



Proposal Submitted in Response to

Request for Bid: Bus DVR Replacement

RFB: # TO-20-01

Submitted to:

Topeka Metropolitan Transit Authority
Attention: Richard Appelhanz

Due: August 29, 2019, 1:00 p.m. CST



Submitted by:

Radio Engineering Industries, Inc. (REI)
6534 L Street
Omaha, NE 68117
800-228-9275

1. Cover Letter

Radio Engineering Industries, Inc.
6534 L Street
Omaha NE 68117

August 29, 2019

Topeka Metropolitan Transit Authority
Attn: Richard Appelhanz
201 North Kansas Avenue
Topeka, KS 66603

Dear Mr. Appelhanz,

On behalf of Radio Engineering Industries, Inc. (REI), I would like to thank you for the opportunity to participate in the Request for Bids to replace your digital video recorders. REI is a one family-owned, over 80-year old American manufacturer, located in Omaha, Nebraska. REI offers over 150 employees and a team of more than 20 hardware and software engineers. REI is unique as one of the few companies in this industry that can offer tours of our production facility. The tour will allow you to speak directly with REI engineers and see how REI designs, engineers, and tests products.

REI differentiates from the competition by:

- being a single source solution for nearly all audio/visual needs within the mobile environment
- offering 24/7/365 Customer Support within the U.S. (not outsourced)
- providing over 250 years of combined engineering experience
- designing and engineering products with DVR's that are backward compatible with previous generations of equipment resulting in low total cost of ownership and an expanded product lifecycle
- being an ISO 9001:2015 certified company since 1999

REI's response has purposely exceeded some of the requested pricing information so Topeka Metro may custom design the ideal mobile surveillance system to fit their needs.


REI's ARMOR live view monitoring and reporting software is included in the proposal. ARMOR is managed and accessed via an off-premise Cloud hosted server. Utilizing a Cloud based server provides secure and reliable access to Topeka Transit proprietary information (metadata and video events). Leveraging a Cloud server approach is the future for enterprise software applications and REI is leading the way to provide the best solutions for our customers.

Topeka Metro can expect REI to be a true partner regarding the DVR Replacement project. As a diligent partner, REI will provide Topeka Metro with the correct system build(s) for the right application(s) and offer real solutions to meet your ever-changing needs. Also, REI will strive to work with the agency to be fiducially responsible; stretching any budgetary dollars as much as

possible to maximize value across the fleet, for both safety of the ridership and liability of the agency.

Your contact for this project will be John Meyer who looks forward to answering any questions or concerns. John can be contacted by phone at 1-800-228-9275, 236 or by email at jmeyer@radioeng.com.

Sincerely,

A handwritten signature in blue ink that reads "Kevin Herrmann". The signature is fluid and cursive, with the first name "Kevin" and last name "Herrmann" clearly distinguishable.

Kevin Herrmann, CFO
kherrmann@radioeng.com
Radio Engineering Industries, Inc. (REI)
(800) 228-9275
www.radioeng.com

Table of Contents

1. Cover Letter	2
2. Understanding of Contract Requirements	6
2.1 RFP Compliance Matrix	7
3. Experience	8
3.1 Company Background	9
3.2 Experience	10
3.2.1 Staff Experience	10
3.2.2 Surveillance System Implementation	10
3.2.3 Surveillance System Support & Maintenance	11
3.2.4 REI Markets	12
4. References	13
5. Warranty Information	14
5.1 REI Exchange Program	15
5.2 Technical Support	16
5.3 Training	16
5.4 ISO Certification	17
6. Completed Price Quote/Certifications	18
6.1 Price Quote	18
6.1.1 Optional Items	19
6.2 DBE Certification	20
6.3 Lobbying Certification	21
6.4 Non-Collusion Certification	22
6.5 Suspension/Debarment Certification	23
6.5.1 REI's GSA Debarment Confirmation	24

7.	Descriptive Information and Literature.....	25
7.1	DVR.....	25
7.2	Cameras	26
7.3	Microphones	27
7.4	Storage Media	27
7.5	Accessories (included).....	27
7.6	Optional Accessories (not included in price proposal)	27
7.7	HD5 1200 Series DVR Specifications	28
7.8	Video Camera Specifications	30
7.9	System Playback Software	31
7.10	A.R.M.O.R. Wireless Suite.....	33

2. Understanding of Contract Requirements

REI has hand selected our HD5-1200 series digital video recorder (DVR) system for the Topeka Metro Bus DVR Replacement project. The DVR supports up to 12-cameras (8 AHD and 4 IP). The equipment is modular and includes the ability to support future features. Wireless (Wi-Fi) is included in the HD5-1200 to support wireless video downloading.

REI's Video Management Software (VMS) installed on any computer supports access to all recorded videos as well as system configurations. The VMS software provides the ability to connect to remote vehicles and view live video through a Wi-Fi or cellular network connection. REI's ARMOR enterprise software also provides internet live-viewing via a cellular router and offers automated notification and downloading of defined events. The Wi-Fi and cellular connection to the DVR provides the ability to review video from each DVR without the need to remove hard drives. Connecting to the DVR remotely for video download is supported through Topeka Transit's existing Wi-Fi network in the vehicle parking area.

REI has worked with several CAD/AVL vendors supporting the transit market. Doublemap is always a front runner and offers a great solution. REI has partnered with them previously and our systems work seamlessly. The router often used for their application is the Pepwave MAX BR1 Mini, Industrial Grade 4G LTE. REI's HD5-1200 DVR works well with this router and is easily configured. In previous projects, REI provided the external antenna that supports the cellular side of the router as well. An all-in-one antenna provided the need for only one (1) hole in the roof to support cellular, Wi-Fi and GPS. The price upgrade for this antenna is provided in pricing Section 6.1.1

When REI is awarded the contract, a Project Review meeting will be scheduled. The meeting will consist of introductions to the REI and the Topeka Metro teams. Topics of conversation will include a requirements review, potential future needs discussion, and a review of the installation support/training schedule.

