on site within 4 hours.

EXHIBIT "1"  
CONTRACT NO. 2041

Unit	IP Address	MAC Address	Model	Serial No	Operating System / Service Patch Rev	Purpose	Login	PW
CES01	10.1.105.220/24	00-25-B3-CA-DE-9B	TT2071	2UA9380BQJ	XP-SP3	CSDM/ADM	Administrator	Motorola1!
CSL1	10.1.105.1	00-26-55-3E-0F-B1	TT2069	2UA9430HVG	XP-SP3	Operator Position 1	Administrator	Motorola1!
CSL2	10.1.105.2	00-26-55-3C-A6-38	TT2069	2UA9430HVL	XP-SP3	Operator Position 2	Dispatch	SFPD
CSL3	10.1.105.3	00-26-55-3C-A6-42	TT2069	2UA9430HVF	XP-SP3	Operator Position 3	Administrator	Motorola1!
Netclock 1	10.1.105.248					Master Clock	Dispatch	SFPD
Netclock 2						Expansion Clock		

Log Recorder	64.84.209.214/24		501M0193-01	46389701				
Log Workstation	64.84.209.215/24		470065-099 HP	MX294301P9				
GW		64.84.209.1						
DNS		10.240.106.199						
		10.240.106.213						

Workgroup MCC5500

Logins	XP	Motorola1!						
	Administrator	SFPD						
	Dispatch							
	MCC5500							
	Console Configuration	SFPD1234						
	CSDM							
	SUPERVISOR1	SUPERVISOR1						
	SUPERUSER	SUPERUSER						
	Nicecall server							
	Administrator	nicecli						
	Nicecall client							
	nice	nice						

Network Configuration

8/29/2014





## REFERENCES

San Fernando Police Department

Chief Tony Vairo

818-398-4260

Los Angeles Police Department – Housing Authority County of Los Angeles (HACLA)

James Stover

213-842-2339

VA Greater Los Angeles Healthcare System

Robert Dalley, Emergency Manager

310-268-3031



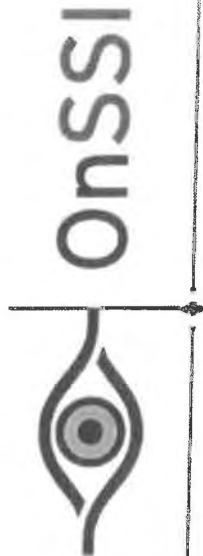
MODEL	QTY	YEAR 1 PER UNIT PRICE PER MONTH	YEAR 1 EXTENDED PRICE PER MONTH	YEAR 2 PER UNIT PRICE PER MONTH	YEAR 2 EXTENDED PRICE PER MONTH	YEAR 3 PER UNIT PRICE PER MONTH	YEAR 3 EXTENDED PRICE PER MONTH	YEAR 4 PER UNIT PRICE PER MONTH	YEAR 4 EXTENDED PRICE PER MONTH	YEAR 5 PER UNIT PRICE PER MONTH	YEAR 5 EXTENDED PRICE PER MONTH
APX900 PORTABLE P/W	65	\$ 6.00	\$ 390.00	\$ 6.18	\$ 401.70	\$ 6.37	\$ 413.75	\$ 6.56	\$ 426.16	\$ 6.75	\$ 438.95
APX1500 MOBILE CONTROL STATION P/W	3	\$ 12.50	\$ 37.50	\$ 12.88	\$ 38.63	\$ 13.26	\$ 39.78	\$ 13.66	\$ 40.98	\$ 14.07	\$ 42.21
APX1500 MOBILE P/W	50	\$ 10.00	\$ 500.00	\$ 10.30	\$ 515.00	\$ 10.61	\$ 530.45	\$ 10.93	\$ 546.36	\$ 11.26	\$ 562.75
APX8000 PORTABLE P/D	93	\$ 6.50	\$ 604.50	\$ 6.70	\$ 622.64	\$ 6.90	\$ 641.31	\$ 7.10	\$ 660.55	\$ 7.32	\$ 680.37
APX8500 MOBILE P/D	25	\$ 10.00	\$ 250.00	\$ 10.30	\$ 257.50	\$ 10.61	\$ 265.23	\$ 10.93	\$ 273.18	\$ 11.26	\$ 281.38
APX8500 CONSOLETTTE P/D	4	\$ 12.50	\$ 50.00	\$ 12.88	\$ 51.50	\$ 13.26	\$ 53.05	\$ 13.66	\$ 54.64	\$ 14.07	\$ 56.28
MCC7500 CONSOLES Including Related Equipment	3	\$ 180.00	\$ 540.00	\$ 185.40	\$ 556.20	\$ 190.96	\$ 572.89	\$ 196.69	\$ 590.07	\$ 202.59	\$ 607.77
GTR8000 Including Related Equipment	3	\$ 112.50	\$ 337.50	\$ 115.88	\$ 347.63	\$ 119.35	\$ 358.05	\$ 122.93	\$ 368.80	\$ 126.62	\$ 379.86
CLEMARS BASE	1	\$ 22.36	\$ 22.36	\$ 23.03	\$ 23.03	\$ 23.72	\$ 23.72	\$ 24.43	\$ 24.43	\$ 25.17	\$ 25.17
NICE LOG RECORDER Gold Package	1	\$ 260.00	\$ 260.00	\$ 267.80	\$ 267.80	\$ 275.83	\$ 275.83	\$ 284.11	\$ 284.11	\$ 292.63	\$ 292.63
GETAC MDC'S	18	\$ 55.00	\$ 990.00	\$ 56.65	\$ 1,019.70	\$ 58.35	\$ 1,050.29	\$ 60.10	\$ 1,081.80	\$ 61.90	\$ 1,114.25
PTP 5.8 MHz-CONN AP W/ANT	6	\$ 45.86	\$ 275.16	\$ 47.24	\$ 283.41	\$ 48.65	\$ 291.92	\$ 50.11	\$ 300.67	\$ 51.62	\$ 309.70
Fixed CAMERAS	59	\$ 28.66	\$ 1,690.94	\$ 29.52	\$ 1,741.67	\$ 30.41	\$ 1,793.92	\$ 31.32	\$ 1,847.74	\$ 32.26	\$ 1,903.17
PTZ CAMERAS	8	\$ 28.66	\$ 229.28	\$ 29.52	\$ 236.16	\$ 30.41	\$ 243.24	\$ 31.32	\$ 250.54	\$ 32.26	\$ 258.06
RADIO TOWERS	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CMM4	1	\$ 91.71	\$ 91.71	\$ 94.46	\$ 94.46	\$ 97.30	\$ 97.30	\$ 100.21	\$ 100.21	\$ 103.22	\$ 103.22
Ocularis Enterprise Base GetCURRENT	1	\$ 369.63	\$ 369.63	\$ 380.72	\$ 380.72	\$ 392.14	\$ 392.14	\$ 403.90	\$ 403.90	\$ 416.02	\$ 416.02
Ocularis Enterprise Camera GetCURRENT	72	\$ 69.93	\$ 5,034.96	\$ 72.03	\$ 5,186.01	\$ 74.19	\$ 5,341.59	\$ 76.41	\$ 5,501.84	\$ 78.71	\$ 5,666.89
Network Switches	3	\$ 51.59	\$ 154.77	\$ 53.14	\$ 159.41	\$ 54.73	\$ 164.20	\$ 56.37	\$ 169.12	\$ 58.06	\$ 174.19
PTP 58MHZ 600LS	3	\$ 40.12	\$ 120.36	\$ 41.32	\$ 123.97	\$ 42.56	\$ 127.69	\$ 43.84	\$ 131.52	\$ 45.16	\$ 135.47
PTP 58MHZ 600LM	3	\$ 40.12	\$ 120.36	\$ 41.32	\$ 123.97	\$ 42.56	\$ 127.69	\$ 43.84	\$ 131.52	\$ 45.16	\$ 135.47
24HR/7 DAYS	1	\$ 122.36	\$ 122.36	\$ 126.03	\$ 126.03	\$ 129.81	\$ 129.81	\$ 133.71	\$ 133.71	\$ 137.72	\$ 137.72
MONTHLY TOTALS			\$ 12,191.39		\$ 12,557.13		\$ 12,933.85		\$ 13,321.86		\$ 13,721.52
Yearly Totals			\$146,296.68		\$ 150,685.58		\$155,206.15		\$ 159,862.33		\$ 164,658.20

EXCEPTIONS TO THE RFP

Page 7, Scope of Service, b) Pre-Qualification Requirements, Item 4 – two (2) hour response time – BearCom is located within the 40 Mile range but cannot guarantee two (2) hours response time to critical failures. Every effort will be made to be on premises in two (2) hours if traffic allows.

Page 15, EQUIPMENT – Qty 2 Radio Towers (small) – there is nothing to maintain – this is excluded from this bid response.

# On-Net Surveillance Systems, Inc.



Event ID: ON-ONNET-NY-0811-1  
Available BICSI CECs:  
32 RCDD 32 RITP 32 ESS 7 NTS  
0 OSP 0 WD 15 ITS Installer 2  
Copper/Optical Fiber 18 ITS  
Technician 32 Certified Trainer

We hereby certify that

**Jack Szymanski**

has successfully completed the course:

**Ocularis Basic Training (Ocularis Boot Camp)**

qualifying Advanced Electronics as an

**OnSSI Certified Channel Partner 2012**

*This course approved for up to 32 CECs from BICSI for qualified credential holders*

**February 3, 2012**

**Course Date**

*Certification expires 2 years from Course Date*

  
Julio Montalvo, Director of Technical Services

On-Net Surveillance Systems, Inc.

**Bicsi**



We hereby certify that

**Jack Szymanski**

has passed the course:

**Ocularis DS Certification Training**

**qualifying Advanced Electronics as an**

**OnSSI Certified Channel Partner 2010**

*This course approved for 14 CECs from BICSI for qualified credential holders*

**March 26, 2010**

**Course Date**

*Certification expires 2 years from Course Date*

A handwritten signature in dark ink, appearing to read 'Julio Montalvo', written over a horizontal line.

**Julio Montalvo, Director of Technical Services, OnSSI**

EXHIBIT "1"  
CONTRACT NO. 2041



UNITED STATES OF AMERICA  
FEDERAL COMMUNICATIONS COMMISSION



General Radiotelephone Operator License

ATTN: JACK  
SZYMANSKI, JACK F  
8210 CONSTANTINE DRIVE  
PO BOX APT. 42  
HUNTINGTON BEACH, CA 92646

FCC Registration Number (FRN): 0017830142

Special Conditions / Endorsements

This license does not confer any authority to operate Broadcast stations. Refer to CFR Title 47 Section 13.7 c)5.

Grant Date	Effective Date	Print Date	Expiration Date
07-18-2008	07-18-2008	07-19-2008	
File Number	Serial Number	Date of Birth	
0003508693	PG00024839	10-08-1969	

THIS LICENSE IS NOT TRANSFERABLE

(Licensee's Signature)

FCC 605-FRC - May 2008



UNITED STATES OF AMERICA  
FEDERAL COMMUNICATIONS COMMISSION



EXHIBIT "1"  
CONTRACT NO. 2041

Marine Radio Operator Permit

ATTN: JACK  
SZYMANSKI, JACK F  
8210 CONSTANTINE DRIVE  
PO BOX APT. 42  
HUNTINGTON BEACH, CA 92646

FCC Registration Number (FRN): 0017830142

Special Conditions / Endorsements

This permit does not authorize the operation of AM, FM or TV broadcast stations.  
License authorized lifetime status pursuant to Memorandum Opinion and Order, Third  
Report and Order, and Third Further Notice of Proposed Rule Making in FCC 06-129.

Grant Date	Effective Date	Print Date	Expiration Date
06-03-2008	06-03-2008	06-04-2008	
File Number	Serial Number	Date of Birth	
0003461700	MP00017211	10-08-1969	

THIS LICENSE IS NOT TRANSFERABLE

(Licensee's Signature)

FCC 605-FRC - May 2008

# AVIGILON

Certificate of Completion

This certificate acknowledges that

Jack Szymanski

has successfully completed

ACC™ 6 Operator

07/20/2018



Alicia Schreffler  
Director, Global Training

# AVIGILON

## Certificate of Completion


This certificate acknowledges that

Jack Szymanski

has successfully completed

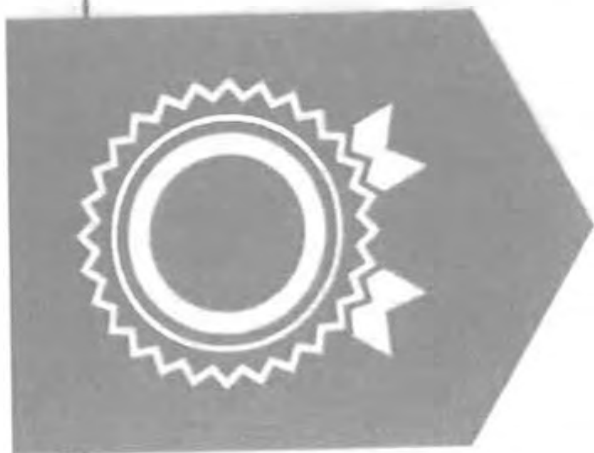
ACC 6 Installation

07/20/2018



Alicia Scheffler  
Director, Global Training





# AVIGILON

Certificate of Completion

This certificate acknowledges that

Jack Szymanski

has successfully completed

ACC™ 6 Administrator

07/17/2018

Alicia Schieffer  
Director, Global Training



P R E S E N T E D T O

*J a c k S z y m a n s k i*

*Has successfully completed a training course for  
the installation and maintenance of BridgeWave Communications  
gigabit wireless products*

**October 15, 2013**

*[Signature]*  
SIGNED

# CERTIFICATE OF COMPLETION

**Jack Szymanski**

HAS COMPLETED THE COURSE

**Introduction to wireless system basics**

WITH A SCORE OF 70%



Tim Jaeger

Firetide, Inc.

on September 11, 2013

740294837

# CERTIFICATE OF COMPLETION

**Jack Szymanski**

HAS COMPLETED THE COURSE

**Firetide DFS Certification Training**

WITH A SCORE OF 94%



Tim Jaeger  
Firetide, Inc.

on September 13, 2013  
741731272

# Certificate of Achievement



This is to certify that

Jack Szymanski

has successfully completed a MOTOROLA training program  
in the principles and servicing of

**MVX1000 Deploy and Administration**

During the period of August 28, 2012- August 30, 2012

  
INSTRUCTOR  
  
TRAINING MANAGER



**MOTOROLA**

Government Enterprise Mobility Solutions

**Motorola Learning Services**

# CERTIFICATE OF COMPLETION

THIS IS TO CERTIFY THAT  
**JACK SZYMANSKI**  
HAS SUCCESSFULLY COMPLETED THE FOLLOWING:

AAE0700-E MVX1000 SALES TECHNICAL OVERVIEW

ON 7/25/2012



**MOTOROLA SOLUTIONS**

# SONY®

## Sony Security Systems Certified Professional

is hereby presented to

**Jack Szymanski of Advanced Electronics**

*You have demonstrated, based on completing the Sony Security Systems Level 1 Certification Program and the IPELA™ Online Training Module, that you are technically qualified to represent Sony Security Systems' products as a Sony Security Systems Certified Professional.*

**Certified on August 13, 2009**

*Ken LaMarca*

Ken LaMarca,  
Vice President, Security Systems Group,  
Sony Electronics Inc.



*Miguel Lazatin*

Miguel Lazatin,  
Sr. Marketing Manager, Security Systems Group,  
Sony Electronics Inc.



# Certificate of Completion

*Customer Repair Center Program*

*Dedicated Micros hereby certifies that:*

*Jacek Zymancki*

*Has successfully completed and demonstrated the knowledge and skills to repair and  
upgrade Dedicated Micros digital video recorders*

*Certification good until June 26, 2009.*

*Ray Murch*

Technical Repairs Manager

*Ac Al*

Repair Support Specialist

DEDICATED MICRO





# Certificate of Completion

## Jack Szymanski

Advanced Electronics

Has successfully completed the Exacq Technologies, Inc. Technical Training Program and is recognized as a Certified Technician for the exacqVision® line of software and hardware NVR products.

August 11, 2008

A handwritten signature in dark ink, appearing to read "Dan Rittman".

Dan Rittman  
Vice President of Engineering

A handwritten signature in dark ink, appearing to read "Brian Clark".

Brian Clark  
Lead Trainer

Receptors International Security Group, USA  
Certificate of Completion

is hereby granted to

**Jacek Szymanski**

to certify that he has completed to satisfaction  
RISG Installation & Administration Training

Granted: March 2008

*R. Dale Williams*

R. Dale Williams  
President

# Certificate of Achievement

This is to certify that

Jacek Szymanski

has successfully completed a MOTOROLA training program  
in the principles and servicing of

**MMD 200**

During the period of April 30 – May 1, 2008

*ma Hoff*  
INSTRUCTOR  
*Jacek Szymanski*  
TRAINING MANAGER



**MOTOROLA**

Government Enterprise Mobility Solutions

**Motorola Learning Services**

Reprint

# Certificate of Completion

This is to certify that

**Jack Szymanski**

has satisfactorily completed the online studies and  
passed the examination for the course titled

**125 kHz Prox Technology Basics**

Date: May 14, 2007

Student ID: jacek@advancedelectronics.com



**Continuing Education Awarded - NTS 06-1696**

This certificate is proof of completion for the course listed above and entitles the  
bearer to 0.1 hours of continuing education credits valid for NTS certifications.



# Certificate of Completion

*Web Based Training*

*Dedicated Micros hereby certifies that:*

*Jack Zymanski*

*Has successfully completed and demonstrated the skills of theory,  
programming, installation, design and implementation  
for the Dedicated Micros DDV-ASP Server product line.  
This date of July 27, 2006*

*Jonathan M. Walick*  
Executive Vice President

*James O'Leary*

Dedicated Micros Representative



Certificate # DM10003200656



# Certificate of Completion

is hereby granted to:

Jack Szymanski

to certify that they have completed to satisfaction

ObjectVideo VEW Partner Certification

Granted: September 14, 2006

Jennifer C. Cochran  
Jennifer C. Cochran



CERTIFICATE of

COMPLETION

BOOM LIFT OPERATOR

**SAFETY  
TRAINING  
ZONE**

*It is hereby certified that*

Jack Szymanski

HAS COMPLETED THE ABOVE COURSE REQUIREMENTS AND AS SUCH IS QUALIFIED OPERATOR OF BOOM  
SUPPORTED AERIAL WORK PLATFORMS.

EQUIPMENT MAKE JLG BOOM MODEL 600S

THIS CERTIFICATE GOOD FOR 3 YEARS FROM DATE OF ISSUANCE

Violet Garcia  
TRAINING INSTRUCTOR

DATE: 5/23/2006

Certification Number: 0000000006

# CERTIFICATE of COMPLETION

**SAFETY  
TRAINING  
ZONE**

*It is hereby certified that*

Jack Szymanski

HAS COMPLETED THE ABOVE COURSE REQUIREMENTS AND AS SUCH IS QUALIFIED OPERATOR OF SCISSOR LIFT  
AERIAL WORK PLATFORMS.

EQUIPMENT MAKE JLG SCISSOR & ACCESSMASTER SERIES MODEL 25AM

**THIS CERTIFICATE GOOD FOR 3 YEARS FROM DATE OF ISSUANCE**

Violet Garcia  
TRAINING INSTRUCTOR

DATE: 5/23/2006

Certification Number: 000000006

SCISSOR LIFT OPERATOR



# Certificate of Completion

## Web Based Training

*Dedicated Micros hereby certifies that:*

**Jack Szymanski**

*has successfully completed and demonstrated the skills of theory,  
programming, installation, design and implementation  
for the Dedicated Micros BX2 product line.*

*This date of March 22<sup>nd</sup>, 2005*

*Jennifer M. Walcott*



Certificate Number DM1003200537

This award certifies that

*Jack Szymanski*

has successfully completed the  
course entitled


*Conquering the "T's" in CCTV*


November 5, 2003



*Certificate*  
of  
COMPLETION



  
David Junio  
Training Manager

  
Dave McDonald  
President

This award certifies that

*Jack Szymanski*

has successfully completed the  
course entitled

*Navigating the "C's" in CCTV*

*November 4, 2003*



David Junio  
Training Manager



Dave McDonald  
President



*Certificate* of  
COMPLETION





**MOTOROLA**

# Certificate of Achievement

This is to certify that

Jack Szymanski

has successfully completed a MOTOROLA training program  
in the principles and servicing of

## Regional Training Workshop

### R56

April 22, 2003

Robert J. Lester  
INSTRUCTOR

maria storm  
TRAINING MANAGER

**Technical Education Center**



# Master Certified Electronics Technician

**John D. Malin , US249052**  
**Hollywood, Florida**

*has successfully completed the technical examinations and requirements to be universally recognized for competency, ability, and knowledge as a MASTER Electronics Technician. Only a few practicing technicians can master examinations in six or more categories of electronics technology as well as the core basics, and thus are singled out as Masters of the profession. Only one technician in one thousand is able to accomplish this feat. The Electronics Technicians Association takes great pride in presenting this official recognition to the above-named expert electronics technician. His/her name has been published in the High Tech News magazine, embedded in the CET permanent data base, and is available for recognition by officials of the industry. This individual also becomes a member of the CET Program Review Council that oversees the setting of technical skills standards for the electronics technician profession. Congratulations from ETA officers and members and the electronics industry.*

*Bryan Allen*

Bryan Allen, CSM, CSS - President

ETA® International  
Greencastle, Indiana  
www.eta-i.org



Issue Date: 5/14/2021  
Expiration Date  
LifeTime



**CETma**

Electronics Technician



# Certified Electronics Technician

## Master Specialty

### RF Communications

**John D. Malin , MS-RF246219**  
**Hollywood, Florida**

*Has successfully completed the technical examinations and requirements to be universally recognized for competency, ability, and knowledge as a Certified Electronics Technician Master Specialist. Only a few practicing technicians are able to complete the core basics and at least SLX accredited certification examinations with four or more earned from a single specialty category. Accomplishing this feat shows that this technician is an expert in their profession. ETA® International takes great pride in presenting this official recognition to the above-named Master Specialist. His/Her name has been published in the High Tech News Journal, recorded in the certification archives, and is available for recognition by officials in the industry. This individual may display the CETms credential or advertise his/her level of accomplishment as a Certified Electronics Technician Master Specialist. Congratulations from ETA officers and members and the electronics industry.*

Issue Date: 3/16/2021  
 Expiration Date  
 March 16  
 2025



## CETms

RF Communications



ETA® International  
 Greencastle, Indiana  
[www.eta-i.org](http://www.eta-i.org)



*Bryan Allen*

Bryan Allen, CSM, CSS - President

# *Certified Journeyman Electronics Technician Antenna System Analysis*

**John D. Malin , ASA232895**  
**Hollywood, Florida**

*has successfully completed the technical examinations and requirements to be universally recognized for competency, ability, and knowledge as a Certified Electronics Technician. To be recognized for this honor, practicing technicians must pass examinations in one or more categories of electronics technology, as well as the core basics, and must show a total of at least two (2) years working in the profession. Only top technicians are able to accomplish this feat. The Electronics Technicians Association takes great pride in presenting this official recognition to the above-named expert electronics technician. His/her name has been published in the High Tech News Journal, embedded in the CET permanent database, and is available for recognition by officials of the industry. This individual may display the CET identification items or advertise his level of accomplishment as a technician. Congratulations from ETA officers and members and the electronics industry. Recertification takes place every four (4) years and may be accomplished by following annual ETA maintenance criteria or by retesting at the end of each four-year period.*

*Teresa J. Maher*  
Teresa J. Maher, CSS - President

ETA® International  
Greencastle, Indiana  
[www.eta-i.org](http://www.eta-i.org)



Issue Date: 2/21/2020  
Expiration Date  
February 21  
2024



**CET**

Antenna System Analysis





# *Certified Journeyman Electronics Technician T1 Link Verification*

**John D. Malin , T1LV247253  
Hollywood, Florida**

has successfully completed the T1 Link Verification technical examinations and requirements to be universally recognized for competency, ability, and knowledge as a Motorola T1 Maintenance and Link Verification technician. To be recognized for this honor, practicing technicians must pass the T1 written exam, as well as the core basics, and must have completed the Motorola T1 Link Verification training course. The Electronics Technicians Association, International, takes great pride in presenting this official recognition to the above-named technician. Congratulations from ETA® officers and members and the electronics industry. Recertification takes place every four (4) years and may be accomplished by acquiring college, tech school, association or manufacturer training session credits, or by testing in the same electronics technology discipline at the end of each four-year period.

*Bryan Allen*

Bryan Allen, CSM, CSS - President

ETA® International  
Greencastle, Indiana  
[www.eta-i.org](http://www.eta-i.org)



**Issue Date: 4/22/2021  
Expiration Date  
April 22  
2025**



**CET**

T1 Link Verification





# Certified Journeyman Information Technology Security

**John D. Malin , ITS246216**  
**Hollywood, Florida**

*has successfully completed the technical examinations and requirements to be universally recognized for competency, ability, and knowledge as a Certified Electronics Technician. To be recognized for this honor, practicing technicians must pass examinations in one or more categories of electronics technology, as well as the core basics, and must show a total of at least two (2) years working in the profession. Only top technicians are able to accomplish this feat. The Electronics Technicians Association takes great pride in presenting this official recognition to the above-named expert electronics technician. His/her name has been published in the High Tech News Journal, embedded in the CET permanent data base, and is available for recognition by officials of the industry. This individual may display the CET identification items or advertise his level of accomplishment as a technician. Congratulations from ETA officers and members and the electronics industry. Recertification takes place every four (4) years and may be accomplished by acquiring college, tech school, association or manufacturer training session credits, or by testing in the same electronics technology discipline at the end of each four-year period.*

*Bryan Allen*

Bryan Allen, CSM, CSS - President

ETA® International  
Greencastle, Indiana  
[www.eta-i.org](http://www.eta-i.org)



Issue Date: 3/16/2021  
Expiration Date  
March 16  
2025



**CET**

Information Technology Security



Issue Date: 2/28/2019  
Expiration Date  
February 28  
2023



**CETsr**  
Recertification

Antenna System Analysis



# Senior Certified Electronics Technician Antenna System Analysis

**John D. Malin, SETASA-R224743**  
**Hollywood, Florida**

has successfully completed the technical examinations and requirements to be universally recognized for competency, ability, and knowledge as a Senior Certified Electronics Technician. To be recognized for this honor, practicing technicians must pass examinations in one or more categories of electronics technology with an 85% score, as well as having the core basics, and must show a total of at least six (6) years working in the profession. Only top technicians are able to accomplish this feat. The Electronics Technicians Association, International takes great pride in presenting this official recognition to the above-named expert electronics technician. His/her name has been published in the High Tech News Journal, embedded in the CET permanent data base, and is available for recognition by officials of the industry. This individual may display the CETsr identification items or advertise his/her level of accomplishment as a technician. Congratulations from ETA-I officers and members and the electronics industry. Recertification takes place every four (4) years and may be accomplished by acquiring college, tech school, association or manufacturer training session credits, or by testing in the same electronics technology discipline at the end of each four-year period.

*Teresa J. Maher*  
Teresa J. Maher, CSS - President

ETA® International  
Greencastle, Indiana  
www.eta-i.org



# Senior Certified Electronics Technician

*Comm Site Inspector/Auditor*

**John D. Malin , SETCSIA232894**

**Hollywood, Florida**

Issue Date: 2/21/2020  
Expiration Date  
February 21  
2024



## CETsr

*Comm Site Inspector/Auditor*



has successfully completed the technical examinations and requirements to be universally recognized for competency, ability, and knowledge as a Senior Certified Electronics Technician. To be recognized for this honor, practicing technicians must pass examinations in one or more categories of electronics technology with an 85% score, as well as having the core basics, and must show a total of at least six (6) years working in the profession. Only top technicians are able to accomplish this feat. The Electronics Technicians Association International takes great pride in presenting this official recognition to the above-named expert electronics technician. His/her name has been published in the High Tech News Journal, embedded in the CET permanent data base, and is available for recognition by officials of the industry. This individual may display the CETsr identification items or advertise his/her level of accomplishment as a technician. Congratulations from ETA-I officers and members and the electronics industry. Recertification takes place every four (4) years and may be accomplished by acquiring college, tech school, association or manufacturer training session credits, or by testing in the same electronics technology discipline at the end of each four-year period.

*Teresa J. Maher*

Teresa J. Maher, CSS - President

ETA® International  
Greencastle, Indiana  
[www.eta-i.org](http://www.eta-i.org)





Issue Date: 5/18/2019  
 Expiration Date  
 May 18  
 2023

# Senior Certified Electronics Technician

**GTR P25 RF Site Performance Verification**

**John D. Malin , SETGSPV-R224897  
 Hollywood, Florida**



**CETsr  
 Recertification**

**TR P25 RF Site Performance Verification**

has successfully completed the technical examinations and requirements to be universally recognized for competency, ability, and knowledge as a Senior Certified Electronics Technician. To be recognized for this honor, practicing technicians must pass examinations in one or more categories of electronics technology with an 85% score, as well as having the core basics, and must show a total of at least six (6) years working in the profession. Only top technicians are able to accomplish this feat. The Electronics Technicians Association, International takes great pride in presenting this official recognition to the above-named expert electronics technician. His/her name has been published in the High Tech News journal, embedded in the CET permanent data base, and is available for recognition by officials of the industry. This individual may display the CETsr identification items or advertise his/her level of accomplishment as a technician. Congratulations from ETA-I officers and members and the electronics industry. Recertification takes place every four (4) years and may be accomplished by acquiring college, tech school, association or manufacturer training session credits, or by testing in the same electronics technology discipline at the end of each four-year period.



ETA® International  
 Greencastle, Indiana  
[www.eta-i.org](http://www.eta-i.org)



*Teresa J. Maher*  
 Teresa J. Maher, CSS - President



Certificate of Completion  
Congratulations, John Malin

## CompTIA Network+ (N10-007) Cert Prep: 1 Understanding Networks

Course completed on Mar 25, 2021 at 07:28PM UTC • 51 min

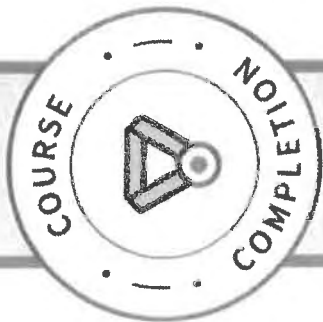
By continuing to learn, you have expanded your perspective, sharpened your skills, and made yourself even more in demand.

A handwritten signature in black ink, appearing to read "Dan F. Roberts".

Head of Content Strategy, Learning

LinkedIn Learning  
1000 W Maude Ave  
Sunnyvale, CA 94085

Certificate Id: ATtMWW5L8W0JcoFNs01ybqJLEyBE





Certificate of Completion  
Congratulations, John Malin

## CompTIA Network+ (N10-007) Cert Prep: 2 The Physical Network

Course completed on Mar 25, 2021 at 05:02PM UTC • 3 hours 11 min

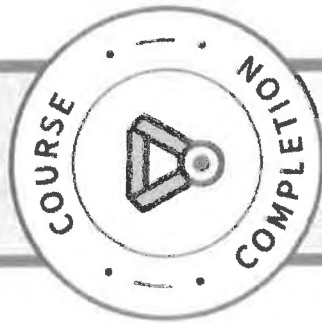
By continuing to learn, you have expanded your perspective, sharpened your skills, and made yourself even more in demand.

A handwritten signature in black ink, appearing to read "Dan Bolante".

Head of Content Strategy, Learning

LinkedIn Learning  
1000 W Maude Ave  
Sunnyvale, CA 94085

Certificate Id: AXA2DSvdqZpGARKAhmuv3u2whjl8





Certificate of Completion  
Congratulations, John Malin

## CompTIA Network+ (N10-007) Cert Prep: 3 The World of TCP/IP

Course completed on Apr 01, 2021 at 06:50PM UTC • 3 hours 28 min

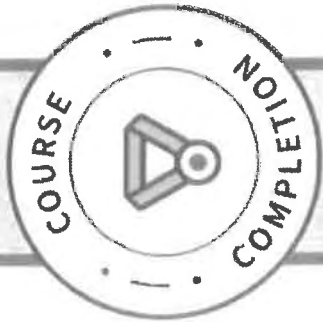
By continuing to learn, you have expanded your perspective, sharpened your skills, and made yourself even more in demand.

A handwritten signature in black ink, appearing to read "Dan Beretta".

Head of Content Strategy, Learning

LinkedIn Learning  
1000 W Maude Ave  
Sunnyvale, CA 94085

Certificate Id: Aa0Kakh-ZDfaXxfu73lBV8vC67xK





Certificate of Completion  
Congratulations, John Malin

## CompTIA Network+ (N10-007) Cert Prep: 4 Making TCP/IP Work

Course completed on Mar 30, 2021 at 12:53PM UTC • 2 hours 51 min

By continuing to learn, you have expanded your perspective, sharpened your skills, and made yourself even more in demand.

A handwritten signature in black ink, appearing to read "Dan Belding".

Head of Content Strategy, Learning

LinkedIn Learning  
1000 W Maude Ave  
Sunnyvale, CA 94085

Certificate Id: AcljFX6rCYFzVl1w4zdbfXIS\_eeP







Certificate of Completion  
Congratulations, John Malin

## CompTIA Network+ (N10-007) Cert Prep: 5 Securing TCP/IP

Course completed on Apr 02, 2021 at 03:34PM UTC • 1 hour 18 min

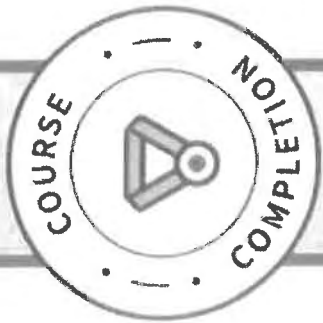
By continuing to learn, you have expanded your perspective, sharpened your skills, and made yourself even more in demand.

A handwritten signature in black ink, appearing to read "David B. Smith".

Head of Content Strategy, Learning

LinkedIn Learning  
1000 W Maude Ave  
Sunnyvale, CA 94085

Certificate Id: AV28\_qCBdszlpV9rcw2yndUhVvbZ





Certificate of Completion  
Congratulations, John Malin

## CompTIA Network+ (N10-007) Cert Prep: 6 Advanced IP Networking

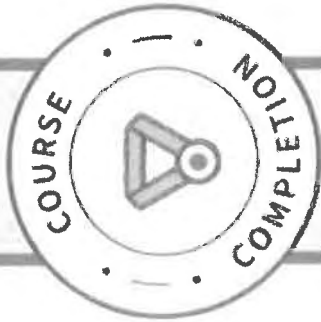
Course completed on Apr 06, 2021 at 08:38PM UTC • 3 hours 22 min

By continuing to learn, you have expanded your perspective, sharpened your skills, and made yourself even more in demand.

A handwritten signature in black ink, appearing to read "Dan Bolz".

Head of Content Strategy, Learning

LinkedIn Learning  
1000 W Maude Ave  
Sunnyvale, CA 94085



Certificate Id: AdMe5vgOE0S16JmMtEnCmlaA3Z9o



Certificate of Completion  
Congratulations, John Malin

## CompTIA Network+ (N10-007) Cert Prep: 7 Wireless, Virtual, Cloud, and Mobile Networking

Course completed on Apr 17, 2021 at 05:44AM UTC • 3 hours 23 min

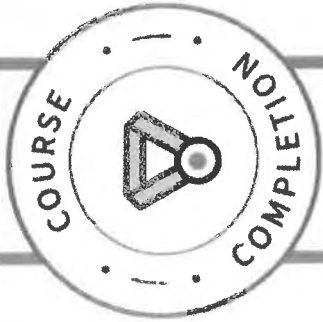
By continuing to learn, you have expanded your perspective, sharpened your skills, and made yourself even more in demand.

A handwritten signature in black ink, appearing to read "Dan Bolante".

Head of Content Strategy, Learning

LinkedIn Learning  
1000 W Maude Ave  
Sunnyvale, CA 94085

Certificate Id: AU0ghr9oSufpWdyYHJjDFbFhdegU





Certificate of Completion  
Congratulations, John Malin



## CompTIA Network+ (N10-007) Cert Prep: 8 Building a Real-World Network

Course completed on Apr 21, 2021 at 01:34PM UTC • 59 min

By continuing to learn, you have expanded your perspective, sharpened your skills, and made yourself even more in demand.

A handwritten signature in black ink, appearing to read "David B. B. B." with a stylized flourish at the end.