Project management will include coordination of equipment ordering and delivery to the Topeka Metro installation location. The installation team will verify available dates to complete the Topeka Metro project. Close coordination with Topeka Metro is essential for coordination of vehicle availability.

REI's installation team will work closely with Topeka Metro to remove the existing equipment and the replacement with REI's HD5-1200 DVR. Custom cabling for camera and audio compatibility will be performed by REI's experienced installation team. The REI installation team will ensure all areas they work in are clean and ready for service. Prior to final acceptance by Topeka Transit, REI's installation team will confirm all hardware and software functionality.

Training is a crucial part to the success of this project. REI will provide hands-on training on the newly installed DVR's, VMS viewing software and ARMOR enterprise software. DVR configuration is also an important part to ensure Topeka Transit is optimizing their mobile surveillance system.

REI offers 24/7/365 in-house technical support for the life of the product. REI's software and DVR firmware is readily available via the www.radioeng.info support site. Equipment maintenance is easily managed by incorporating checks into your existing vehicle preventative maintenance (PM) for Topeka Transit vehicles. REI will provide suggestions and tips for Topeka Metro to get the most life and functionality out of your mobile surveillance system.

The key advantages of the REI HD5 system are:

- DVR Performance: Video Recording Bit Rate of 80 Mbps
- DVR Recording: Supports high definition cameras up to 4K resolution
- DVR Quality Standard: MIL-STD 810F compliant
- Advanced Camera Technology: Wide Dynamic Range (WDR), optimized for day and night time viewing, and audio microphone with noise reduction
- Triple Stream Recording Capability: for maximizing recording time
- Stringent Product and System Design and Testing Standards

2.1 RFP Compliance Matrix

Specification	Fully Compliant	Notes
Metro Specifications		
Remove existing DVRs on each bus as specified by Metro.	Y	
Install new DVRs on each bus as specified by Metro.	Y	
Live video viewing from any bus at any time accessible through the internet.	Y	
Ability to review video from each DVR without removing the hard drive	Y	
DVR must be compatible with current Metro cameras.	Y	
Lifetime technical support including software updates and maintenance will be provided. Please include your support contract.	Y	REI's support contract is part of the REI Warranty in Section 5 Warranty Information.
Warranty will be provided. Please include your warranty coverage period, terms and conditions.	Y	REI is offering a full five (5) year warranty and the details can be found in Section 5.
Follow all contract requirements on pages 3-6.	Y	
Furnish all labor, material, and equipment necessary for satisfactory contract performance.	Y	
Ensure that each DVR is fully functional and ready for use upon project completion.	Y	
Optional		
Properly dispose of/recycle existing DVRs on each bus as specified by Metro including a certificate of release of liability.	Y	

3. Experience

Founded in 1938, Radio Engineering Industries, Inc. (REI) is an international, vertically integrated research, design, engineering, and manufacturing company headquartered in Omaha, Nebraska, U.S.A. The REI primary objective of quality, service, and value are strictly followed to this day to provide products and services developed with customers and their product applications and environments in mind.

REI offers an extensive line of commercial electronics to manufacturers, dealers, distributors and operators in the student and public transportation sectors as well as motor coach, shuttle bus, construction and agriculture industries. All of the REI audio/video surveillance and entertainment / infotainment systems are constructed of durable, professional-grade components. Each system is designed and developed by the REI dedicated staff of hardware and software engineers who offer a combined total of nearly 200 years of REI experience. All products are designed and tested to ensure that 'off the shelf' components that may not withstand the rigors of the mobile environment are never accepted.

The entire REI production industry is governed by International ISO 9001:2015 Quality Standards, ensuring only the highest quality products for customers in the United States, Mexico, South America, Canada, Europe and Australia. We support our products long after the sale with Customer Support available 24/7/365.

REI's expertise in the development of commercial mobile electronics, combined with diversified manufacturing capabilities, provides solutions that meet and exceed the ever-changing needs of customers. This flexibility allows REI to develop unique partnerships with customers to meet their specific applications.

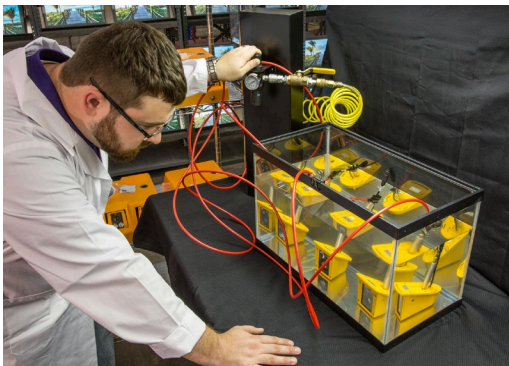
Radio Engineering Industries, Inc. (REI)
6534 L Street
Omaha, NE 68117
Main: 800.228.9275
Fax: 402.339.1704
Service: 877.726.4617
www.radioeng.com

3.1 Company Background

With more than 80 years of engineering, manufacturing and customer support experience, REI continues to be a technology innovator and a long-term partner with our customers. REI is proud of our successful, long-term relationships and constantly looks for ways to build new ones as we continue our mutual success in having the most reliable and cost-effective products and system solutions for the transportation and commercial vehicle industries.



200+ years of engineering experience



Quality control testing



As an ISO 9001:2015 certified company, REI is committed to quality throughout the entire organization. REI's highly skilled, proven staff of dedicated hardware and software engineers design and test REI products to the strictest quality standards. REI's equally skilled team of production and quality assurance professionals ensure manufacturing processes meet and conform to these stringent requirements.