Head of Content Strategy, Learning

LinkedIn Learning  
1000 W Maude Ave  
Sunnyvale, CA 94085

Certificate Id: AZP7LCmT97a2BSzxrNgLHEMV2rUj



Certificate of Completion  
Congratulations, John Malin

## CompTIA Network+ (N10-007) Cert Prep: 9 Managing the Network

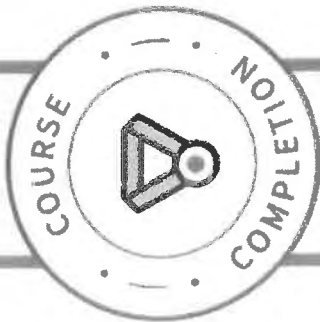
Course completed on Apr 26, 2021 at 05:36PM UTC • 3 hours 19 min

By continuing to learn, you have expanded your perspective, sharpened your skills, and made yourself even more in demand.

A stylized, handwritten signature in black ink, appearing to read "Day B. B. B.".

Head of Content Strategy, Learning

LinkedIn Learning  
1000 W Maude Ave  
Sunnyvale, CA 94085



Certificate Id: AYk3kBj3sBcY\_FkgMMvf-U7wPdxG

**MOTOROLA SOLUTIONS**

# Certificate of Completion

John Malin

has successfully completed

TTS752

# CompTIA Network+ Certification Boot Camp

Company: Motorola Solutions, Inc

Completion Date: 1-Feb-2019



UNITED STATES OF AMERICA  
FEDERAL COMMUNICATIONS COMMISSION  
General Radiotelephone Operator License

MALIN, JOHN  
7201 ARTHUR ST  
HOLLYWOOD FL 33024

FCC Registration Number (FRN) 0009764861

Special Conditions/Endorsements

Ship Radar Endorsement

This license does not confer any authority to operate Broadcast stations. Refer to CFR Title 47 Section 13.7 c) 5.

Grant Date	Effective Date	Print Date	Expiration Date
10-23-2003	11-25-2003	11-26-2003	
File Number	Serial Number	Date of Birth	
0001526129	PG00010774	02-25-1969	

THIS LICENSE IS NOT TRANSFERABLE

(Licensee's Signature)

April 2002

FCC 605-FRC

Cut Along This Line



UNITED STATES OF AMERICA  
FEDERAL COMMUNICATIONS COMMISSION  
General Radiotelephone Operator License

MALIN, JOHN  
7201 ARTHUR ST  
HOLLYWOOD FL 33024

FCC Registration Number (FRN) 0009764861

Special Conditions/Endorsements

This license does not confer any authority to operate Broadcast stations. Refer to CFR Title 47 Section 13.7 c) 5.

Grant Date	Effective Date	Print Date	Expiration Date
10-23-2003	10-23-2003	10-24-2003	
File Number	Serial Number	Date of Birth	
0001492651	PG00010774	02-25-1969	

THIS LICENSE IS NOT TRANSFERABLE

(Licensee's Signature)

FCC 605-FRC

April 2002

# Criminal Justice Information Services Security Awareness Training



This is to certify that

**JOHN MALIN**

has successfully completed the

**Level 4 Security Awareness Certification**

**5/4/2021**

Certification Date



**5/4/2023**

Expiration Date



CompTIA

# John Douglas Malin

has successfully completed the requirements to be recognized as



COMP001021796376

CANDIDATE ID

March 10, 2021

CERTIFICATION DATE

This certification is valid through 03/10/2024

A handwritten signature in cursive script, appearing to read "T. Thibodeaux".

TODD THIBODEAUX, PRESIDENT & CEO

H.W. Thorp, Jr., GS-15

Chief, Joint Knowledge Online Division

Deputy Director Joint Training

Joint Staff, J7



# JOINT KNOWLEDGE ONLINE



**JOHN MALIN**

has successfully completed

***Level I Antiterrorism Awareness Training (2 hrs)***

**06/14/2021**



# JOINT KNOWLEDGE ONLINE



**JOHN MALIN**

has successfully completed

**SERE 100.2 Level A SERE Education and Training in Support of  
Code of Conduct (FOUO) (4 hrs)**

**06/14/2021**

CONTRACT NO. 2041(a)  
EXHIBIT "1"  
CONTRACT NO. 2041

H.W. Thorp, Jr., GS-15  
Chief, Joint Knowledge Online Division  
Deputy Director Joint Training  
Joint Staff, J7

H.W. Thorp, Jr., GS-15

Chief, Joint Knowledge Online Division

Deputy Director Joint Training

Joint Staff, J7

# JOINT KNOWLEDGE ONLINE



**JOHN MALIN**

has successfully completed

***SOUTHCOM Human Rights Awareness (1 hr)***

**06/14/2021**



Certificate of Completion  
Congratulations, John Malin

## Avoiding New Manager Mistakes

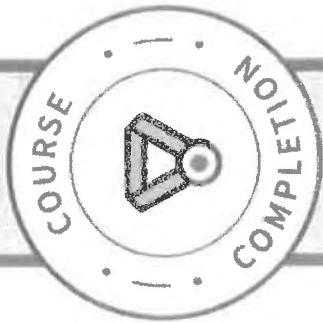
Course completed on Apr 07, 2021 at 08:25PM UTC • 25 min

By continuing to learn, you have expanded your perspective, sharpened your skills, and made yourself even more in demand.

A handwritten signature in black ink, appearing to read "David Bolante".

Head of Content Strategy, Learning

LinkedIn Learning  
1000 W Maude Ave  
Sunnyvale, CA 94085



Certificate Id: AcOJn3E6\_Oyz05dqusWOU3-FPlxa



Certificate of Completion  
Congratulations, John Malin

## How to Manage Your Manager

Course completed on Mar 25, 2021 at 08:21PM UTC • 27 min

By continuing to learn, you have expanded your perspective, sharpened your skills, and made yourself even more in demand.

A handwritten signature in black ink, appearing to read "Dan F. Baluta".

Head of Content Strategy, Learning

LinkedIn Learning  
1000 W Maude Ave  
Sunnyvale, CA 94085

Certificate Id: ARi\_EuVJJ5JulIPvUucQA5ftdSayv





Certificate of Completion  
Congratulations, John Malin

## Make the Move from Individual Contributor to Manager

Course completed on Apr 07, 2021 at 07:16PM UTC • 40 min

By continuing to learn, you have expanded your perspective, sharpened your skills, and made yourself even more in demand.

A handwritten signature in black ink that reads "Dan F. Roberts".

Head of Content Strategy, Learning

LinkedIn Learning  
1000 W Maude Ave  
Sunnyvale, CA 94085

Certificate Id: AQDDWBThW7IF7N1yqd7S869lfQsX





# CERTIFICATE OF ACHIEVEMENT

This certifies that

**John Malin**

has successfully completed the MOTOROLA Solutions training program  
in the principles and servicing of

**ASTRO® 25 IV&D Systems  
Applied Networking**

**During the period of  
March 14<sup>th</sup> – 18<sup>th</sup>, 2016**

A handwritten signature in black ink, likely belonging to the instructor.

**Instructor**  
North America Learning  
Motorola Solutions, Inc.





Takes pleasure in presenting  
this Certificate of Recognition to

**John Malin**

For successfully completing  
the factory authorized training course for

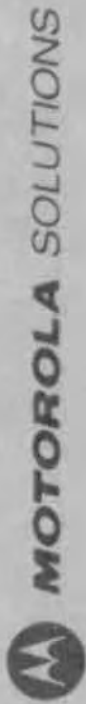
**CM Series**

Issued on  
**September 7, 2007**

  
Jonathan David - Training Instructor



Mark Blondina - Customer Support, Dir.



# CERTIFICATE OF ACHIEVEMENT

This Certifies that

**JOHN MALIN**

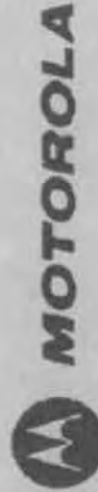
has successfully completed 24 hours in the MOTOROLA Solutions  
training program in the principles and servicing of

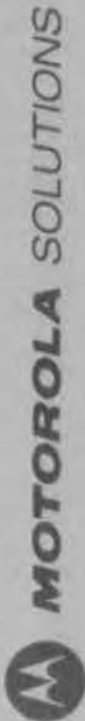
**APX RADIO MANAGEMENT WORKSHOP**

During the period of March 28<sup>th</sup> thru March 30<sup>th</sup>, 2017

A handwritten signature in black ink, appearing to read 'Richard Vogler'.

Richard Vogler  
Instructor,  
North America Learning





# CERTIFICATE OF ACHIEVEMENT

This certifies that

**John Malin**

has successfully completed the MOTOROLA Solutions training program  
in the principles and servicing of

**ASTRO 25 IV&D M Core Workshop**

During the period of  
May 5<sup>th</sup> – 9<sup>th</sup>, 2014

A handwritten signature in black ink, appearing to read 'na HSD'.

**Instructor**  
Americas Learning  
Motorola Solutions, Inc.

A handwritten signature in black ink, appearing to read 'Andrew R. Candreva'.

**Andrew R. Candreva**  
Director, Americas Learning  
and Business Operations  
Motorola Solutions, Inc.

# Certificate of Achievement

This is to certify that

John Malin

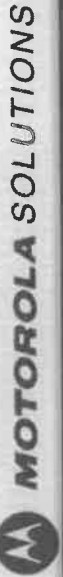
has successfully completed the MOTOROLA training program  
in the principles and servicing of

ASTRO 25 IV&D Radio System  
Administrator Workshop

During the period of April 8<sup>th</sup> – 12<sup>th</sup>, 2013

  
INSTRUCTOR  
  
DIRECTOR NORTH AMERICA LEARNING

Motorola Solutions Learning



**MOTOROLA SOLUTIONS**

# Certificate of Completion

John Malin

has successfully completed

CON012

# MCC 7000 Series Dispatch Consoles Workshop

Company: Motorola Solutions, Inc

Completion Date: 7-Feb-2020

**MOTOROLA SOLUTIONS**

# Certificate of Completion

John Malin

has successfully completed

CON014

# MCC 7000 Series Dispatch Consoles Overview

Company: Motorola Solutions, Inc

Completion Date: 12-Oct-2020



**MOTOROLA SOLUTIONS**

# Certificate of Completion

John Malin

has successfully completed

GNL1149

## CEN101 (ST Training)

Company: Motorola Solutions, Inc

Completion Date: 16-Apr-2018



**MOTOROLA SOLUTIONS**

# Certificate of Completion

John Malin

has successfully completed

EHS0302

## Radio Frequency (RF) Safety

Company: Motorola Solutions, Inc

Completion Date: 4-Sep-2018





**MOTOROLA SOLUTIONS**

# Certificate of Completion

**John Malin**

has successfully completed

**ETAJ-ASA**

# Antenna Systems Analysis

Company: Motorola Solutions, Inc  
Completion Date: 1-Feb-2020

**MOTOROLA SOLUTIONS**

# Certificate of Completion

John Malin

has successfully completed

ETAS-CSIA

# ETAS-CSIA Senior Certified Satellite Installer Antenna (CSIA)

Company: Motorola Solutions, Inc

Completion Date: 1-Feb-2020

**MOTOROLA SOLUTIONS**

# Certificate of Completion

John Malin

has successfully completed

NST9251

## The Value of R56 Compliance

Company: Motorola Solutions, Inc

Completion Date: 27-Mar-2018

**MOTOROLA SOLUTIONS**

# Certificate of Completion

John Malin

has successfully completed

NST9257

# R56 Communications Site Auditor

Company: Motorola Solutions, Inc

Completion Date: 13-Feb-2020



**MOTOROLA SOLUTIONS**

# Certificate of Completion

John Malin

has successfully completed

SRV0023

# Audio Quality Expert Certification

Company: Motorola Solutions, Inc

Completion Date: 9-May-2019

**MOTOROLA SOLUTIONS**

# Certificate of Completion

John Malin

has successfully completed

RDS2017

# APX Radio Management Workshop

Company: Motorola Solutions, Inc

Completion Date: 30-Mar-2017



**MOTOROLA**

**iDEN Technical Education**  
1299 East Algonquin Road  
Schaumburg, IL 60196 USA

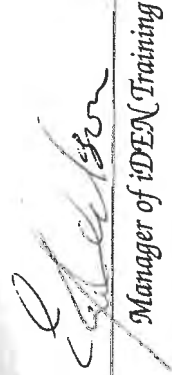
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*for*  
**Packet Data Operations**

**March 13, 2000**

*Is Hereby Awarded To*  
**John Malin**

  
Instructor

  
Manager of iDEN Training



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PRD0480

## New Tower Top Amplifier (TTA) System Overview

Company: Motorola Solutions, Inc  
Completion Date: 18-Jun-2020



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# RF Devices Design Part 2 - Antennas, Interference, & DAS

Company: Motorola Solutions, Inc

Completion Date: 12-Aug-2020

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SRV0037

## ASTRO 25 Preventive Maintenance Best Practices for Conventional with Voting System

Company: Motorola Solutions, Inc

Completion Date: 9-Oct-2020

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SRV1039

## End to End Audio Optimization of P25 Systems

Company: Motorola Solutions, Inc

Completion Date: 16-Apr-2018

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TTS141

# ST/SFO - ASTRO P25 Advanced Systems Mobility Operations

Company: Motorola Solutions, Inc  
Completion Date: 9-May-2019

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SRV1062

## MCC 7500 IP Logging Solution Architecture Overview and Troubleshooting

Company: Motorola Solutions, Inc

Completion Date: 4-May-2017



**CERTIFICATE OF COMPLETION**  
***Institute for Criminal Justice Studies***

*Presented to*

***John Malin***

***for Successfully Completing  
Safety Training for Field Civilians***

***April 23, 2010***

*Lt. Robin Larson*

**Lieutenant Robin Larson  
Institute for Criminal Justice Studies**

**0.00 Hours  
ID EMOTOMALIN**

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ON 10/24/2013



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AAE1402.02E - MOTOTRBO SUBSCRIBER PORTFOLIO  
OVERVIEW (NA)

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AAE2700: MOTOTRBO SYSTEM ANALYSIS AND  
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ACT100-E - BRIDGING THE KNOWLEDGE GAP-  
TECHNICIANS

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RCS001-E - RADIO COMMUNICATION SYSTEMS

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RCS002-E RADIO SYSTEMS OVERVIEW

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SMT001-E SMARTNET OVERVIEW

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WEE1701 - AIRDEFENSE TECHNICAL ENABLEMENT

ON 11/15/2013



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**Issue Date: 10/5/2018**  
**Expiration Date**  
**October 05**  
**2022**



**R56**

**R56 Installer**



# *Certified*

## *R56 Installer*

**Gregory M. Leeser , R56213031**  
**Anahiem, California**

*has successfully completed the technical examinations and requirements to be universally recognized for competency, ability, and knowledge as an R56 Installer (non-auditor status). To be recognized for this credential, practicing technicians must pass examinations in the core concepts required in the installation of a communications site, based on the R56 industry codes and standards. Only top technicians are able to accomplish this feat. The Electronics Technicians Association takes great pride in presenting this official recognition to the above-named expert electronics technician. His/her name has been published in the High Tech News journal, embedded in the CET permanent data base, and is available for recognition by officials of the industry. This individual may display the R56 identification items or advertise his level of accomplishment as an installer. Congratulations from ETA officers and members and the electronics industry. Recertification takes place every four (4) years and may be accomplished by testing in the same electronics technology discipline at the end of each four-year period.*

*Teresa J. Maher*  
 Teresa J. Maher, CSS - President

ETA® International  
 Greencastle, Indiana  
[www.eta-i.org](http://www.eta-i.org)



**In Building Coverage  
Certification Training**

**Certificate of Completion**

Date: April 13, 2016

Be it known that

Greg Leaser

Advanced Electronics

has successfully completed the lecture, written exam, and  
lab practical exams.

*Minfei Leng*

Global Educational Services

**Minfei Leng  
Training Manager**



Issue Date: 5/17/2018  
Expiration Date  
May 17  
2022



**GCT1**

Technician-Level 1



# Certified General Communications Technician-Level 1

**Connor L. Hart, GCT1205338**  
**Milford, Connecticut**

*has successfully completed the technical examinations and requirements to be universally recognized for competency, ability, and knowledge as a General Communications Technician - Level 1. To be certified, practicing technicians must pass the written examination, which tests the acquired knowledge of GCT1 procedures and technology. The Electronics Technicians Association International takes great pride in presenting this official recognition to the above-named technician. His/her name has been published in the High Tech News Journal, embedded in the ETA permanent data base, and is available for recognition by officials of the industry. This individual may display the GCT1 credential designation following his/her name. GCT1 identification items, and advertise his/her level of accomplishment as a GCT1 technician. Congratulations from ETA International officers and members, and the electronics industry. Recertification takes place every four (4) years.*

*Teresa J. Maher*

Teresa J. Maher, CSS - President

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Issue Date: 5/17/2018  
Expiration Date  
May 17  
2022



CET

General Communications Tech-Level 2

# Certified Journeyman Electronics Technician

## General Communications Tech-Level 2

Connor L. Hart, GCT2205339

Milford, Connecticut

*has successfully completed the technical examinations and requirements to be universally recognized for competency, ability, and knowledge as a Certified Electronics Technician. To be recognized for this honor, practicing technicians must pass examinations in one or more categories of electronics technology, the core basics as well as a hands-on skills test, and must show a total of at least two (2) years working in the profession. Only top technicians are able to accomplish this feat. The Electronics Technicians Association takes great pride in presenting this official recognition to the above-named expert electronics technician. His/her name has been published in the High Tech News journal, embedded in the CET permanent data base, and is available for recognition by officials of the industry. This individual may display the CET identification items or advertise his level of accomplishment as a technician. Congratulations from ETA officers and members and the electronics industry. Recertification takes place every four (4) years by retesting in the same electronics discipline at the end of each four-year period.*



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*Teresa J. Maher*

Teresa J. Maher, CSS - President

 **MOTOROLA SOLUTIONS**

# Motorola Solutions Certification

is awarded to

**Connor Hart**

has successfully completed the Motorola Solutions Certification Program  
requirements with competency, ability and knowledge in

## P25 System Technical Associate

Certification: GRSTA0001  
Company: BEARCOM GROUP INC  
Certification Date: 6-Dec-2019  
Expiration Date: 6-Dec-2021





# CITY OF SAN FERNANDO

PROJECT 25 TRUNKED SYSTEM

NOVEMBER 5, 2019

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**MOTOROLA SOLUTIONS**

Motorola Solutions Inc.  
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Schaumburg IL 60196  
USA

Tel : 1 847 576 5000  
Fax : 1 847 538 6020

November 5, 2019

Anthony Vairo  
Chief of Police  
910 First Street  
San Fernando, CA 91340

RE: ASTRO Project 25 Trunked Radio System

Dear Chief Vairo:

Motorola Solutions, Inc. (Motorola Solutions) appreciates the opportunity to provide the City of San Fernando quality communications equipment and services. Motorola Solutions' project team has taken great care to propose a solution to address your needs and provide exceptional value.