REI reserves over \$10 million in inventory in our 180,000 square foot facility in Omaha, Nebraska. With dedicated engineering, production, sales, customer service, and

shipping teams, REI exceeds every other manufacturer in the mobile industry when it comes to supplying the parts you need when you need them.

The principal purpose of surveillance recording is to capture any event, which is needed to be reviewed and kept for any reason – the system needs to record the event clearly, with high quality according to your specifications. Audio and video systems need to be working at all times, and the event needs to be easily retrieved, viewed and securely stored without possibility of compromise.

Important consideration for the design and build of the system include:

- How do the DVR and hard drive handle bus vibrations?
- Are temperature extremes addressed?
- Does the vendor offer years of technical and service experience to help define the system?
- Will the vendor offer assistance with the settings of video and audio recording levels, and system defaults set to meet and exceed the exact needs of the project?

With a video surveillance platform, the audio and video footage belong to Topeka Metro. It should be simple to find, retrieve, play, report, archive, and recall. The process should be simple enough that anyone could do it, yet it needs to be secure enough that only people with authorization can be allowed to utilize the platform. The audio/video and metadata records need to be authentic and unalterable – to maintain the utmost integrity level which may be needed for risk mitigation.

REI's standard product warranty is three (3) years and an additional two (2) year warranty is included with this proposal. REI equipment and software platforms are still in the field after 15 years. What is vital to the effectiveness of this project is not just a warranty, but how much it is needed. Product breakdown can be disruptive to the operation.

3.2 Experience

3.2.1 Staff Experience

REI offers 163 people in the organization, 36 in executive and managerial roles, 66 in technical and skilled rolls, 61 in office and clerical roles. The REI engineering staff alone offers 200 plus years of industry experience. All of the REI staff members are poised to dedicate the time Topeka Metro will require for a successful project.

3.2.2 Surveillance System Implementation

REI understands the project requirements to implement a surveillance solution. Based on our experience in the design and development of systems, system components and

meeting project objectives in the most cost-effective way, REI is proposing the following system solutions to demonstrate our knowledge and understanding of services required:

- It is important to note the importance of the technology engineered into the DVR, camera and complete system. Image quality, simultaneous high definition digitizing of images, reliability and data management are critical factors that must be considered when comparing and evaluating the quality of any mobile video surveillance system.
- Based on REI's years of experience these critical factors are paramount in system design. Without these critical factors, the cost of the system is irrelevant. REI systems are designed to provide the most cost-effective system with optimal performance features to provide Topeka Transit with an ideal system solution.
- DVRs, cameras and system accessories are not designed and manufactured to the same standards. REI is confident that the design, engineering and production of our systems is to the highest performance and quality standards to provide our customers with the most reliable, cost-effective solution available.

3.2.3 Surveillance System Support & Maintenance

REI offers extensive, free webinars for staff, administration, and management and provides 24/7/365 Technical Assistance toll-free at (877) 726-4617. REI also maintains a Customer Support website that provides technical product manuals, service and troubleshooting information at: www.radioeng.info

3.2.4 REI Markets

REI focuses on the commercial and public transportation sections. REI is the factory supplier of electronics to more than 200 vehicle manufacturers and is proud of the partnerships we have forged with these prestigious companies:

School
Transit
Trucking
Ambulance

Motorcoach
Agriculture
Rail
Fire Trucks

Shuttle
Waste Management
Fleet

REI Supplies **200+** Manufacturers



4. References

REI works with a large volume of transit, school bus and motor coach companies and respects the desire for privacy and will ask customers to allow us to use their name in proposals and marketing; however, we find in most cases they prefer not to be used in this manner. Please feel free to contact other transit authorities and ask them for their open feedback. REI is constantly improving our organization, staff and processes. We recognize customer satisfaction is of utmost importance and will do everything we can to earn your long-term business.

REI is proud to present the following references:

Company Name	Contact	Email Address	Phone
Sun Metro Transit City of El Paso, Texas	Kevin Bunce Assistant Director of Maintenance	bunceke@elpasotexas.gov	915-212-3306
Hill County Transit District Killeen, Texas	Luis Pino Director of Technology	lpino@takethehop.com	254-933-3700
Bay Area Transportation Authority Traverse City, Michigan	Rich Pantano Technology Coordinator	pantanor@bata.net	231-778-1031
OATS Transportation Columbia, MO	John Fields Fleet and Safety Director	jfields@oatstransit.org	573-554-1914

5. Warranty Information

REI provides a standard three (3) year warranty (parts and labor) for all hardware. A two (2) year additional warranty is included with our proposal making the total warranty period **five (5) years**. As part of REI's warranty, our Warranty Exchange program provides for replacement of all in-warranty equipment during the same time frame. The terms of the exchange program provide for REI sending out replacement equipment within 48 hours and paying for freight both ways.