To best meet the functional and operational specifications, our solution includes a combination of hardware, software, and services. Specifically, this solution is for the replacement of the conventional system and legacy consoles with a Project 25 trunked system and new MCC7500 consoles:

- One Redundant L-Core Master Site
- One Network Management Client
- Three GTR 8000 Radios
- Auxiliary Equipment (Combiner, Antennas Systems)
- Three MCC7500 consoles
- Networking Equipment
- Spares

Motorola Solution's proposal is conditional upon the City of San Fernando's acceptance of the terms and conditions contained in the Communications System and Services Agreement ("CSSA") included in this proposal, or a negotiated version thereof. Pricing is as set forth in the existing County of Los Angeles Contract MA-IS-1740313 and an additional System Discount incentive will remain valid through December 6, 2019.

Any questions the City has regarding this proposal can be directed to Mike Bravo, Sr. Account Executive at (951) 277-2125, ([mike.bravo@motorolasolutions.com](mailto:mike.bravo@motorolasolutions.com)).

Our goal is to provide the City with the best products and services available in the communications industry. We thank you for the opportunity to present our proposed solution, and we hope to strengthen our relationship by implementing this project.

Sincerely,

MOTOROLA SOLUTIONS, INC.

A handwritten signature in dark ink, appearing to read "Scott Lees".

Scott Lees  
Territory Vice President

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## SECTION 1

# SYSTEM DESCRIPTION – ASTRO 25 TECHNOLOGY

## 1.1 ASTRO 25 INFRASTRUCTURE

Motorola Solutions, Inc. (Motorola Solutions) proposes our ASTRO® 25 platform with Integrated Voice and Data (IV&D) to provide secure and reliable communications for the City of San Fernando (the City). ASTRO 25 offers a future-ready, wireless platform that combines a uncompromising, real-world performance and reliability.

ASTRO 25 offers the City a Project 25(P25), standards-based Internet Protocol (IP) solution with a flexible, modular network. ASTRO 25 can expand to accommodate additional radio users, increased geographic coverage, enhanced data applications, and connectivity to other networks, ensuring that the City will have efficient and cost-effective communications for decades to come.

ASTRO 25 also provides advanced call processing capabilities designed to meet the needs of public safety. On an ASTRO 25 network, first responders can share voice and data communications between members of the same team, across an agency, or among different agencies. In addition, the network's centralized command and control capabilities will enable the City to deploy resources, track personnel, and maintain communication security more efficiently and effectively.



The system's P25-compliant IV&D operation allows data traffic to travel seamlessly over the ASTRO 25 radio system, improving in-field efficiency and providing a platform for additional capabilities. By creating a data transport layer capable of supporting both industry-standard IP and customer-developed applications, IV&D will provide the City with a number of important benefits:

- Conserves valuable airtime.
- Increases communications accuracy.
- Allows queries in the field without involving dispatch.

Because ASTRO 25 automatically prioritizes voice communications over data transmissions, the City's personnel will always be able to transmit and receive mission-critical communications.



City of San Fernando  
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## 1.2 PROPOSED SYSTEM ARCHITECTURE

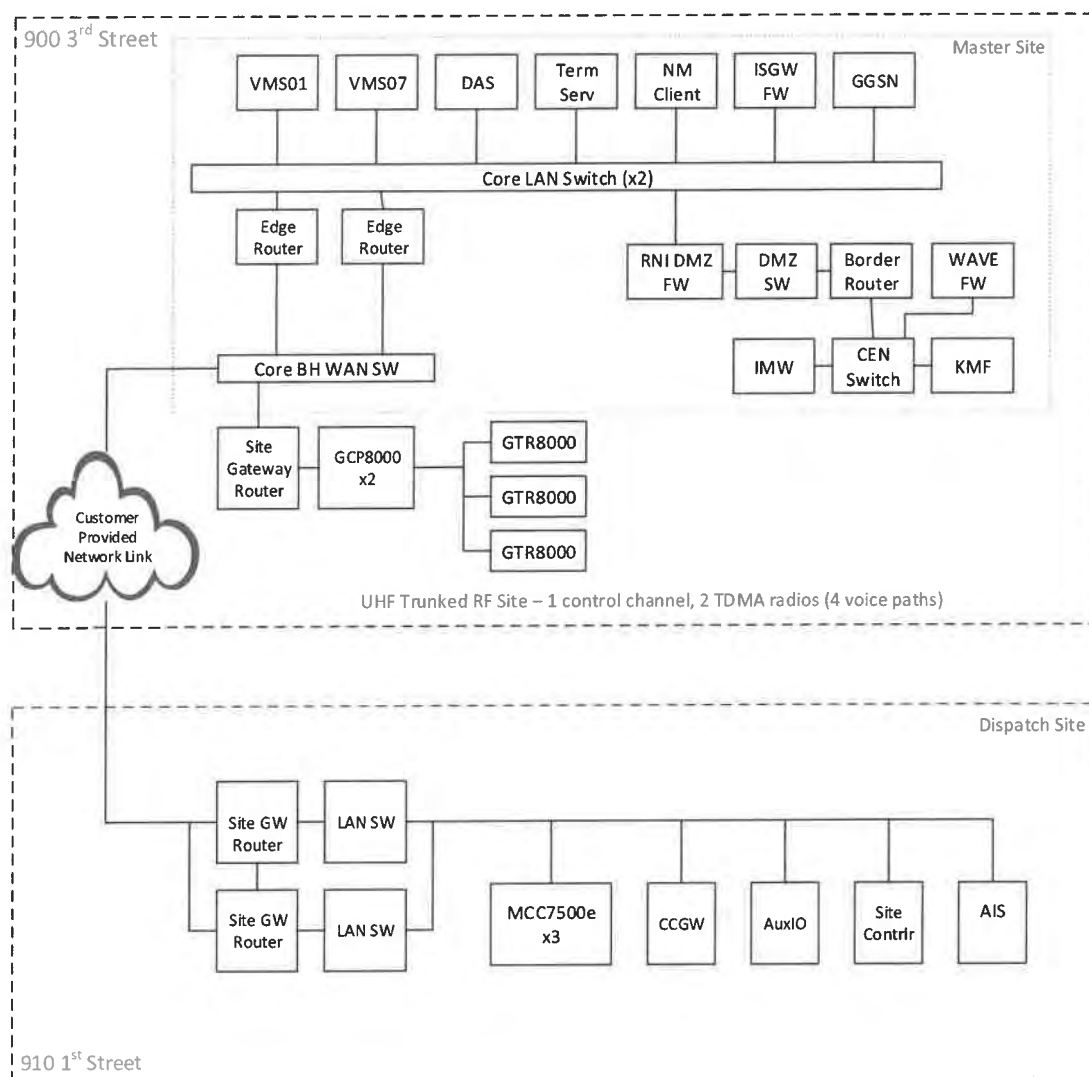
The proposed ASTRO 25 solution will provide an adaptable and affordable platform for mission critical wireless communications throughout the City's geographic area. The proposed system provides a single-zone architecture. A zone comprises the master site and Radio Frequency (RF) site referred to as the "system" throughout this proposal. The system will support two (2) trunked, TDMA channels supporting four (4) voice paths, allowing multiple users to share channel resources in a single-bandwidth.

The proposed solution consists of the following sites:

- One master site.
- One (1) ASTRO 25 standalone repeater site with RF subsystem.
- One (1) dispatch site.
- One (1) KVL 5000 encryption device
- One (1) backup power system for the master site and repeater site.

The figure titled "System Architecture" shows a graphical view of the proposed system architecture.





**Figure 1-1: The proposed solution will provide the coverage, capacity, and reliability required by the City.**

The “master site”—where core equipment is located—provides a central point of control for the operation of the radio communication system. From the master site, the City’s system administrators will have access to the hardware and software components that control call processing, network management, and system configuration. Common Server Architecture (CSA) reduces physical space and individual component requirements at the master site by using Virtual Management Servers (VMSs) to host server applications in a Virtual Machine (VM) environment.

The proposed ASTRO 25 Standalone Repeater (ASR) Site provides base radios to route the City’s voice traffic to the system for distribution to other sites. The base radios also repeat each transmission to support other local user radios. ASR sites support packet data and route data traffic to the site controller. The site controller then routes these data packets upstream to the zone controller for further processing and routing.

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## 1.3 SYSTEM RESILIENCY

Providing continued communications is an essential goal of the ASTRO 25 platform. Motorola Solutions has tailored its proposed design for the City to optimize the system's resiliency, functionality, and budget for the City's specific environment.

## 1.4 LEGACY SYSTEM INTEROPERABILITY

Critical communications may come from a variety of sources and equipment. The proposed system will provide the City with a gradual migration path to future system enhancements by supporting the following legacy Motorola Solutions equipment and technologies:

The proposed solution will provide the City with extended interoperability features to connect the proposed system with other elements of the City's communications such as existing control stations and tying in existing auxiliary alarms.

## 1.5 SYSTEM VOICE AND DATA ENCRYPTION

The proposed system supports end-to-end encryption using the Advanced Encryption Standard (AES) encryption algorithm to ensure that only authorized radios can listen to encrypted transmissions on the network.

The **Advanced Encryption Standard (AES)** is an improvement over Data Encryption Standard (DES) algorithms and uses keys of 128, 192, or 256 bits to encrypt blocks of 128-bit traffic. The Motorola Solutions secure voice solution uses a 256-bit key. AES uses the Rijndael algorithm with symmetric block cipher.

### 1.5.1 KVL Key File Export

To allow the City's users to share key material without a Key Management Facility (KMF), the KVL Key File Export feature enables users to export key material from a KVL 5000 device to a software-based encryption equipped MCC 7500 console via external media (CD/DVD, USB memory, direct wireline from KVL to console).

This helps users to centrally manage keys without the need to manually duplicate key entry or rekey into an MCC 7500.

## 1.6 SYSTEM CYBERSECURITY

In addition to system-level security capabilities, ASTRO 25 includes a robust set of cybersecurity service standards that will provide communications continuity and security for the City's system, such as:

- **Secure Network Communications** – Provides secure point-to-point connections between two different machines through Secure Shell (SSH).
- **Secure Network Management** – Secures network traffic between network managers and SNMPv3-enabled elements through the inherent authentication and encryption capabilities of SNMPv3.
- **Backup and Recovery** – Enables the quick restoration of system devices under failure conditions through the centralized management of data backup and restore operations.



- **Transparent Element Hardening** – Removes nonessential tools, services, and utilities from the Windows Operating System, which could be used by an attacker to gain unauthorized access to system settings or data.

## 1.7 SYSTEM CAPACITY AND SPECTRUM MANAGEMENT

The level of traffic on the City's system may vary depending on the time of day, day of the week, and emergency situations. Motorola Solutions takes great care to design systems that can meet peak performance levels without requiring resources that remain unused during slow periods. The proposed ASTRO 25 radio system includes features to ensure that resources are efficiently used.

The proposed system will use **P25 Time Division Multiple Access (TDMA)** to divide each channel into two talkpaths, leveraging 2:1 channel efficiency to double talkpath capacity over FDMA using the same radio frequency bandwidth allocation. This enhanced capacity improves the system's Grade of Service, leading to fewer busied calls and faster callbacks during busy situations. The extra bandwidth provided by TDMA can be deployed for more talkpath capacity and packet data services at the same site, or redistributed to other sites on the network.

## 1.8 SYSTEM VOICE COMMUNICATIONS MANAGEMENT

The successful completion of calls is a vital factor in the ASTRO 25 radio system design. Targeting communications is important for both privacy and efficiency. Some information may be sensitive and intended for a specific person, while other information may be important for an entire group of radio users. Communications that are relevant for one group should not distract another group, and some radio users may need priority over other radio users when the system is busy. The proposed system for the City includes a collection of features to maximize communications availability, target and prioritize communications, and minimize the effort required by radio users to complete calls.

The zone controller manages call processing in the system. If a zone controller failure prevents channel requests from being acknowledged, the Automatic Retry feature will continue sending channel requests from the individual user radio until the request is acknowledged, or until a total of 16 automatic retries occur. If a radio user presses the push-to-talk (PTT) button and fails to find an open channel, Busy Queuing/Call Back will deliver a busy tone and place the call into a busy queue. As channels become available, they will be assigned to calls in the queue using pre-assigned priority levels. Radio users will be notified of the assigned channel through a call-back tone.

To ensure uninterrupted communications, Recent User Priority will give priority over other radio users to radio users who have been recently assigned a voice channel. Recent User Priority will provide priority system access for up to 10 seconds between transmissions to a talkgroup engaged in a conversation. Misdirected Radio Protection uses embedded signaling to ensure a radio from one talkgroup cannot accidentally be assigned to a voice channel being used by a different talkgroup. If a user radio is accidentally assigned to a different talkgroup channel, the radio will recognize that it has been assigned incorrectly and automatically revert to the control channel. With Continuous Assignment Updating, the control channel will continue to transmit the channel assignment for as long as a talkgroup is using an assigned channel. This ensures a radio just coming into service will be sent to the appropriate voice channel to join the rest of its talkgroup. Radio Talkgroup Muting will allow the radio user to mute all voice traffic for the currently selected talkgroup, including emergency voice received. The radio can be

City of San Fernando  
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automatically unmuted by the dispatch operator or another radio user by sending the muted radio a Call Alert.

The proposed system provides the City with 10 Priority Levels, allowing system administrators to segment radio users according to their communications needs. Priority 1 is always reserved for emergencies. Priorities 2 through 10 can be assigned on a per radio or talkgroup basis. These priorities are only applicable when the system is busy. Priority Monitor allows the radio user to scan talkgroups in their system, and mark up to two talkgroups in their scan list as Priority. A non-priority conversation will be interrupted by Priority 1 or Priority 2 talkgroup activity.

Dispatch operators can selectively call and carry on a Private Call with another individual radio, as long as that radio is not already engaged in another Private Call. The calling radio receives an acknowledgment of a successful Private Call. If the receiving radio has a display, it shows the calling party's radio ID. To protect channel availability for mainstream operations, Private Call management can control how many resources are dedicated for private calls at a trunking RF site. The system administrator can pre-configure and limit the number of simultaneous private calls that are active at a particular site, or even disallow private calls entirely.

Dispatch operators can make a simultaneous call to multiple talkgroups, with all radios configured for talk-back capability. Dispatchers can program this Multi-Group Call to operate in one of two ways:

1. The requesting radio user waits for all requested talkgroups to finish all calls in progress.
2. The requested call immediately interrupts other conversations in progress without waiting for active radio users to de-key. Radio users who are transmitting on a voice channel do not hear the call until they de-key.

The proposed system provides a dispatch function called Dispatch Console/Talkgroup Merge to allow multiple talkgroups to operate together on one voice channel, improving channel efficiency.

The proposed system allows the City to establish Conventional Talkgroups to separate voice communications between multiple agencies sharing an RF conventional channel. Radio users and dispatch operators using the same talkgroup can communicate with each other, while radio users from other talkgroups on the same channel cannot hear them.

## 1.9 SYSTEM DATA COMMUNICATIONS MANAGEMENT

The proposed system's Project 25-compliant Integrated Voice and Data (IV&D) operation allows data traffic to seamlessly use the City's ASTRO 25 radio system, improving in-field efficiency. The IV&D service creates a data transport layer capable of supporting both industry-standard IP and customer-developed applications.



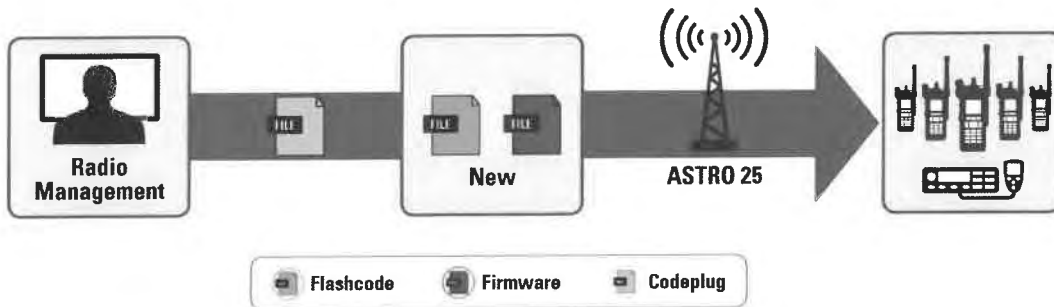


Figure 1-2: Firmware Download Process

## 1.10 SYSTEM CONFIGURATION MANAGEMENT

The ASTRO 25 system will provide the City's system administrators with a centralized approach to configuring the proposed system.

With the Unified Network Configurator (UNC), the City's system administrators will be able to configure networks and devices in the ASTRO 25 system through easy editing screens and configuration "wizards." Role-based radio user setup, auto discovery of devices/configurations, and minimized data entry reduces configuration errors and initial configuration time. Personnel can quickly access historical configuration and forensic information, and quickly roll back to previous configuration versions, if necessary.

The UNC can direct comparison between the current system configuration with any planned changes, simultaneously displaying the configurations and enabling the scheduling of any changes for distribution during off hours, minimizing the impact of system changes on communications. The UNC is highly secure, supporting SSH and SNMP passwords and providing an automated mechanism to seamlessly roll passwords and passphrases.

The Provisioning Manager (PM) enables the City's system administrators to provision the infrastructure and devices in the ASTRO 25 radio system through a GUI. The PM offers a well-rounded set of features:

- **Streamlined Web-Based Graphic User Interface** – Requires fewer keystrokes to manage critical information. Provides a central point for the configuration of operational parameters for mobile and portable radios, dispatch operator positions, and system administrators.
- **Batch Creation of Radios and Talkgroups** – Minimizes data entry and reuses configuration information through "Multi-Instance Creation."
- **Enhanced Agency Partitioning** – Allows system administrators to define data partitions of system management resources among various agencies and radio users.
- **Provisioning Manager Audit** – enables stricter enforcement of system policies and provides an efficient way of troubleshooting configuration issues. Allows the system administrators to navigate between an audit record and the corresponding configuration record.
- **External Provisioning Manager Interface** – Provides an interface that partners with an identified third-party vendor (Genesis, MCM, Premier One, NGI) to provide an integrated solution for critical customer applications on the system, such as, Asset Management, Billing, and Fleet Mapping applications.
- **Radio and Radio User fields Combined into One Window** – Provides efficient management of user radio provisioning by eliminating the need to enter device information multiple times.
- **Import/Export Capabilities** – Offer a convenient mechanism to export and import data from external applications using .csv protocol.