REI LIMITED WARRANTY			
<p>What Does This Warranty Cover? This warranty only covers failures due to defects in materials or workmanship which occur during normal use.</p>			
<p>What Does This Warranty Not Cover? This warranty does not cover damage which occurs in shipment or failures which are caused by products not supplied by REI or failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, faulty installation, set-up adjustment, improper maintenance, alteration, improper antenna, inadequate signal pick-up, maladjustment of consumer controls, modification, line power surge, or damage that is attributable to acts of God, or service by anyone other than a REI Factory Service Center. This warranty does not include service or labor charges connected with the determination or replacement of defective parts or the operation of this equipment. REI is not responsible for any labor charges incurred by any person or company other than REI authorized repair centers.</p>			
<p>LIMITS AND EXCLUSIONS There are no express warranties except as listed above. REI SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING WITHOUT LIMITATION, DAMAGES TO TAPES OR DISCS. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY, ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH BELOW. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.</p>			
<p>What is the Period of Coverage? REI will repair this product, free of charge, from the date of original purchase in the event of a defect in materials or workmanship as follows:</p> <p>For ninety (90) days - microphones, speakers, antennas, housings, rechargeable batteries, remanufactured product and all non-warranty repairs (replaced parts and labor only). For one (1) year - all other manufactured products. For three (3) years - select manufactured motorcoach products. For three (3) years - select surveillance equipment. REI may have contractual agreements which provide REI motorcoach and surveillance products with additional coverage. Call 877-726-4617 for details. Any product supplied by REI, but not manufactured by REI, will include the original manufacturers warranty only.</p>			
<p>What Will REI Do to Correct Problems? Once the product is deemed by REI to be a warrantable defect, REI will, at its own discretion, repair or replace the product with new or reconditioned product. All warranty repairs and/or product replacements will include the remaining warranty from the original purchase date.</p>			
<p>How Do You Get Service? For assistance in obtaining service for REI products call toll free 877-726-4617 (Continental United States and Canada only) or 402-339-2200 (outside Continental United States and Canada) between the hours of 7:00A.M. - 5:00P.M. CST Monday thru Friday (excluding Holidays). Prior to calling REI, customers must have the part number, serial number, VIN number (if it's a motorcoach product) and detailed description of the problem ready to provide to the REI service representative. After providing the proper information to REI, customers will be issued a return authorization number. When the REI service representative provides the return authorization number, they will also give instructions for returning the item. Any discrepancies in following this procedure may cause shipments to be refused or warranty claims to be rejected. IMPORTANT! REI does not accept product returns for repair or replacement without first issuing a return authorization number. All returns must be sent freight prepaid and insured by the customer. REI will not accept COD shipments. IMPORTANT! REI does not accept responsibility for lost shipments. It is the customer's responsibility to provide REI with the part number, serial number, return authorization number and shipper tracking number in the event REI does not have record of receiving product for repair or replacement. Once warranty service has been performed on your product, REI will ship the item freight prepaid to any business address in the Continental United States or Canada. Customers located outside the Continental United States and Canada are responsible for all freight charges. Any duties or fees, if any, are the customer's responsibility. Any repair deemed non-warranty by REI will be subject to all freight charges, and in some cases inspection fees, to be paid by the customer. These fees may exist regardless of whether the product is repaired. If a customer requires help in trouble shooting a problem, contact REI and request technical assistance before requesting a return authorization number.</p>			
<p>What Must You Do To Keep This Warranty in Effect? KEEP YOUR ORIGINAL PROOF OF PURCHASE AS IT MAY BE REQUIRED IN ORDER TO RECEIVE WARRANTY SERVICE. Make sure the serial number is not removed, altered or defaced. Do not attempt to have your product repaired by anyone other than a REI Factory Service Center. Also, see "What Does This Warranty Not Cover".</p>			
<p>REI AUTHORIZED REPAIR FACILITIES:</p> <table> <tbody> <tr> <td>REI 6534 L Street Omaha, Nebraska 68117 Phone: 877-726-4617</td> <td>REI 1378 Bennett Drive, Unit 126 Longwood, Florida 32750</td> </tr> </tbody> </table>		REI 6534 L Street Omaha, Nebraska 68117 Phone: 877-726-4617	REI 1378 Bennett Drive, Unit 126 Longwood, Florida 32750
REI 6534 L Street Omaha, Nebraska 68117 Phone: 877-726-4617	REI 1378 Bennett Drive, Unit 126 Longwood, Florida 32750		
<p>What if your Product is a Non-Warranty Repair? All Products sent to REI for repair which are determined, at REI's discretion, to be non-warrantable repair may incur inspection fees regardless of actual repair being performed or will incur repair fees if the product is repaired. All non-warranty repairs include a 90 day warranty for any components that are replaced, if any, and labor performed. Inspection fees apply regardless of whether a product is determined to be non-warrantable prior to shipping to REI. All freight charges, duties or fees associated with non-warranty repair are the customer's responsibility.</p>			

5.1 REI Exchange Program



SURVEILLANCE EXCHANGE PROGRAM



FAST



EASY



CALL
877.726.4617

Arrange an exchange
M-F/7-5 CST.

RECEIVE

Receive replacement
product within 48 hours.
Reduces downtime!

RETURN

Use the prepaid freight
label, attach and send
original product.

5.2 Technical Support

REI provides free 24/7/365 Technical Support with the toll-free number of (877) 726-4617. REI offices are open from 8 a.m. to 5 p.m. Central Standard Time, Monday through Friday. REI also maintains a Customer Support website that provides technical product manuals, service and troubleshooting information at: www.radioeng.info

REI is committed to providing our customers with the information they need to maximize the use of all our products.

If an issue arises, the first step is to call Technical Support to troubleshoot the issue. If the issue cannot be resolved, a Return Material Authorization (RMA) will be issued so the product may be sent in for repair. During the warranty period, REI will repair or replace any faulty parts/material. The cost will be included in the warranty price. Topeka Metro will ship each faulty component to REI, who will return a new or repaired component within 48 hours of originally receiving the fail unit.

Additional warranties may be purchased at the sole discretion of the Purchasers, up to final system acceptance.

5.3 Training

REI offers extensive, free webinars for staff, administration and management of Topeka Metro. Training is provided for all initial system installations.

5.4 ISO Certification

As an ISO 9001:2015 certified company, REI is committed to quality throughout the entire organization. ISO 9001:2015 is the current certification level and officially states that a management system, manufacturing process, service, and documentation procedure have all the requirements for standardization and quality assurance. REI works diligently to maintain this certification.