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With the PM's integrated database, system administrators are required to enter data only once, improving accuracy, saving time, and maintaining data integrity.

## 1.11 SYSTEM PERFORMANCE MANAGEMENT

The ASTRO 25 performance suite will enable the City's system administrators to monitor, manage, and report on system performance in near real-time, as well as proactively plan for expansion. The performance suite comprises both Motorola Solutions and third-party management applications that are certified, integrated, and supported by Motorola Solutions. Together, these applications provide a complete picture of how the system is operating.

## 1.12 SYSTEM FAULT MANAGEMENT

System performance depends on the proper functioning of the system's software and components. The proposed system includes the following features to facilitate the detection, isolation, and resolution of events that are reported by system components.

The Unified Event Manager (UEM) provides critical fault management, including processing and presentation of events that are sent by managed devices. Historical and real-time traffic screens will give the City's system administrators access to radio events, radio status, and any device alarms.

The UEM supports the following main functions:

- **Device discovery** – The UEM is optimized to quickly discover the managed devices in the system.
- **Fault management** – Fault management in the UEM includes processing and presentation of events sent by a managed device.
- **Supervision** – The UEM periodically checks its ability to communicate with the devices it manages.
- **Synchronization** – The UEM performs synchronization automatically, by validating the health of a device with the information stored in the fault management database.

The UEM will provide secure communications with the City's managed devices. If a loss of communication with a managed device occurs, that failure will be reported to the UEM, which will alert administrators according to the severity of the event. The UEM's alarm view dynamically updates based on the condition of the reported device (that is, the alarm will be cleared from the alarm view when a device sends a clear event to the UEM).

The UEM Simple Network Management Protocol (SNMP) Element Management Toolkit enables third-party vendors to define SNMP messages between their devices and the UEM, allowing system administrators to monitor faults on critical third-party devices directly from the UEM.

## 1.13 SYSTEM ALERTING CAPABILITIES

Certain circumstances require the immediate alerting of personnel. Whether a specific individual or an entire group of radio users needs to be notified, the proposed system will provide the City with the capabilities needed to alert dispatch operators and radio users of important information and critical situations.

The Call Alert feature uses the control channel to enable a dispatch operator or radio user to page another dispatch position or individual radio without affecting voice channel capacity. Call Alert sounds a tone on



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the receiving radio and returns an acknowledgement to the initiating radio. If the receiving radio is in a voice call, the alert tone sounds in the background, so the voice message continues to be clearly heard.

The Emergency Alarm and Emergency Call features provide the alerting capabilities needed for critical situations. With Emergency Alarm and Emergency Call, a radio user can quickly inform the dispatch operator of a life-threatening situation. The simple press of the radio's emergency alarm button sends an audible and visible alarm and the user radio's ID to the dispatch operator and, potentially, other talkgroup members.

**ALERT DISPATCH OF AN  
EMERGENCY WITH THE  
PUSH OF A BUTTON**

The dispatch console receives immediate notification, even when the system is busy, and an available channel is assigned immediately to the emergency call. If the system is busy, the City's dispatch operators will be able to choose between two alternatives for handling emergency traffic:

- **Top of the Queue** – The emergency caller is put at the top of the busy queue. As soon as the first radio user on any channel de-keys, the emergency caller is assigned that channel. This approach prevents contention for the channel.
- **Ruthless Preemption** – The zone controller re-assigns the channel with the lowest priority call to the emergency caller—a feature unique to Motorola Solutions trunking systems.

## 1.14 SYSTEM COMPONENTS

An ASTRO 25 radio system is comprised of a master site and one or more radio frequency sites. This section provides descriptions of the components at each location.

### 1.14.1 Master Site Core Components

The equipment at an ASTRO 25 master site provides an adaptable and affordable platform for mission critical wireless communications in a scalable and virtualized configuration. The master site equipment comprises the system's core components, including a common server architecture (running the applications that provide command and control for the system) and LAN switches (routing information to and from the master site to the radio frequency sites that provide system coverage).

#### 1.14.1.1 Common Server Architecture

A master site's Common Server Architecture (CSA) deploys server applications with the Linux/Windows operating systems on a HP DL380 Virtual Management Server (VMS) host. The VMS hosts the following server applications through VMware in a Virtual Machine (VM) environment:

- **Air Traffic Router (ATR)** – Captures data exhibited by Affiliation Display, Dynamic Reports, Historical Reports, Radio Control Manager (RCM) Reports, and for systems with the Inter-RF System Gateway (ISGW) employing the ISSI 8000/CSSI 8000 feature. The ATR also captures foreign talkgroup and foreign Subscriber Unit Identifier information for ZoneWatch to display.
- **Backup and Recovery (BAR) Server** – Backs up and restores critical data.
- **User Configuration Server (UCS)** – Stores information about user radios, talkgroups, critical sites, and security information.
- **Zone Database Server (ZDS)** – Exports infrastructure and subscriber information it receives from the User Configuration Server (UCS) to consoles and site gateways (conventional channel interface).
- **Zone Statistics Server (ZSS)** – Provides database storage of statistics and back-end processes required for zone-level functions.
- **Zone Controller (ZC)** – Provides centralized control for call processing and mobility management functions.



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- **License Manager** – Stores and manages software licenses.
- **Unified Event Manager (UEM)** – Provides fault management.
- **Unified Network Configurator (UNC)** – Provides controlled and validated configuration management of system devices.
- **Centralized Event Logging Server (Syslog) Server** – Captures Operating System (OS) events generated by most devices in the Radio Network.
- **Unified Network Configurator (UNC) Device Server (UNCDS)** – Enables the UNC to manage up to 15,000 devices.
- **System Statistics Server (SSS)** – Stores and provides statistical data for the system.
- **vCenter Appliance** – Manages all fault tolerant Packet Data Gateways (PDGs) and ATRs.
- **Network Management (NM) Client** – Provides a virtual workstation for system administrators and technicians to use for various system-related tasks.

### 1.14.1.2 Firewall

A firewall provides network boundary enforcement and attack detection features. The firewall restricts traffic to known sources, destinations, and protocols, based on the hosts and services that are specified in the firewall configuration. All undefined traffic is discarded.

### 1.14.1.3 LAN Switches

The master site includes one or more LAN switches. The LAN switches aggregate all the Ethernet interfaces for all servers, clients, and routers at the core.

## 1.14.2 Radio Frequency Site Component Descriptions

An ASTRO 25 Radio Frequency (RF) site supports a wide variety of configurations to meet critical communications requirements for present and future communication needs. Depending on the RF site configuration, each RF site has several different components. The following components are included in the RF sites provided as part of our solution for the City.

### 1.14.2.1 Enhanced GGM 8000 Conventional Channel Gateway

Enhanced Conventional Channel Gateways (ECCGWs) connect dispatch operators to analog or digital conventional channels in the system. Up to 16 conventional channels can be connected to the eight analog and eight V.24 ports on a GGM 8000-based ECCGW in any mixture of analog, MDC 1200 digital or mixed mode.

In addition to the 16 channels supported on the analog and V.24 ports, the ECCGW can support up to 16 digital conventional channels through its IP port. Mixed mode channels must use a V.24 port for the digital portion.



**Figure 1-3: Enhanced GGM 8000 Conventional Channel Gateway** - Connects dispatch operators to analog or digital conventional channels in the system.



### 1.14.2.2 G-Series Site Components

G-series site equipment uses a standard chassis (see the figure titled "G-Series Chassis") for individual site components. Six basic modules create the entire G-series platform, resulting in reduced spare parts inventory. Modules have front access to improve serviceability with hot-swap support to ensure channels are back on the air in minimum possible time. Standard battery revert and charging capability is built into every G-series power supply. Integrating these capabilities eliminates the need for a large uninterrupted power supply and saves valuable site space.



**Figure 1-4: G-Series Chassis** – A single chassis and six basic modules create the entire G-series platform, resulting in reduced spare parts inventory.

- **GTR 8000 Site Repeater/Base Radio** – The GTR 8000 base radio consists of a transceiver module, power amplifier module, fan module, and power supply. The transceiver module includes the functionality for the exciter, receiver, and station control. The base radio software, configuration, and network management, as well as inbound/outbound traffic handling, are performed through this transceiver module. On-board serial and Ethernet ports are located on this module for local servicing through Configuration/Service Software (CSS). The power amplifier module amplifies the low-level modulated RF signal from the transceiver module and delivers the amplified signal on the path to the transmit antenna. The power supply module supports the transceiver and power amplifier modules, and can also provide auxiliary power to a connected site controller or receive multicoupler/low noise amplifier.
- **GCP 8000 Site Controller** – The GCP 8000 Site Controller is used at an ASTRO 25 trunking site to assign voice and data channels, manage and report alarms on site resources, provide Ethernet switching capability, and provide a frequency reference to GTR 8000 Base Radios. The frequency reference is provided either via a GPS receiver or an ultra high stability oscillator. The nature of these frequency references eliminates or minimizes site visits for frequency tuning servicing.
- **GCP 8000 Conventional Site Controller** – The GCP 8000 Conventional Site Controller provides mission critical call processing and mobility management throughout the ASTRO 25 conventional system. The GCP 8000 interfaces through the Ethernet LAN switch, providing access to the packet switched network through the core gateway. Equipped with a single controller module, the GCP 8000 can support the full set of dispatch consoles, archiving interface servers, and conventional gateways.

### 1.14.2.3 Dual Remote Site Link Switches

In a dual remote site link configuration, two switches are used so that there is no single point of failure for the remote site's entire IP network.

### 1.14.2.4 Dual Remote Site Link Routers

The remote site access routers, located at the prime site, provide the IP network routing interfaces between the prime site and all of the remote sites. In the dual remote site link configuration, two remote site access

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routers each serve as the endpoint for one of the remote site's Wide Area Network (WAN) links. The remote site access routers support T1, FT1, E1, FE1 and Ethernet links.

### 1.14.2.5 GGSN Router

Motorola Solutions' General Packet Radio Service (GPRS) Gateway Service Node (GGSN) router provides for the internetworking between the ASTRO 25 data system and the Customer Enterprise Network (CEN), allowing for independent management of IP addresses across networks.

The GGSN router handles the IP routing services in support of end-to-end IP data messaging. These services include Static and Dynamic IP addressing, IP fragmentation, and ICMP error reporting messaging for diagnostics and troubleshooting.

### 1.14.2.6 TRAK 8835 Site Reference

The TRAK 8835 Site Reference is a GPS-based frequency and time reference. The TRAK 8835 Site Reference device is certified only for use at an ASTRO 25 repeater site and circuit-based or IP-based analog-only voting subsystems.

### 1.14.2.7 Radio Frequency Distribution System

The Radio Frequency Distribution System (RFDS) connects base radios and antennas, allowing for a completely contained and more compact installation footprint. For the transmitters, this can include isolators, combiners, TX filters, diplexers, and power monitors. For the receivers, this can include duplexers, site preselectors, and multicouplers.

### 1.14.2.8 Network Time Protocol Server

The Network Time Protocol (NTP) Server performs time-synchronization of devices on a network. Time synchronization is critical because activities to manage, secure, and troubleshoot network devices often involve determining the timing of the alarms, events, and other information captured by the event logs and software applications that manage and support the system. The NTP can provide synchronization within several milliseconds of Coordinated Universal Time (UTC), and NTP servers often employ Global Positioning System (GPS) receivers to provide time synchronization.

### 1.14.2.9 Site LAN Switch

The site LAN switch provides a LAN interface for site equipment and a LAN port for the site gateway. Through the switch, the service technicians gain access to service the site, and also access to the system's Graphical User Interface (GUI).

### 1.14.2.10 Terminal Server

The Terminal Server provides serial access to Network Management (NM) servers and network transport equipment in the Radio Network Infrastructure (RNI). The terminal server has a separate direct RS-232 connection to each of its supported devices. In the event of a major failure, the Terminal Server provides dial-up access for troubleshooting. This interface is intended exclusively for Motorola Solutions Service personnel.



### 1.14.2.11 KVL 5000 Key Variable Loader

The KVL 5000 is a P25 communications encryption device that delivers greater flexibility for programmers to secure their radio channels, leading to less interruption in the City's workflow. As the only key loader that employs a hardware protected keystore, the KVL 5000 is used to generate, transport, and load encryption keys to secure user programming and critical information with a physical encryption solution at the highest level.

The KVL's one-handed build features a sleek, responsive UI with quick start for a more efficient key loading process. This device integrates with Motorola Solutions' Key Management Facility (KMF) by provisioning radios to use Over-the-Air-Rekeying (OTAR).

The KVL 5000 brings enhanced capabilities and greater performance to the City's operators with the following core features:

- Purpose-Built
  - Ruggedized design with IP54, MIL-STD certification for use in demanding environments.
  - Increased responsiveness and efficiency, with large, accessible touch display and quick startup for fast engagement.
- Efficient Operation
  - Power saving operation to ensure the KVL 5000 is ready for use in emergency situations.
  - Battery power up to 10 hours of normal key load use.
  - Sleep, standby, and power-off modes available.
- Compatibility
  - Key sharing and backwards compatibility with previous Motorola Solutions KVL models (KVL 4000 to KVL 5000, KVL 3000+ to KVL 5000).



Built on the strong foundation of Motorola Solutions' KVL 4000, the KVL 5000 maintains feature parity by supporting the following capabilities:

- FIPS 140-2 Level 2 compliant.
- Hardware protected keystore.
- Auto keyload and multiple keyload.
- Ability to keyload while KVL is charging (no minimum charge required).
- Key generation.
- KMF support, with UKEK provisioning, store and forward.

## 1.15 SECTION TITLE

Motorola Solutions, Inc. (Motorola Solutions) proposes our MCC 7500E dispatch console to provide the City of San Fernando with the confidence of state-of-the-art secure communications, seamless IP-based connectivity, flexible system architecture with scalable components, and centralized console management.

Motorola Solutions designs its console to help reduce the total cost of owning an IP-based, feature-rich dispatch system without compromising quality and reliability. The console provides the City of San Fernando with sophisticated network management and easy migration to future capabilities.

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## 1.16 DISPATCH CONSOLE CONFIGURATION FOR THE CITY OF SAN FERNANDO

The proposed console will interface seamlessly with the City's ASTRO® 25 system.

The proposed solution offers the City three (3) dispatch positions. The figure titled "MCC 7500E Dispatch Position" shows an MCC 7500E operator position.

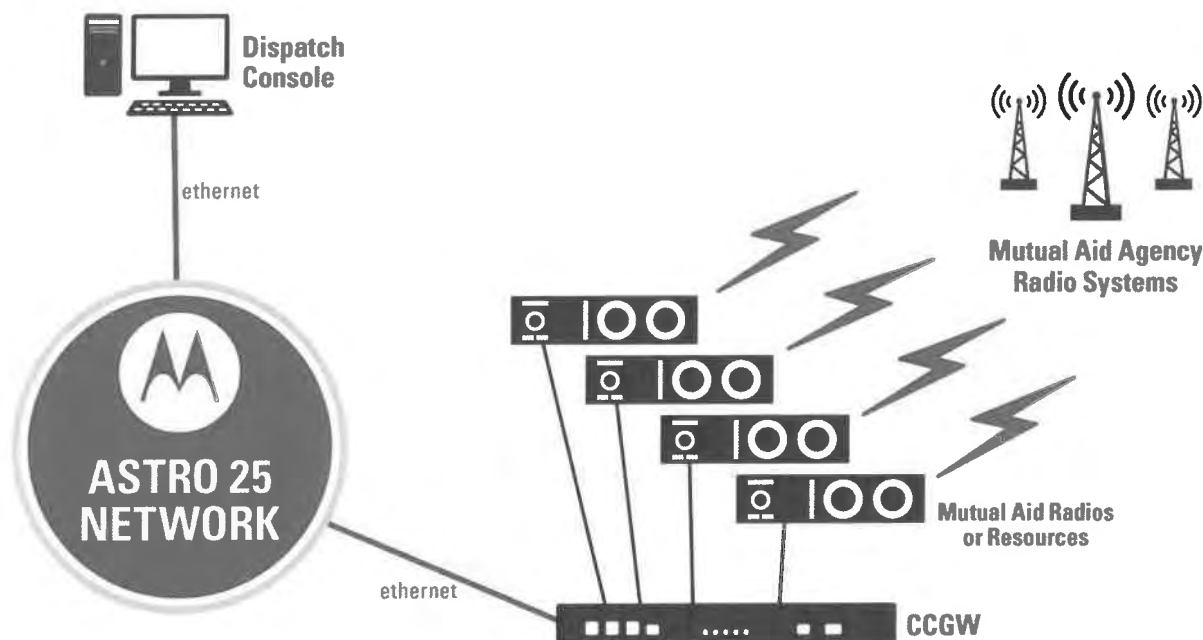


Figure 1-5: MCC 7500E Dispatch Position provides a small form factor, familiar GUI, and advanced features.

## 1.17 EMBRACING INTEROPERABILITY AND INTEGRATION

Motorola Solutions is an active participant in establishing P25 standards for interoperability. The proposed console is a key component for the interoperability of the ASTRO 25 system. When a situation requires coordination between multiple agencies, the proposed dispatcher can patch together Mutual Aid radios and required subscribers on the ASTRO 25 system (see the figure titled "Mutual Aid Components").

Incident conversations are seamless from the moment of the patch initiation and can be recorded like any talkgroup conversation within the Land Mobile Radio (LMR) network. The dispatcher can also take part in and monitor conversations for the duration of the incident, as necessary.



**Figure 1-6: Mutual Aid Components** - Mutual Aid agency radio systems connect to the ASTRO 25 network through a CCGW.

### 1.17.1 Integration with the ASTRO 25 Network

The proposed dispatch console seamlessly integrates into the City's ASTRO 25 system without interface boxes, digital voice gateways, or backroom electronics for an integrated, mission-critical network. This tight union between radio infrastructure and console equipment has several operational benefits to the City of San Fernando.