The REI highly skilled and proven staff of dedicated hardware and software engineers design and test each product to the strictest quality standards. The REI equally skilled team of production and quality assurance professionals ensure all manufacturing processes meet and conform to these stringent requirements.

REI's adherence to these strict requirements demonstrates a commitment to consistently developing, manufacturing, and servicing the highest quality products in the mobile electronics industry.



6. Completed Price Quote/Certifications

6.1 Price Quote



RFB TO-20-01
Bus DVR Replacement – Addendum #1

PRICE QUOTE

Proposer Radio Engineering Industries, Inc. (REI)

Total Cost for 26 DVRs	51,506 - equipment \$ <u>15,600- installation</u>
Optional Disposal/Recycling Cost of DVRs	\$ <u>Not Applicable</u>
Lifetime Technical Support Cost Per Year	\$ <u>Included in price</u>
Warranty Cost Per Year	\$ <u>Included in price</u>
Estimated Project Start Date	<u>Ten (10) days after receipt of purchase order</u>
Estimated Project Completion Date	<u>Within 30 days based on vehicle availability</u>
Live View via ARMOR (includes annual 26 vehicle license)	\$ 10,140
ARMOR - 10 hour Annual Support Contract*	\$ 2,000
Total Cost	\$ 79,246

* REI provides free technical support for all surveillance equipment. ARMOR live-viewing and remote monitoring and notification requires enterprise software and Cloud servers. REI is recommending the 10 hour support contract to ensure any firmware and software changes do not impact the day-to-day operations of Topeka Transit, to ensure the latest software version is loaded and to perform the required maintenance on Cloud servers. If an annual support contract is not desired, any server and software configuration issues may be charged at the standard REI hourly rate.

Topeka Metro is tax exempt and will obtain a Project Exemption Certificate from the Kansas Department of Revenue. Do not include sales tax in your proposed price.

6.1.1 Optional Items

Armor Cloud Configuration Fee - Covers REI IT support labor working with Topeka Transit to configure Wi-Fi network pointed to the REI Armor Cloud.	\$1500
Upgrade to 1TB HDD (from 500GB	\$ 150
Upgrade to 2TB HDD (from 500GB)	\$ 290
Upgrade antenna to support cellular router	\$ 70
7" LCD display for viewing rear camera	\$ 287

6.2 DBE Certification



RFB TO-20-01
Bus DVR Replacement

DISADVANTAGED BUSINESS ENTERPRISES (DBE) CERTIFICATION

This contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, *Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs*. The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10%. Metro's overall 2019-2021 goal for DBE participation is 2.00%; the race neutral goal is 1.12%, and the race conscious goal is 0.88%. There is no contract goal for this procurement.

The contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted contract. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as Metro deems appropriate. Each subcontract the contractor signs with a subcontractor must include the assurance in this paragraph (see 49 CFR 26.13(b)).

The contractor is required to pay its subcontractors performing work related to this contract for satisfactory performance of that work no later than 30 days after the contractor's receipt of payment for that work from Metro.

The contractor may not hold retainage from its subcontractors.

The contractor must promptly notify Metro, whenever a DBE subcontractor performing work related to this contract is terminated or fails to complete its work, and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The contractor may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of Metro.

Signature: _____

Name and Title: Kevin Herrmann, CFO

Company Name: Radio Engineering Industries, Inc. (REI)

Date: 8/28/17

6.3 Lobbying Certification



RFB TO-20-01
Bus DVR Replacement

LOBBYING CERTIFICATION

The undersigned contractor certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions. See 49 CFR 20.100.

(3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 USC. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure. [Note: Pursuant to 31 USC 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure. See 49 CFR 20.400.]

The undersigned contractor certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 USC 3801, et seq, apply to this certification and disclosure, if any.

Signature: _____

Name and Title: Kevin Herrmann, CFO

Company Name: Radio Engineering Industries, Inc. (REI)

Date: _____

8/27/19

6.4 Non-Collusion Certification



RFB TO-20-01
Bus DVR Replacement

NON-COLLUSION CERTIFICATION

This is my sworn statement to certify that this proposal was not made in the interest of or on behalf of any undisclosed entity. This proposal is not collusive.

This proposer has not been a party to any agreement or collusion in restraint of freedom of competition by agreement to bid a fixed price, to refrain from bidding, or otherwise. This proposer has not, directly or indirectly, by agreement, communication or conference with anyone, attempted to induce action prejudicial to the interest of Topeka Metropolitan Transit Authority, or of any proposer, or anyone else interested in the proposed contract.

Signature:

Name and Title: Kevin Herrmann, CFO

Company Name: Radio Engineering Industries, Inc. (REI)

Date:

8/27/19

6.5 Suspension/Debarment Certification



RFB TO-20-01
Bus DVR Replacement

SUSPENSION / DEBARMENT CERTIFICATION

In regard to 2 CFR Parts 180 and 1200

In accordance with 2 CFR Parts 180 and 1200, the contractor is required to verify that none of its principals or affiliates:

- 1) is included on the federal government's suspended and debarred list;
- 2) is proposed for debarment, declared ineligible, voluntarily excluded or disqualified;
- 3) within three years preceding this proposal, has been convicted of or had a civil judgment rendered against them for (a) commission of fraud or criminal offense pertaining to performing a public transaction, (b) violation of any federal or state antitrust statute, or (c) embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;
- 4) is indicted or charged by a governmental entity for any of the charges in 3) above; and
- 5) has had any public transaction terminated for cause or default within three years preceding this proposal.

The contractor is required to include this requirement in any subcontracts related to this contract.

By signing and submitting its proposal, the proposer certifies that the certification in this clause is a material representation of fact relied upon by Metro. If it is later determined that the proposer knowingly rendered an erroneous certification, in addition to remedies available to Metro, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The proposer agrees to verify that none of its principals or affiliates is included on the federal government's suspended and debarred list at any time throughout the period of this contract. The proposer further agrees to include a provision requiring the same compliance in its subcontracts related to this contract.