The physical space to accommodate the proposed console is comparable to that required for a personal computer. The console can access both trunked talkgroups and conventional radio channels over the same network. This architecture reduces overall transport costs and the need for duplicate fixed network equipment.

### 1.17.2 Connection to ASTRO 25 System

The flexibility of the ASTRO 25 system architecture allows the connection of the proposed console to be suited specifically to the City's needs.

#### Dual Site Link

The proposed console site for the City is remote from the core site and features redundant site links to provide path diversity. The console site has two logical connections to the core site with each connection using a different core router.

Each console site gateway provides an interface that handles the following IP traffic between the proposed console center and the City's ASTRO 25 core site:

- Network management traffic.
- Call control and audio traffic for all the calls being handled by the dispatch positions.
- Aux I/O traffic for the Aux I/Os being handled by the dispatch positions.

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The site gateways fragment large IP packets according to industry standards, prioritize packets, and convert Ethernet data to the desired transport medium.

### **LAN Switches**

The site LAN switches provide LAN interfaces for console site equipment and a LAN port for the link to the core site. Through the switch, service technicians can access the system's configuration manager and service the equipment.

### **Advanced Conventional**

This option provides the dispatcher with the ability to control ASTRO 25 conventional channels and/or MDC 1200 channels.

## **1.18 MAKING CONSOLES EASY TO OPERATE**

Motorola Solutions designs its proposed console to provide mission-critical audio between the dispatcher and users in the field. It is optimized for real-time audio, prioritizing emergency calls over other traffic, and minimizing voice queuing. Using robust error mitigation to maintain call quality even when the system is heavily loaded, the proposed console reduces communication errors that may force dispatchers or radio users to repeat their transmissions.

### **1.18.1 Customizable Dispatch Interface**

The proposed console provides dispatchers with a graphical user interface (GUI) that can be customized by agency or by individual users to optimize user efficiency. Based on dispatcher preference, the proposed GUI can be customized to show details of trunked and conventional RF channels on a per-channel basis.

Busy dispatchers can respond to a missed call by simply clicking on an entry in the Activity Log. The number of calls and call information displayed in the Activity Log is customizable to suit the needs of the user. The status of Auxiliary I/Os can be easily interpreted from the GUI with the use of familiar graphical icons, such as a door shown open or closed.

### **1.18.2 Auxiliary Inputs/Outputs**

The proposed console supports Global Auxiliary Inputs/Outputs (Aux I/Os) for remote status indications or remote control through dispatch positions. Global Aux I/Os are typically implemented by hardware that is independent of the dispatch positions in a system and may be accessible to multiple dispatch positions. Aux I/O Servers provide the Aux I/O feature for the consoles.

### **1.18.3 Standard Radio Transmission and Reception**

A typical proposed dispatch position has a headset and two speakers. One speaker is for selected audio and the second speaker is for all remaining unselected audio. Additional speakers can be added to a console allowing dispatchers to configure a specific speaker for a set of designated audio sources. This simplifies multitasking between multiple audio sources and allows flexibility in the way the audio is presented to the dispatcher.

#### **Receiving Calls from the Field and Other Dispatchers**

The proposed console provides dispatchers with greater flexibility for how to hear calls from field radio users and other dispatchers. Each dispatcher can define his or her own audio reception profile by selecting



a single audio source, whether conventional or talkgroup, to be heard on a selected speaker or headset (Single Select). The dispatcher can also define groups of radio resources that can all be heard on a selected speaker or headset (Multi- Select).

### **Initiating Calls to the Field and Other Dispatchers**

The dispatcher has several different ways of initiating a call. In most circumstances, a General Transmit is appropriate. With the General Transmit, the dispatcher selects a resource on the console and activates the transmission through a footswitch, headset transmit button, or a microphone transmit button. If the dispatcher needs to quickly transmit on a resource that is not selected, the dispatcher uses the Instant Transmit function.

An Instant Transmit safety switch prevents accidental activation of functions that may cause negative consequences. The safety switch can be used with Aux I/Os and preprogrammed pages, as well as Instant Transmit switches.

### **Audio Communication to the Field and Other Dispatchers**

The dispatcher can transmit audio in different ways. They can make calls to all users listening to a specific conventional radio resource or a specific trunking talkgroup. When multiple resources are required, the dispatcher can select additional talkgroups and/or conventional channels, as needed using the Multi-Select feature.

The proposed console also enables dispatchers to make private calls to individual field radio users or dispatchers. Once a private call is established, it can be patched in with another resource at the dispatcher's discretion.

### **Controlling Console Audio**

The proposed console offers dispatchers several different ways of controlling or muting the audio on their consoles, such as the following:

- Audio volume can be changed for any specific resource.
- All non-selected resources on the console can be muted for 30 seconds (All Mute) or unmuted, if already muted.
- A dispatcher can transmit on a resource while receiving audio from the same resource or other resources.
- A dispatch position can be configured to automatically mute the other dispatch audio on a shared resource to prevent acoustic feedback when a co-located dispatch position transmits.
- RF Cross Mute automatically mutes the receive audio from a specified channel when the dispatcher transmits on another specified channel to prevent acoustic feedback.

### **Controlling Network Audio**

Dispatchers can control audio on the ASTRO 25 network. The dispatcher can enable or disable radio users to compartmentalize traffic, reduce interruptions, and maintain communications between dispatch and the field. When this function is enabled or disabled, all dispatch consoles with this resource assigned are updated with the current status of the feature. This feature can be controlled from any dispatch position.

## **1.18.4 Emergency Radio Transmission and Reception**

As part of a mission-critical communications network, the proposed dispatch console facilitates immediate prioritization and resolution of emergency communications between the City's dispatch and first





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responders in the field. This enables dispatchers and first responders to focus on their mission and not their equipment, especially during critical situations.

### **Receiving an Emergency Call**

When a user in the field or another dispatcher initiates an emergency call, the console emits both visual and audible indications (Emergency Alarm). The audible indication alerts the dispatcher that an emergency is underway; the visual indication directs the dispatcher's attention to the specific resource making the emergency call. The dispatcher can immediately reserve a voice channel for the duration of the emergency.

### **Responding to an Emergency Call**

A dispatcher can bypass the standard console interface to auto-open a quick list, which contains specific controls for recognizing an emergency call, initiating an emergency call, and ending an emergency call (Auto-Open of Quick List). The dispatcher can then recognize the emergency call, which ends the audible emergency indication and notifies all dispatchers that the emergency is being addressed (Emergency Recognize).

The audible emergency indication may also be muted by a dispatcher without recognizing the emergency alarm (Mute Tones at a Single Op). This can be used in a situation where one agency is monitoring a channel that belongs to another agency. That channel can be configured to not generate audible and/or visual emergency indications.

### **Ending an Emergency Call**

When an emergency is over, the dispatcher can end the Emergency Alarm. The visual indication on the dispatch position GUI is removed, and the console informs the other dispatch positions that the emergency is over (Emergency End/ Knockdown). The emergency mode remains active on the initiating radio unit until it is ended (reset) by the radio user.

## **1.18.5 Radio Patch Control**

The dispatcher can patch communication between trunked and/or conventional radios that are normally unable to communicate with each other due to different features, programming, or even different frequency bands. A patch group is a group of linked resources that can both receive messages from a console and transmit to all other members of the patch group.

### **Setting up a Standard Patch**

Patches are supported between trunked resources and/or conventional resources. After the patch is created, the dispatch position transmits all audio on one resource to all other resources in the patch group. In a patch between trunked resources, patched radio users with displays see the ID or alias of the other patched radio(s), as opposed to that of the console. This minimizes confusion and the need for the dispatcher to intervene in the call. Patches are automatically reestablished, if interrupted, so the dispatcher can concentrate on continuing operations.

### **Predefined Patches**

Patches can be predefined and automatically reinitiated each time a dispatch position computer is restarted (Patch Auto-Start).

## 1.18.6 Call Management and Control

The dispatcher can use the following functionality to manage and control audio for different types of calls between the dispatch position and radio users or other dispatchers.

### Automatic Prioritization of Calls

Calls on the dispatch position are prioritized through a transmission hierarchy. Calls from primary supervisors take priority over those from secondary supervisors, which in turn take priority over non-supervisors. Instant Transmit or All-Points Bulletin (APB) transmissions, regardless of whether they are from a supervisor, take priority over general or patch transmissions.

Multiple dispatchers can be designated as primary supervisors on the same system, which is useful when multiple agencies share one system. With the Network Manager Client installed, supervisors can disable and enable dispatch console functionality as needed.

### Manual Prioritization of Calls

System Access Priority Select allows a dispatcher to prioritize trunked resources on the system as either normal or tactical. A dispatcher can change the priority of a trunked resource to tactical to give the resource a better chance of gaining communication access on a busy system. Only emergency calls have a higher priority than tactical.

When the System Access Priority Select status of a resource is changed, it is updated at all dispatch consoles in the systems that are monitoring that trunked resource.

### Using the Multi-Select Feature

The Multi-Select feature allows a dispatch position to define groups of selected radio resources. When a Multi-Select group is opened, all of the resources in the group are simultaneously selected. Resources can be added or removed from a Multi-Select group while the group is open. The dispatcher can transmit on several resources simultaneously or can listen to multiple resources simultaneously in their headset or select speakers.

### Standard Call Indications

The dispatch position indicates the availability of any given resource, regardless of whether the resource is involved in a transmission. An inbound call indication provides the dispatcher with a visual cue of audio activity on a radio resource and allows a dispatcher to see at a glance what the status of a resource is at any moment.

### Call Alerting

A dispatcher can use Call Alert to page an unattended radio or dispatch position through a series of beeps and an indication of the sender's ID. When available, the radio user or dispatcher sees the unit ID of the calling dispatch console or radio ID and is able to return the call.

Additionally, a Call Alert can trigger an activity. For instance, a Call Alert may cause a vehicle's horn to sound and its lights to flash. The dispatcher can even send a Call Alert to a user who is involved in voice and data communications over the network.

## 1.18.7 MKM 7000 Console Alias Manager (CAM)

The MKM 7000 Console Alias Manager (CAM) manages the radio unit ID aliases displayed on dispatch positions. It enables agencies that share a radio system to change aliases displayed on their dispatch positions and logging recorders without affecting the aliases displayed at the other agencies on the system.

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A typical console uses many types of aliases to provide meaningful, descriptive names instead of numeric ID numbers for different resources on the console, such as:

- Trunking talkgroups and conventional channels
- Aux I/Os
- Secure keys used for voice encryption
- Frequencies on multi-frequency conventional channels
- Private Line (PL) codes on conventional channels
- Predefined pages
- Radio unit IDs (also called radio PTT IDs)

The CAM supports aliases for radio unit IDs on ASTRO 25 trunking systems, ASTRO 25 conventional systems, MDC 1200 conventional systems, and Advanced SECURENET conventional systems. When SmartX site converters are used with SmartZone or SMARTNET systems, the CAM supports aliases for those types of radio unit IDs as well.

The CAM does not support aliases for systems connected through an ISSI link or non-Motorola Solutions consoles connected through a CSSI link.

## 1.19 CAPTURING AND LOGGING AUDIO

The proposed console system includes a logging recorder subsystem that enables the recording and replay of audio and other information associated with real-time conversations over the network. These capabilities provide the City's personnel with clear audio and enough information to easily understand the context and content of any recorded transmission.

This proposal includes the *support for* logging recorders that record 120 simultaneous conversations coming through the Archiving Interface Server (AIS). *This proposal does NOT include the logging recorder itself.*

## 1.20 PROTECTING CONSOLES AND COMMUNICATIONS

The console enables end-to-end encryption from the dispatcher to the ASTRO 25 network, so that the City's communications will not be undermined by unencrypted transmissions. Each dispatcher is able to fully participate in secure communications while being confident that sensitive, vital information is not heard by unauthorized individuals.

### 1.20.1 Secure Access to the Console

To use the dispatch position, a dispatcher must enter a valid radio system user account name and password. The dispatch position validates that information with the radio system's network manager and allows the dispatcher to access only the resources for which the user has access rights. This also applies to third-party applications that use the dispatch console's API.

### 1.20.2 Secure Communications at the Console

The console encrypts and decrypts radio voice messages. Thus, radio voice messages are encrypted from end-to-end between the radio user to the dispatch position. The dispatcher can choose whether to encrypt their transmissions on a particular trunked resource. Dispatchers can interface with agencies that have different encryption configurations without any manual intervention or delay.



### 1.20.3 Securing Communications at the Logging Recorder

Not only are real-time communications encrypted, encryption extends to call logging to ensure that even recorded communications are not vulnerable to retrieval by unauthorized people. The AIS can support different encryption algorithms simultaneously.

Like the dispatch console, the AIS also requires a valid radio system user account name and password be entered and validated by the radio system's network manager before it allows access to recorded information. A user can access only the recordings for which the user has access rights. This enables agencies to keep their logs private from other agencies on the same system.

## 1.21 INCORPORATING CONSOLE CONFIGURATION AND MANAGEMENT

The proposed console system is configured and managed by the same configuration manager, fault manager, and performance reporting applications as the radio system. The user can define exactly which resources are available and how they are presented to the dispatcher. This provides the City with a single point for configuring and managing the entire ASTRO 25 system. Changes are automatically distributed throughout the system.

This centralized approach saves valuable time and effort for system administrators and technicians and reduces the errors that can occur when radio IDs and other data are entered at multiple locations. In addition, call traffic and performance reports for each dispatch position can be generated from the system's network manager, enabling administrators to quickly and easily ensure optimal effectiveness and efficiency.

## 1.22 DISPATCH CONSOLE SOLUTION COMPONENTS

The proposed components are connected together and to the rest of the ASTRO 25 system on an IP network through console site routers and switches. The console functions as an integrated component of the total radio system and fully participates in system-level features, such as end-to-end encryption and Agency Partitioning.

The console connects directly to the radio system's IP transport network without gateways or interface boxes. Audio processing, encryption, and switching intelligence for dispatch are performed within each software-based dispatch position without additional centralized electronics.

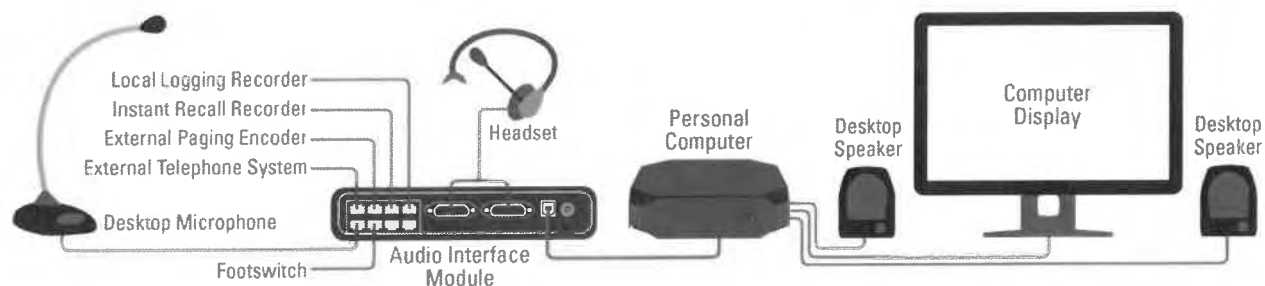
Since the network is IP-based, the system interfaces and components can be distributed physically throughout the network. Some of the available console components are identified below.

### 1.22.1 MCC 7500E Console Operator Position

The dispatch position supports commercially available accessories, including a USB microphone, USB headset, and USB footswitch, as shown in the figure titled "MCC 7500E Dispatch Position." The following list describes the components included in the proposed configuration.

City of San Fernando  
November 5, 2019

## THE MCC 7500E DISPATCH CONSOLE



**Figure 1-7: MCC 7500E Dispatch Position supports multiple accessories.**

### Audio Interface Module (AIM)

The USB Audio Interface Module (AIM) acts as an interface between analog devices and the dispatch position and as a general purpose input/output module. The USB AIM supports audio routing between the dispatcher and Motorola Solutions standard peripherals. The USB AIM connects to the MCC 7500E dispatch position with a USB cable.

### Personal Computer (PC)

The personal computer included with the dispatch position is Windows-based and certified by Motorola Solutions.

### Computer Display

The dispatch position will use a 22" Computer Display without TouchScreen capability.

### Enhanced Integrated Instant Recall Recorder (IRR)

The Enhanced IRR is seamlessly integrated with the dispatch position's software, allowing audio and call data from any radio or telephony resource to be recorded and easily played back. Call data includes PTT IDs, name of resource, start time and date, and stop time and date. Two analog inputs are available for use with recording audio from external devices.

### Desktop Speakers

Two (2) audio speakers have been included with each dispatch position and can be configured to transmit audio from a specific talkgroup or set of talkgroups. Each speaker is a self-contained unit, with individual volume controls, and can be placed on a desktop or mounted on a rack or computer display.

### Headset Jack

The dispatch position supports up to two headset jacks, both push-to-talk (PTT) and non-PTT-enabled, for simultaneous use by the dispatcher and a supervisor. The headset jack contains two volume controls for the separate adjustment of received radio and telephone audio.

### Headset

The proposed headset consists of two elements. The headset base includes an audio amplifier, a Push-to-Talk switch, and a long cord that connects to the dispatch position. The headset top consists of the earpiece and microphone as well as a short cable that connects to the headset base.



**Gooseneck Microphone**

The microphone controls the dispatch position's general transmit and monitor features through two buttons on its base. The microphone can be fastened down or left loose. It can be used alone or in conjunction with a headset.

**Footswitch**

Each dispatch position includes a dual pedal footswitch that controls general transmit and monitor functions.

**Redundant Ethernet Connection**

The optional redundant Ethernet connections increase MCC 7500E console availability by protecting against the loss of multiple dispatch positions. In the event of a LAN switch failure, the system will automatically detect and switchover with no manual intervention required. Dispatching operations will not be interrupted.