Signature: _____

Name and Title: Kevin Herrmann, CFO

Company Name: Radio Engineering Industries, Inc. (REI)

Date: _____

6.5.1 REI's GSA Debarment Confirmation

Entity Dashboard Entity Overview Entity Registration Core Data Assertions Reps & Certs POCs Exclusions Active Exclusions Inactive Exclusions Excluded Family Members RETURN TO SEARCH	RADIO ENGINEERING INDUSTRIES, INC. DUNS: 082726928 CAGE Code: oSAM2 Status: Active Expiration Date: 11/28/2019 Purpose of Registration: All Awards	6534 L ST OMAHA, NE, 68117-1112 , UNITED STATES
	Entity Overview <div> Entity Registration Summary Name: RADIO ENGINEERING INDUSTRIES, INC. Business Type: Business or Organization Last Updated By: Nick Kissel Registration Status: Active Activation Date: 11/28/2018 Expiration Date: 11/28/2019 </div> <div> Exclusion Summary Active Exclusion Records? No </div>	



IBM-P-20190208-1620
WWW2

Search Records	Disclaimers	FAPIS.gov
Data Access	Accessibility	GSA.gov/IAE
Check Status	Privacy Policy	GSA.gov
About		USA.gov
Help		

This is a U.S. General Services Administration Federal Government computer system that is "FOR OFFICIAL USE ONLY." This system is subject to monitoring. Individuals found performing unauthorized activities are subject to disciplinary action including criminal prosecution.

7. Descriptive Information and Literature

The following information comprises a break-down of each system. REI equipment will meet/exceed your requirements.

7.1 DVR

REI has hand selected the HD5-1200 series mobile digital video recorder (DVR) system for the Topeka Metro application. The DVR supports up to twelve (12) 1080p HD cameras (8 Analog HD and 4 IP). The HD5 series DVR supports removable (hot-swappable) hard disk drives (HDD), solid state drives (SSD) and secure digital (SD) cards. HDD and SSD capacities are offered in 500GB, 1TB and 2TB. HDD and SSD are enclosed in a ruggedized metal removable tray to provide dampening from shock/vibration, temperature protection and electrostatic discharge (ESD) safe handling. HD5 DVRs also support SD memory cards. The SD interface is configurable between mirrored storage or event storage.

The REI HD5 series DVR supports cellular modems via an Ethernet (RJ45) connection on the rear of the DVR.

The DVR includes an internal web server which supports local and wireless connection to program DVR and camera settings. Camera

adjustability includes: resolution, frame rate, and quality. REI provides a software utility (Record Time Estimator – screen shot shown above) that estimates storage capacity based on storage available, camera settings and type of video recorded. The above example shows six (6) cameras recording at 720p\1080p, 20 fps @ 100% quality. A 500GB HDD will store 116 hours of video recording in sub-stream and 19 hours of main stream. The REI DVR system is configurable allowing Topeka Metro to adjust parameters to meet/exceed your video storage requirements. When REI is selected as your surveillance solution, we will assist your team to determine your requirements and optimize your record time.

Radio Engineering Record Time Estimator

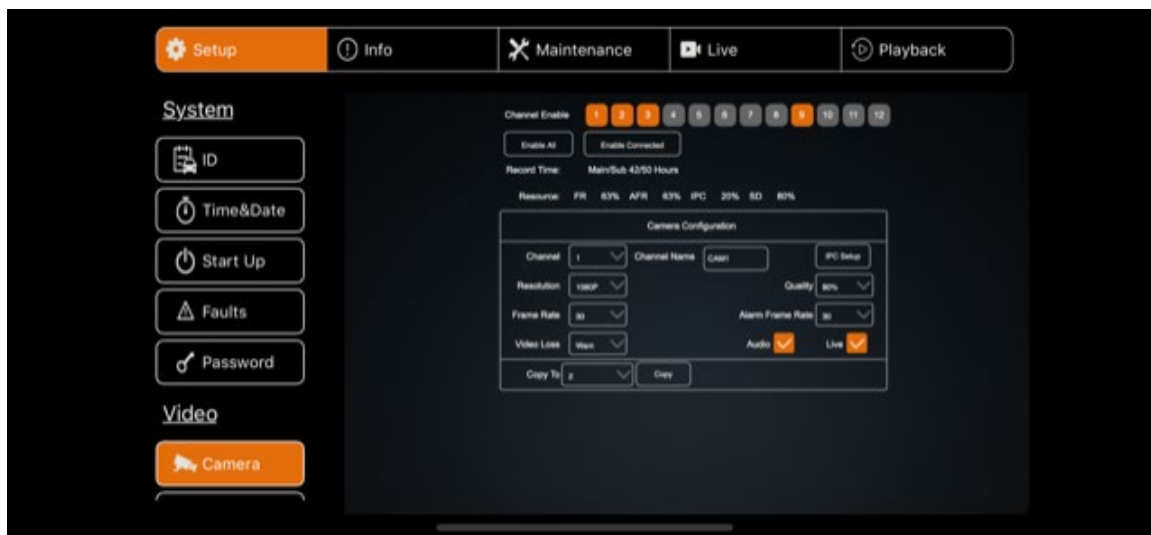
Platform: **HD5-1200** Storage Capacity: **500 GB** Configuration: **Custom**

Enable	Resolution	Frame Rate	Quality
<input checked="" type="checkbox"/> Analog Camera 1	720P	20 fps	100%
<input checked="" type="checkbox"/> Analog Camera 2	720P	20 fps	100%
<input checked="" type="checkbox"/> Analog Camera 3	720P	20 fps	100%
<input checked="" type="checkbox"/> Analog Camera 4	720P	20 fps	100%
<input type="checkbox"/> Analog Camera 5	720P	30 fps	100%
<input type="checkbox"/> Analog Camera 6	720P	30 fps	100%
<input type="checkbox"/> Analog Camera 7	720P	30 fps	100%
<input type="checkbox"/> Analog Camera 8	720P	30 fps	100%
<input checked="" type="checkbox"/> IP Camera 1	1080P	20 fps	100%
<input checked="" type="checkbox"/> IP Camera 2	1080P	20 fps	100%
<input type="checkbox"/> IP Camera 3	1080P	30 fps	100%
<input type="checkbox"/> IP Camera 4	1080P	30 fps	100%
<input checked="" type="checkbox"/> Sub-Stream	CIF	30 fps	100%

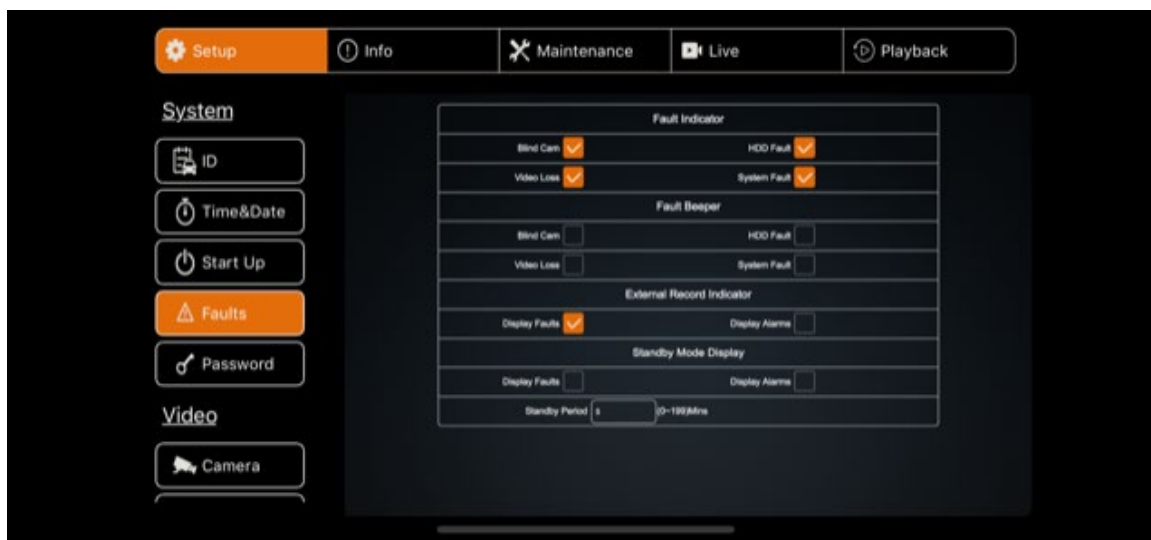
Main Stream: **19 Hours** Sub-Stream: **116 Hours**

Resource Utilization: Analog: 34% IP: 41%

REI also provides free access to our DVR Toolkit application, available from the Apple and Android stores. The application runs on mobile devices (phones/tablets – Apple/Android) and provides DVR programmability. While REI also offers an external 7” LCD monitor as an option, this application is suggested in lieu of an external monitor and mouse for programming.



REI DVR Toolkit screen shot – camera configuration



REI DVR Toolkit screen shot – fault configuration

7.2 Cameras

REI's HD5 DVR will interface to the existing cameras via a custom cable adapter for video and power. REI has worked with other surveillance vendors cameras on other projects and we are proud to say we had no issues with compatibility.

7.3 Microphones

The existing Topeka surveillance system includes two (2) remote microphones. REI will provide interconnection to the microphones via the camera interface at the DVR. Audio playback will be linked to two (2) camera channels. Audio can be monitored by selecting the camera channel. REI VMS training will review this process during training.

If microphones are desired to be upgraded or added in future, REI would suggest using an REI camera. REI cameras include adjustable gain microphones that are superior to most remote microphones for the mobile surveillance industry.

7.4 Storage Media

- 500 GB Hard Disk Drive (HDD), (1TB and 2TB capacity are available)
- Hard Disk Drive (HDD) or Solid State Drive (SSD)
- Shock resistant
- Durable, extruded aluminum chassis
- Vibration dampening integrated into housing
- Integrated heater for operation to -40°F
- Docking station not required – USB 3.0 port supports direct connection to a host PC
- Key switch locks USB port, preventing unauthorized access to SSD contents
- Activity and communication lights for visual verification of operation and PC connectivity

7.5 Accessories (included)

- Event marker/panic button – flag video for easy playback and LED indicator displaying equipment status
- Sensor harness – monitor 8 inputs such as turn signals, front/rear doors, and brakes
- Wi-Fi/GPS antenna (1x per bus) – required for Wi-Fi connectivity and GPS

7.6 Optional Accessories (not included in price proposal)

- Cellular/Wi-Fi/GPS antenna – in place of above antenna would provide one antenna for all wireless signals (one hole in
- Cellular/Wi-Fi router – supports main mobile carriers
- Wi-Fi dongle – connect a device; i.e. phone, tablet, or laptop; to access the DVR wirelessly
- 3G Accelerometer – measure hard braking, excessive acceleration, and potholes

7.7 HD5 1200 Series DVR Specifications



HD5-1200 DVR

MOBILE VIDEO SURVEILLANCE

The HD5 Series – the last DVR you will ever need to buy.