## SAMPLE MAINTENANCE AGREEMENT

BearCom is pleased to provide the following renewal for the maintenance of your radio equipment. This proposal includes:

### A. INFRASTRUCTURE COVERAGE

- 24/7 with 4-hour response time
- PMI Annually
- Hi-Tech Coverage – Infrastructure Repair with Advanced Replacement

### B. MOBILE RADIO COVERAGE

- 8:00 A.M. to 5:00 P.M., Monday – Friday, excluding legal holidays
- Next business day response

### C. PORTABLE RADIO COVERAGE

- 8:00 A.M. to 5:00 P.M., Monday – Friday, excluding legal holidays; at a BearCom facility
- Battery replacement – One per radio per year when accompanied with radio
- Disposal of spent battery
- Belt clip replacement - One per radio per year when accompanied with radio
- Antenna replacement - One per radio per year when accompanied with radio

### D. VIRTUAL PATROL SYSTEM

- Severity Level 1
- 24 hours per day x 365 days per year
- Technician telephone response 1 hour
- 2 hour On-Site response
- Preventative Maintenance Inspection:
  - a. Annually
- Technical Support for Related Software

### E. GENERAL TERMS AND CONDITIONS

### F. INVENTORY AND PRICING

### G. SIGNATURE PAGE

**A. INFRASTRUCTURE COVERAGE**

BearCom will provide On-Site Infrastructure Response services, which will be facilitated by the customer placing a "Request for Service" telephone call to the BearCom office. If a service request is made after hours, on a weekend or on a holiday, the caller must use the BearCom "After Hours" menu on the telephone system. On-Site Response provides for an on-site technician response as determined by Table A below.

**Table A**

<b>Response</b>	
Current Coverage	24/7 with 4-hour response time Annual PMI Hi-Tech Coverage – Infrastructure Repair with Advanced Replacement

**1.0 Preventative Maintenance Inspection (PMI)**

Preventative Maintenance Inspections will provide operational test and alignment, on the customer's equipment (infrastructure or fixed network equipment only) to ensure the equipment meets original manufacturer's specifications, all of which are hereby incorporated by this reference. Infrastructure Preventative Maintenance Inspections will be performed during standard business days, 8:00 A.M. to 5:00 P.M., excluding legal holidays.

Service requirements that occur after-hours or on weekends (outside of standard business days) may be purchased by the customer at an additional fee or billed on a time and material basis.

- 1.1 BearCom has the following responsibilities:
  - 1.1.1 Schedule the Annual PMI with the customer
  - 1.1.2 Notify the Customer of any possible System downtime needed to perform this service.
  - 1.1.3 Select and manage any subcontractors required to perform preventative maintenance on original equipment manufacturer (OEM) equipment.
  - 1.1.4 Dispatch the technical resources upon receiving Customer date(s) for Infrastructure Preventative Maintenance Inspection to be performed.
  - 1.1.5 Receive and log the following information from the customer to the JD Edwards system:
    - a) Dates to perform Infrastructure Preventative Maintenance Inspection.
    - b) Task number.
    - c) Site identification.
    - d) Customer and address.
    - e) Customer primary contact.
    - f) Access requirements.
    - g) Close Task Number upon receiving notice of completion from assigned technician or project manager.
- 1.2 Have on hand equipment list including type and quantity.
- 1.3 Have on hand original equipment manufacturer (OEM) Equipment manuals for system



specifications as available

1.4 Inspect and clean cabinets

1.5 Inspect:

- 1.5.1 General circuitry.
- 1.5.2 Fault indicators.
- 1.5.3 Cables, connections and grounding.
- 1.5.4 Remove any dust, and/or foreign substances from the equipment.
- 1.5.5 Clean filters, if applicable.
- 1.5.6 Complete all preventative maintenance requirements and manufacturers specification
- 1.5.7 Measure, record and adjust the equipment parameters in accordance with the manufacturer's service manuals and the Rules and Regulations of the Federal Communications Commission (FCC), where applicable.
- 1.5.8 Consult equipment manuals for system specifications per system configuration.
- 1.5.9 Complete and sign (by technician) system specific Infrastructure Preventative Maintenance Inspection checklist:
  - a) Electronically file one copy of the system specific Infrastructure Preventative Maintenance Inspection checklist at the BearCom office.
  - b) Identify any service problems that require customer or BearCom action.
  - c) Schedule post PMI meeting with customer to discuss service problems or other issues that require specific action by BearCom or by customer.

## **B. MOBILE RADIO COVERAGE**

### **1.0 On-Site Mobile Radio Response**

On-Site Radio Response provides for BearCom to be on-site to analyze a problem with a mobile radio and to repair the radio on-site if possible. Response will be on the same day if possible, or the next business day, as the trouble call is received by BearCom. If a mobile radio cannot be repaired in the field, BearCom remove the radio and reinstall a FRU (Field Replacement Unit) if provided by the customer. BearCom will then take the radio to its facility to perform the repair, return and reinstall the radio, then give the FRU back to the customer.

- 1.1 8:00 A.M. to 5:00 P.M., Monday through Friday, excluding legal holidays.
- 1.2 Next business day response.

**C. PORTABLE RADIO COVERAGE**

Portable radio repair provides for BearCom to provide the labor and replacement parts to repair customer's portable radio. All portable radio repair work and PMI's will be done at an BearCom facility and not at the customer location.

1. 8:00 A.M. to 5:00 P.M., Monday – Friday, excluding legal holidays. Customer brings equipment to BearCom
2. Battery replacement, including disposal of spent battery. One battery per year per radio, when accompanied with radio if needed.
3. Battery disposal.
4. Belt clip replacement, one belt clip per radio per year when accompanied with radio if needed.
5. Portable antenna replacement, one antenna per year per radio when accompanied with Radio if needed.
6. BearCom has the following responsibilities:
  - 6.1 Add the following customer information to the BearCom JD Edwards tracking system:
    - 6.1.1 Customer name, contact and address.
    - 6.1.2 System type and equipment descriptions.
    - 6.1.3 Site identification (site names, site ids, addresses and zip codes).
    - 6.1.4 Provide equipment list including type and quantity, when available.
  - 6.2 Provide an operational check of equipment to determine the nature of the problem.
  - 6.3 Restore equipment with external defects that can be restored without opening the radio case.
  - 6.4 Generate service ticket in JD Edwards.
7. SP - Local Subscriber Repair

If Motorola does not manufacture the equipment, it may be returned to the original equipment manufacturer or third party vendor for repair. BearCom will coordinate and track third-party equipment sent to the original equipment manufacturer or third-party vendor for service. Once the equipment is received from the manufacturer, BearCom will contact the customer to pick up the equipment or utilize the pick-up and delivery option provided that the customer has pick-up and delivery as part of its SOW.

**D. VIRTUAL PATROL SYSTEM****On-Site Response**

On-Site Response provides for BearCom to provide on-site response as determined by pre-defined severity levels and response times.

BearCom will provide On-Site Response services, which will be facilitated by the customer placing a "Request for Service" telephone call to the BearCom office. If a service request is made after hours, on a weekend or on a holiday, the caller must use the BearCom "After Hours" menu on the telephone system. On-Site Response provides for an on-site technician response as determined by pre-defined response levels set forth in Table A.

**Table A - Severity Definitions**

<b>Response Types</b>	
(A)Severity Level 1	24 hours per day x 365 days per year Technician telephone response 1 hour 2 – 4 hour On-Site response
(B)Severity Level 2	8:00 A.M. to 5:00 P.M. response Response during Standard Business Day, Monday – Friday Excludes legal holidays Same day response
(C)Severity Level 3	8:00 A.M. to 5:00 P.M. response Response during Standard Business Day, Monday – Friday Excludes legal holidays Next business day response

**Preventative Maintenance Inspection (PMI):**

BearCom will provide an Annual Preventative Maintenance Inspection (PMI) service to the customer.

Preventative Maintenance Inspections will provide operational test and alignment, on the customer's equipment to ensure the equipment meets original manufacturer's specifications, all of which are hereby incorporated by this reference. Preventative Maintenance Inspections will be performed during standard business days, 8:00 A.M. to 5:00 P.M., excluding legal holidays.

1.0 BearCom has the following responsibilities:

- 1.1 Schedule the PMI Annually with the customer
- 1.2 Notify the Customer of any possible System downtime needed to perform this service
- 1.3 Dispatch the technical resources upon receiving Customer date(s) for Preventative Maintenance Inspection to be performed
- 1.4 Receive and log the following information from the customer to the JD Edwards system:
  - 1.4.1 Dates to perform Infrastructure Preventative Maintenance Inspection
  - 1.4.2 Task number
  - 1.4.3 Site identification
  - 1.4.4 Customer and address
  - 1.4.5 Customer primary contact
  - 1.4.6 Access requirements
  - 1.4.7 Close Task Number upon receiving notice of completion from assigned technician or project manager
- 1.5 Have on hand equipment list including type and quantity.
- 1.6 Have on hand original equipment manufacturer (OEM) Equipment manuals for system specifications as available
- 1.7 Inspect and clean cabinets
- 1.8 Inspect:
  - 1.8.1 General circuitry
  - 1.8.2 Fault indicators
  - 1.8.3 Cables, connections and grounding
  - 1.8.4 Remove any dust, and/or foreign substances from the equipment
  - 1.8.5 Clean filters, if applicable
  - 1.8.6 Complete all preventative maintenance requirements and manufacturers specification
  - 1.8.7 Measure, record and adjust the equipment parameters in accordance with the manufacturer's service manual
  - 1.8.8 Consult equipment manuals for system specifications per system configuration
  - 1.8.9 Complete and sign (by technician) system specific Infrastructure Preventative Maintenance Inspection checklist:
    - 1.8.9.1 Electronically file one copy of the system specific Preventative Maintenance Inspection checklist at the BearCom office
    - 1.8.9.2 Identify any service problems that require customer or BearCom action
    - 1.8.9.3 Schedule post PMI meeting with customer to discuss service problems or other issues that require specific action by BearCom or by customer

E. **GENERAL TERMS AND CONDITIONS**

BearCom and the customer agree that if this proposal is acceptable to the customer that this document will be the basis for a maintenance agreement.

The Maintenance Agreement may be cancelled by either party with thirty (30) days written notice.

BearCom agrees to provide maintenance on the equipment identified in this agreement including all parts and labor which are required to repair the equipment which has become defective due to normal wear and usage. Maintenance does not include repair of equipment which has otherwise become defective, including but not limited to damage caused by accidents, physical abuse or misuse, vandalism, water, wind, fire or acts of God, nor the elimination of interference caused solely extraneous sources and/or signal exceeding the equipment design specifications.

Unless otherwise stated BearCom services excludes repairs to: any transmission lines, antennas, towers or tower lighting, batteries, carrying straps, belt clips crystals, or reeds, nor does it include repair of optional accessories; non-standard mobile microphones; iDEN mobile microphones; portable remote speaker microphones; mobile external speakers; mobile power and antenna cables; and power supplies. Radio and battery engraving service is not covered unless an engraved battery is replaced with a new battery.

The maintenance agreement is non-cancelable and non-refundable. If Equipment is added to the agreement subsequent to the start date, these units are also non-cancelable and non-refundable for the agreement duration. Equipment may only be added or deleted to the agreement, via a customer signed or emailed BearCom Inventory Adjustment Form (Service Addendum). Complete and accurate serial numbers and model descriptions must be supplied.

All inventory adjustment requests for add-on subscriber units received during any given month will be effective the 1<sup>st</sup> of that month.

Equipment deletions from the agreement may only be deleted under the following limited conditions:

- a) Equipment was stolen and notice of theft is provided to BearCom; or
- b) BearCom determines Equipment is damaged beyond economical repair (60% of the replacement value of a comparable radio), or
- c) BearCom determines Equipment is no longer supportable or is obsolete; or
- d) Customer has deemed said equipment as obsolete and has been replaced with new equipment.

Equipment deletions, where applicable, will be effective at the 1<sup>st</sup> of the following month in which the request was received.

The terms and conditions of this proposal are an integral part of the BearCom service agreement or other applicable agreements to which it is attached and made a part thereof by this reference.

If there are any inconsistencies between the provisions of the BearCom service agreement or other applicable agreements and this proposal, the provisions of this proposal shall prevail.

#### **G. INVENTORY AND PRICING**

##### **Maintenance Price:**

**H. SIGNATURE PAGE**

If the above-mentioned terms and conditions are agreeable, please indicate so by signing this page and returning a copy to BearCom along with your purchase order (if applicable). This agreement is effective from \_\_\_\_\_ to \_\_\_\_\_.

\_\_\_\_\_  
Customer Signature\_\_\_\_\_  
Signature

Vickie Dubois, Customer Service Manager

\_\_\_\_\_  
Customer Print Name\_\_\_\_\_  
Print Name

BearCom  
2601 Manhattan Beach Blvd.  
Redondo Beach, CA 90278

Phone #: \_\_\_\_\_

Phone #: 424-675-7116

Fax #: \_\_\_\_\_

Fax #: 424-675-7113

Email: \_\_\_\_\_

vickie.dubois@bearcom.com

\_\_\_\_\_  
Date\_\_\_\_\_  
Date**VISIT OUR WEB SITE AT****[www.bearcom.com](http://www.bearcom.com)**

## NOTICE INVITING BIDS

Notice is hereby given that sealed proposals will be received by the City of San Fernando, California, for furnishing the following:

### **CITY-WIDE RADIO SYSTEM AND WIRELESS BROADBAND VIDEO NETWORK MAINTENANCE PROPOSAL**

in strict accordance with the Specifications on file in the office of the SAN FERNANDO POLICE DEPARTMENT, 910 First Street, San Fernando, California, 91340. Copies of specifications and proposal documents may be obtained from the City's website at <https://ci.san-fernando.ca.us/rfps-rfqs-nibs-nois/>.

One original of the proposal must be submitted to the POLICE DEPARTMENT in a sealed envelope at CITY HALL Clerks Office, 117 Macneil Street, San Fernando, California, 91340, not later than **5:00 p.m. on Friday, November 12, 2021**. Any bidder may withdraw their proposal, without obligation, at any time prior to the scheduled closing time for receipt of proposals. A withdrawal will not be effective unless a written request for withdrawal signed by, or on behalf of the prospective company received prior to the closing date. Proposals may later be referred to the City Council for appropriate action. The City reserves the right to reject any or all proposals as the best interests of the City may dictate.

By: \_\_\_\_\_  
Julia Fritz, City Clerk

Published in **The San Fernando Sun** on **September 30, 2021**.

## REQUEST FOR PROPOSALS



**The Police Department is requesting proposals for:**

### **City-Wide Radio System and Wireless Broadband Video Network Maintenance Services**

**RELEASE DATE: September 30, 2021**

**RESPONSE DUE: November 12, 2021**



## GENERAL INFORMATION

[illegible]

## BACKGROUND

[illegible][illegible]

## INSTRUCTIONS TO SUBMITTING COMPANY'S

### A. Examination of Proposal Documents

[illegible]

### B. Questions/Clarifications

[illegible]

### C. Submission of Bid Proposals

[illegible]

#### **D. Withdrawal of Proposals**

Ā ÐHǪĤÐKĀĞĐKĀFÍEİ DĬ ĲĠĀĦĨĢĤİÐǫADǫKĀĞÈÀ ÐEHİÈĀEEAEJÈÅEDĚĒĤIĀJÐGFIIFHGĀHEĀ  
ĦİĦĦİĤİÐǫDĜĤİHIUFEÈEĀĞĔEĀBĀÆDKĀEGREUFGEÑAFĲ ÈĞĀEHJEÌ İĤĤIĀ FÍEİD J ÐĞĀEGÈENKĀ  
ĤIĀHGĀDEEDǫGEĀHEĀĤĖBĀSTIJÈĀÐHǪÐKLĀ

### **E. Rights of City of San Fernando**

[illegible]

ĆĘĖĀAFÍKĚİĒI İJÈĀÍẼÈĀIFÉĤĦŁĀĀ

[illegible]

### F. Contract Type

[illegible]

## G. Collusion

[illegible]

## SCOPE OF SERVICE

[illegible]

a) **Maintenance/Programming:** AHQI DDIADDFHAE DDFQ EGDDGEAE DGGAGD GJEADGGAI ILA  
 GDDHDA GEADJEAE HIFIEEAHAE HD FIDAGEADDFQD FQAE AFINKCFEEAI JGGBDFEFAHGGJGFDDIHGA  
 CKIEGAJEELAGHDFGDGEAHIIDDGIEAD EFHILADIEILA EHEDEILAE AHGGJGFDDIHGA AEGEIABDFEHA  
 CKIEGLA AALAE IEEA I HDEDDGEACFI EGELIACFE EHA AEIJ HIGACKIEGA DGEAHIEIEA IE GDEEA  
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 FGDDJEEDNAGHIAFGEEAHLAIHIEIDGGFGEADGEAHEDTGEADGGAE EHEIEA BIAEEAGHDFGDGEA  
 HHIDDGIEAD EFHIDGEAIEIEA EGDEE HJFHGEGILAE EAHQI DDHIAE DGBNHHIGAE FIAEI IJFDBHIA  
 DAEJEEAADGGJDDGAEELAFQHFDDEEAGHIGEGKAE DIAFIADHIEIEEADKAE EA GDFQEGDDGEAHQI DDIAA  
 ADFQEGDDGEAD DGGGHIHAGDGEADAGEDI AHGEANODG GJDDGAIEIEGI DIJ EAGDFQEGDDGEADGEAD  
 IEHHIAE DGGAEADGGFI EEAHAE EAHGFDAAHDI GEGIAHGAHJFHGEGIA DHGEFTHGUAIEADCKAKHEA  
 HEAEHGGEGEDTHGIA FESEEEELAADFQEGDDGEAHQI DDIADGGAI IEADGGAE EAEHJFHGEGILA  
 IEI IEILAEHJ DIAEDGEADCKAHIEIEA EGDEE HJFHGEGILAE KAEHJFHGEGIA EHGDDEEAE EGHJIEEA  
 EIHGAEEA KIEGAEHIAFIHHIDGAE EAHIHHEILKAEIEEAFIKAEEDGAEIGDDGEHADGEAIA GHIAHAEDEA  
 IEEAHEGFIEIAJFIEHJIAJIFI EGABGIEGA EHGAIEEAAFIUAA

b) **Pre-Qualification Requirements:**  $\mathbb{A} \mathbb{H} \mathbb{H} \mathbb{I} \mathbb{E} \mathbb{I} \mathbb{A} \mathbb{G} \mathbb{I} \mathbb{I} \mathbb{A} \mathbb{G} \mathbb{E} \mathbb{E} \mathbb{I} \mathbb{A} \mathbb{I} \mathbb{E} \mathbb{E} \mathbb{A} \mathbb{H} \mathbb{G} \mathbb{G} \mathbb{H} \mathbb{J} \mathbb{F} \mathbb{A} \mathbb{H} \mathbb{I} \mathbb{E} \mathbb{N}$   
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[illegible]

[illegible]

## PROPOSED TERM OF CONTRACT

**Five years, with options for two one-year extensions at the City's discretion.** In addition, the proposer must provide a breakdown of maintenance fees for the first through fifth year, at minimum.

## SCHEDULE FOR SELECTION

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BÈĪĪĒĒĒĒĀ ĪĎĎĎĎĀ Ā	Ā	Ā	Ā	Ā	Ā	ÈĪĒĒ ĖĒ ĪĀĀĀĀĀ
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BÈĪĪĒĒĒĒĀ ĪĎĎĎĎĀ Ā	Ā	Ā	Ā	Ā	Ā	ÈĪĒĒ ĖĒ ĪĀĀĀĀĀ
ÈĪ ĒĒĒĒĒ ĪĎĎĎĎĀ ĪĎĎĎĎĀ ĪĎĎĎĎĀ	Ā	Ā	Ā	Ā	Ā	ÈĪĒĒ ĖĒ ĪĀĀĀĀĀ



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[illegible]

EL: **Proposal:** ĆĖÄĤHGHĖĐİÄHHİDĞÄGJÄDEÄHGĖÄKHĜĚÄEHĐJĖĞŁÄ Ä ĞÄÈIJÐÈİÄ DĞFÄ  
ÈHJFHĞĖGİÄHFİEEÄIĘHJGEÄDEÄEÈIDIFDEÄDGÖÖGGĖEAJFIĘFGÄDĞĖÄHHİDĞŁÄ

[illegible]

**Retention of Proposer Material:**

**EL: Professional Services Agreement:**

## GENERAL TERMS AND CONDITIONS

[illegible][illegible]

[illegible]

DL: **Independent Contractor:** AHHHIIÈIÀIEḐḐḐEÈÈĀIHĀHDİDFḐIĀİEÈFIĀIHḐEĀJHÈGÈIĒĀḐḐĀ  
FḐIJIḐḐḐEĒHJFIÈEĀFḐĒEĀHḐḐHJFḐHḐDÈİḐHÈIḐḐEĒEḐḐḐHĀHḐḐEḐḐEĀHIGĀḐḐḐĀIḐEĀ  
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İÈÈĀFĀKĀĀḐḐḐHĀ

**d. Insurance:**

ØL AHGÈI ĐFĐĞĖİDĞĀFĐDFĠNĪHGHĐFGÈEAFGEĞĒAFGFĪAÉŠHÆİİAÍEDGAŌŁŁŐŁ'ŁŐŁ'Ł  
ÈĐĐĀ HĐĐJIEĞĐĀ ĎGEĀ ŐŁŁ'ŐŁŁ'ŐŁŁ'EIÈÊĬËĹ ĆĘĲĲ FĢĴĴ ĘĞĀĲİEDĞĚFGĐĞĴĲĲ  
AHGHİEEÈĞIFĲĲ İHĐĒĀİAGĀAHİİĐĒĀFGĐĞĴEFĢĴĲĐĐĴĴĐĞĀĞĐĲFG

CEL: AHGGEI DFDDA HGHDFGEADDFGNIAAGFIAEASHGEIIAE DGAQQOQOQOAHGDFGEAEFGEGEA  
 AFGFIADHEFGKKGJKADGEAIHHIEIKAE DGDDELAAJFEEGDEAEAHGGE IDFDDA HGHDFGEA  
 DHJEDDEAIAFGAGGEI DIKAEDEDEI ADEAI EEAAGEEAHHJH HGAIEAEIJFDEIAGEEIAIEEA  
 EI EEGEGIA DGENIADDEADHJEE IAHGADA AFIKAI

[illegible][illegible]

ĀĪĠǾ AAȦBȦŌĀĠīIĠǾǾĒĀĪĪĒĎĎĒĀĪĪĒĒĀĪĒĀ ĤĪĒĀŌĒĒĒĎĤĪĀĤŌĠĒĒĎĪĀĎĠǾĪĀĤ  
 ĠĎĠǾĪĪĎĒĀĠĤĪĒĀĪĒĎĠǾĠǾĠĤĪĒĀĎĪĠĀĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠ  
 ŌĎĠǾĠǾĠĠŌĀĤĤĪĒĎĪĒĤĒĀĤĒĀĪĒĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠĠ

[illegible]

EL: Compliance with Laws and Regulations: ÆHHHIEIÆGJ| ÍÆHGĤGKÆIÆADĜĜĤHĜĜDDĜĖDÍELÅ  
 DĜEŠHDĜAD IADGEÆEJĜDTHGILÆGÆEÆIEĜÍDĜKÆHIIEIGĜEĜÍDĜÅI ÍFDFTHGIGĜDKÆEÆĜHĤIEEÅ  
 JEFDEAJHIĜEAGÈDEI|DÆADĜÍDTHGÅHEÁIEÆAGĜDFDĜLÅHJDĜKÆIĜĜDĜIEFĤÅHIÅHĤIĜDĜDEÅHEÅ  
 ÍEÆÆEĜIÅHEEIEEÆHĜÆFĤIĤIHĤHIDĜÆFHIĤHÆEÆIÆEĜFJ KLÆIÆEĜĜĜÆEÆEÆIHHGIFDFĜĜHĜÆEÅ  
 ÅIHĤHIEIÅHĜHIEKÆAFÍKÆIÅHGDEIÆGEFDĜEÅFGÆEÆIÆĜEIEIÆIÆEÆIĤEĜFEDÆIÆJĜDHĜAJEFDEÅ  
 IÆHJFIEEÆIĜEADĜĜÍDTHGILÆAFÍKÆEIEI IEIÆIÆEÆIÆEÆIÆHĜDDÈHĜDKÆIĜEADĜĜÍDTHGILÆFGĜJEFGEÅ  
 DĜKÆIĤFDEADĜEĜIĜ ÎÅHĜDĜIFHGEEÆIÆEĜDKLÅHIÅADĜDEĜÅIEÆEÆEĜEĜÍLÅ

[illegible]

EL: **Gratuity Prohibited:** AE HÂHÎEÎAEĎĞĠAÎÊÈIĎĞKÂIDÎFÎEÎLÂËJHIÎAHIAĎKIÉFGĒĂĂSHGÈİDİKÂ  
İDĞĒĂ HÂ İKÂ Ĩ ĐĐĞĂ Ğ HGHKĒĂ HÂ ĐĖĞIĂ HÂ ÊĂĂ AKÂ BIA ÊĂĂ ĨIHÎEHĒĂFGĚİĞDFGEĂ  
DHGİFEÈİHGĂHEĂİEFİĂHHİDĞLĂ

[illegible]

## DETAILED SUBMITTAL REQUIREMENTS

DL: **Proposal Format:** AA AEHHHIEIIAIEĐGGAIEHĐEAIIEFIAHIIHĐIGIAGADDEIDEDGDEAFIEA IE EA  
FGIJDHGI AHIJFGGEEAGAEFIAEDHGLAEHHHIDGIAHJIGEADAEHIEHDEADIAFGHGKAHIIHIFDGEA  
ĐGEAHIIHJFEEDAAIIDFEIEHIJ ĐIELAHGDFIEIEIDIFHGHAEIEEAHIIHHIEIMADHĐDFGFIEIMADII EK  
IEEAIEHJFIEGEGIIAHEIEEABAEACIGHI IAD EGIHGAIEHJIGEADAEFIEGAHIDDDIDDKAHGHGEEGÈIIL  
ĐGEADGDIFIMADHGEIGILAGGADIILADDEILAEI EILADGEADĐGEIAHJIGEADAEJGDÈI EEADGEADGÈDİGKA  
GDĐEGÈELAAČEFAHIDGAEHJIGEADEDBFKEAFGAIEEAGGHJFGEDGCHIAIIEBGILA

CÈĐĨHGĀŲL·ĀĀÁÊÈĐJĨIJ ÈĀCǪĞĞĐIKĀ



CÈĐĨHGĀCĒL·Ā CĐHĤÈĀHÉĀCĐHĐÈÌĀ

CÈĐĨHGĀPL·Ā AHĜĤĐĶĀ ĐĐĜĤIJĜEĀ

CÈÐĨĦĞĂȮŁ.Ă ÆĤĥĤİÈĒĂŲĤĦĞÈĞĬĂǾĞĒĂÇËƉĐÈÌĂ

CÈÐĨĤĠĀQL·Ā ĀĐFĢÈĞĐĞĐÈĀĐĞĒĀCĮĤĤHIĤĤĐGĀ

CÈĎĨHGĀRL·Ā AĞFĖĲĒĔĕIÈĢĐÈÌĀ

CÈĐĨHGĀRL·Ā AHÌÍĀÆHHÌĎĞĀ

CÈĐĨHĞĂŘĹ·Ă ÁĴĐÊĤĨHĞÌĂÍĤĂÍẾỀĂBÂÆĀ

CÈĐĨHGĀRL·Ā ÀHĐJĜÈĜÎĀ

[illegible]

**DŁ: Executive Summary (Proposal Section 1.0):** ĆĘFİÄDİĀĤÉĲÈĀÈÌĤHGİĒĀĤĲÈĀBĀEĤĤĲĞEĀ  
ĞFGĚĒĀHĀĐĀĐĒĞDŮIJ ÈĀIJĠGĞDIFKFGĒĀİĒÈĀĤĤHİDĞLĀ

DL **Scope of Services (Proposal Section 2.0):** ~~CEFIÆEÐIHGAHEÆEÆAHIHÐDGHJGEÆFGDGEJEDÆ  
EÆGEIDGÆIDJIFHGÆIÆEÆAHIHÐHIEINAHJIEÐDGEÆEIIÐDGEFGÆEÆEÆAHIHGEDDGEÆEÆADHHEÆIÆA  
JHIGÆAHIHÐHIEELÆEÆADHHEINÐEÆGEIÆEJGEÆFGDGEJEDDGEÆIÆGÆIHGÆAHIHGEDDGEÆEHIHGÆAÆEÆA  
DHGHGEHGÆHEÆIÆEÆDIIÐDGHKÆHEIFHELÆ~~

[illegible]

ĎĐĜÊĤĴĢĖĀƒǦǨĠĞǾĨĤĢĀİĚǾǾĀƑǾĐǾĲĖÈŁĀ

ØŁ· ÄHJĀĞHGĒĀÍĚBĀĎĤKĀĘĐİĀĐÈÈGĀFGĀĐJÌFGÈİLĀĀ

CEL · ĀḌIFĒĒĀĒÈÌḐĪŦĤĠĀHÉÁÍĒĒĀĠĤḐKĀİĤĬĀḐGEĀĒḐGḐĤĤĠḐḐĠĠ ḐĲĲ ÈLĀ

PL: ÄHJÄGHGĤEĀDHGHĎKĀĎIADÈEGĀĖGGFĠĒĀHHHĪHĪÈĒĀHGĬIHĜĀHĎĞFĪĀIFĠGFĠDĪĀĚĒ  
AFÍKLĀ

PL: ÅHÌ ÍĀĪÈÐÈĞĀĒIJFĤ ÈĒĀĞĐĞĐFĐĞĀĒÈĞÈĞÎĀĐĪĀHQĎFGÈĒĀĒÈĞĎĠĀĐGGJĎĞĀĤHIĬLĀ  
ĆĒĒĪĎĒÈĞÈĞÎĀĪEHĜĒĀFGĐĞJEĒĀFGĎĨGĀHGĀĐGGJĎĞĀİĐĞĒĒĐDFĒĒĒĒĒ

[illegible]

RL AHĤFÈÌĀHÉĀÐĴİFGÈÌĀĞFĐÈĞÌĒĪFHĞDĞĀÑĐD ĨHGÌĀHIĀHIẾỄÀĐỀỀỀĞỈĐGÌL·Ā

ÈL: **Proposed Equipment and Services (Proposal Section 4.0):** ÇÈÈÀIHÀHÌÈÌÀGÌÌ ÍÀHÌÈÈGÌLÀGÀ ÈÈÌDFGÌÈÀJÌÈÌFHGLÀÈDÌÌ ÈÌÀDGEÀDÌHDFGFÌHÀÈÈÀHÌHÌÈÈÀKÌÌÈGLÀAGÀDEEFÌHGÀHÀÈÈÀ ÈÈÌDÌHÌHGÌLÀÈDÌÈÀHÌHÌÈÈÀGÀGÌDÌÌJÈÀÈÌGÀDÌJÀÈDÌÌÀGÈÀDÌDÈÌDHEÀÈÌÀFÈGOÀGÙ ÈÌÌÀHÀ ÍÈÈÀÈGĞHJFGÈÀHÌÈÌGÌLÀ

[illegible]

- ĈĤHGĀJEƆĐEǺHŦĞDĞÌAEHÈİÀK̂JĬĪĲĬİÈĞĀİĴLĀĀ
- ĊĎ ĨĂĐĖĀÍÊĚĀHHÏGĐGĀDGĖĀGFgfĴĠĜĀĢĠĒHĭFİÈĞÈĞÎĹĀ

CEL EĞFGFİ İİ DĦGĂJJEIJFEJLCEĐ ĨAĖEĞFGFI DĦGAHHĞIÈÎDIEAGDGGEAFÍEÁÍEƏ KÌ ÈĞŁĂ  
CĘD ĨAİĞFGGDMEAI EHJFIEEAİHAGDFGFDFGAEEÀ KÌ ÈĞŁĂ CĘD ĨAGHGFFHFGEAFIAHIĞEGKĂ  
I EHJFIEEA BIAH HIGDGKI I EG AH EI HI GD GDELĂ

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Page No.

PL: CÈÐJIFÍKLÆÐ ÍÀÈÐJIFÍKÄHHGÐÄÆFGÐGJEÈBÆÆÄIÆÈÄKIÈGLÄÄHJÄFIÆÈÄÈÐJIFÍKÄIHÈGÈÄ  
EÈGÈELÄCÈÐJÄFIÄFGÐGJEÈÆFGÄIÆÈÄJÌÈÄIÀÈÐJIFÍKÄLÄ

PL- ĆĤEİĐEÈİŁĆĎ İĀİĀİĖÈÀİĤĬ ĐİĒĪĤEİ ĐEÈĀİEHĬEGDKLĀHJĀ ĐİĒĀĤĐĐEÈİĀĐGEĀĬÈİĀ  
ĐĤĤĞFÈELĀĤHJĀĐĤĐEÈİĀĐGEĀİĀEÈĤĞĤELĀĤHJĀĐEĀİĤEİĐEÈİĀĐĤĞFÈELĀ

**ÉL: Maintenance and Support Program (Proposal Section 5.0):** ÇÈÀÎIHHÎDÇĀ ĪÂHÈĐFĶÆÈĀ  
GǾJĭ ÈĀHÉĀHGŦGÈĀĬĴĤĤHIĪĤĤIJFEÈÈĀDKĀÍÈÈĀĤHIÈĪFGDǾJEFL

ØL ĆĖĞĤEHGÈĀĦĦHIĀ NÈELĀGDĞJÈĀHGĞNÈĀIĦĦHIĀ EHÍGFĞÈĪĤI ĬĀ HÉĀHĤÈDĨHGĻĀ  
ĐŨDFĞĐDFĞFÍKĀHÉACEPĀĴĀRĀĐHİÖFSÈĻÈ

[illegible]

PL: ÀÈĞĦ KĀGÈİĤEĀHÉĬJĬ ÈĀĤÈİ ĐÈÌĀĐGEĀIHEJĐÍĀÈGEĐĞĐÈĞÈĜĀŖĐĞJEFGEĀĬ HIFĐĞĀ  
ÉİEHİEGĐKĀHÉĀĤÈİĀĐKĀGHEİĞÈĻĀ

PL ÆHÐĜÈĜÆĤHĨĨĜĖĀĎĜĖÆĨĜĴĨĜĀĤHÐÈÈĴĴ ÈĴĀ

QL· JĚĀĚĴ ÈÌĀĎĢĖĀĤĦĎĖÈÌ·Ā

RL·CꞤĤĤHIÍĀĤHIJFEÈĀ~~Ĥ~~ĀÍĚ~~FE~~ÑĤĎÍKĀÌHĞĴĨHGÌL·Ā

[illegible]

**EŁ:** Client References (Proposal Section 6.0): AŦ KĀ ĘĞ IƎÈÌ Ą ÈÊIÈĞĐÈÌ Ą HĀ ĐĂĠ ĤHÍÍĐǴĜĚĤ Ą  
EƏFİFH(ĢĖ) ĐIEĲĜĚĬ EÈGEGİL:ĊĘĒĜDĞÈİĲĐEAĤEHĞĔŞİĞĐÈİ İAHÉĤĕĤĤIHĞÈĐĶĐĐĞĐĤİĄ  
ÉHIĄĒĐĐĖĤIÈĞĐĒĜİİĄĐĒĄĞĤILĄ

[illegible]

**EL- Cost Proposal (Proposal Section 7.0):**

~~A~~HGÈDÌÀHÊÈÀÌEHJĜEĀDEĀDÌIJĜÈĀĀFGDĞJEĒĀDĞĠAGİDÖFİKÄČĚĀFGĀÍÈĀBĀÆ

AFÍKÄÈÌ Ì ÈÌÀÌÈÈÄÌFÈÈÄÌHÄDĤĐĐİÄÌIHĦHÌÈÌÄHGÄHÌİÄDGEÄDHÊÄDĞĐİFĖHGAĐİÄDĞÄĞÄ  
İEÌ HÌÈÈHİÄ İÈÄÌÈÈĞÈĐİHGÄİHDEİİÄDGEÄĞEHİĐİHGÄİHDEİİLÄFİKÄİÄDİGFGEÄİIHĦHÌÈÌÄİHÄ  
ÉJGFİÄDÄÈİGÄÈİÄHİFİÄDÄGGÄDĖHIFÈİLÄ

[illegible][illegible]

GL: Documents (Proposal Section 9.0): ÆHĤHÎÈÌÀÏÊĤĴĠĖÆFGĐĴEËŸĞĤĠĖÆĤHĤFÈÌĤÉÆĚĀ  
 ĤĢĜGHJFGĒEHĐJĠĖĀ

ØL: CHÈĐFĚĐHGAÌĘÈÈÎĀ

CÆL CĎĜĤĞĚĂĦĤĬĖĂĢƆĔĖĠƆĢĖĂĬĢĖĠĂ

PL: CǪĜĤĞĚĂĢĐĲĠĢĐĢĐĚĂĐĤĤĢĚĢ Ā

PL CĎGHĜĖĀEHĐJĠĞĦHĠGĀNJIÈIĀEJFEÈILĀDFFGFĜĖĀĤDFFĐĠLĀEŁOĀ

## EQUIPMENT

[illegible]

- [illegible]