DESCRIPTION	PART #
HD5-1200 DVR with WiFi	710609



Featured Specifications

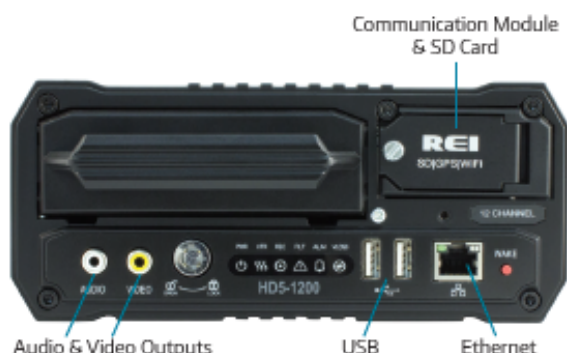
<p>High Definition (1080p) on All Channels</p>	<p>Ultra HD (4K) Channels 9-12</p>	<p>GPS (optional)</p>
<p>4G Cellular (optional)</p>	<p>Fast 802.11n WiFi</p>	<p>Panic Button (optional)</p>
<p>Full-Frame Rate up to 30fps/Channel</p>	<p>H.264 Triple Streaming</p>	<p>Accelerometer (optional)</p>
<p>Up to 2TB Hard Drive or Solid State Hard Drive (optional)</p>	<p>Up to 256GB SD Card (optional)</p>	<p>Lockbox (optional)</p>
<p>Extruded Aluminum Chassis</p>	<p>Fanless Design</p>	

Benefits

- Save money – 100% compatible with all existing REI HD Series cables, cameras, peripheral devices and brackets
- Versatile – connects up to 12 HD cameras providing total video coverage in and around your vehicle
- Expandable – communication module makes upgrading easy for faster communication technology as it becomes available
- Enhanced clarity – 1080p high definition – available on all channels – allows you to see the smallest details with enhanced clarity
- Built to last – vibration dampening integrated into hard drive housing
- User-friendly – configuring via iOS/Android™ tablet, hand-held monitor and mouse or laptop PC
- Dependable – integrated heater for operation to -40°F
- Secure – steel rear cover and locking front cover (both optional)
- Safe – provides consistent, regulated power including all cameras, external devices, and peripherals

Testing Standards

- Battery/voltage tested per ISO 7637-2
- Electrical load tested reverse polarity and power faults per ISO 16750-2
- Electrostatic discharge testing/protected per ISO 10605
- Thermal tested per ISO 16750-4
- Vibration tested to military standard-810G
- Shock tested to military standard-810G



Power	8 to 32 Volts DC, <2A operating (excludes cameras, accessories)
Dimensions	Without brackets: 7.4" x 3.2" x 9.5"; With brackets: 9.1" x 4.0" x 9.5" (max)
Weight	8.6 lbs (3.90 kg) with mounting brackets
Standby Current	< 2mA
Operation Temperature	-40°-+160°F continuous operation
Operating Humidity	10% - 95%, non-condensing

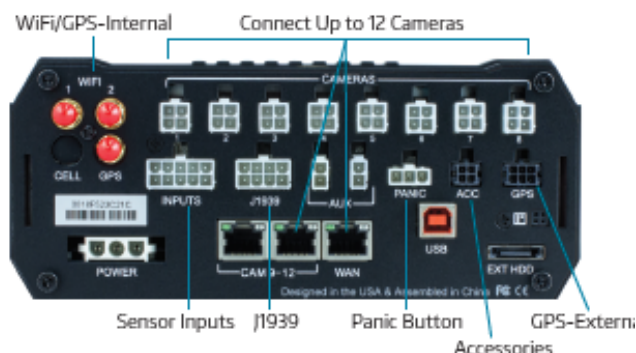
VIDEO RECORDING

Video Inputs	Up to 12 Channels
Video Standards	NTSC, AHD, ONVIF, REI
Resolution	Up to 1080P Channels 1-8 Up to UHD(4K) Channels 9-12
Frame Rate	Up to 30 fps per channel
Bit Rate	80 Mbps
Compression	H.264 Triple stream encoding/ recording – high quality recording + efficient network video streaming
Audio Inputs	12
Total Channels	12

STORAGE

Hard Drive	Removable hard disk drive module with USB 3.0 interface, integrated shock and vibration dampening, and heater
SD Card	SD slot for simultaneous (mirror) or alarm video recording

HD5-1200 DVR



COMMUNICATION MODULE

Easily Upgradeable Communication Module	Field or factory installed removable communication module
WiFi (internal)	802.11a/b/g/n 2.4Ghz/5Ghz WiFi (WiFi models only)
Cellular (external)	Optional 3G/4G modem for cellular connectivity
GPS	Optional internal or external GPS receiver

INPUTS/OUTPUTS

USB Ports	2 front panel USB ports for mouse and video backup, firmware update, configuration, and debugging (log files, etc.)
WAN Ports	Rear panel WAN (Ethernet) port for connection to external 3G/4G cellular router and for connection to REI and non-REI in-vehicle systems
LAN Ports (IPC, etc.)	Front panel LAN port for local DVR configuration, camera adjustment, IP camera setup, etc.
Front Panel Audio/Video Port	Front panel composite audio/video outputs for local DVR configuration, camera setup, etc. using a USB mouse
Vehicle Interface (J1939)	Dual SAE J1939 250kbps/500kbps interface for connection to in-vehicle networks, multiplex systems, etc.
Accessory Port (RS485)	For connection to optional REI peripherals, including accelerometer, output modules, display modules, RFID, etc., and non REI devices
GPS/Status Port (RS232)	Optional external (RS232) GPS receiver Optional GPS/Status output (RS232) for interface to third-party AVL systems
Sensor Inputs	8 sensor inputs for detection of vehicle signals (brakes, turn signals, etc.)

7.8 Video Camera Specifications



EXCELLENCE
IN INNOVATION

1080p/720p Cameras:
Eyeball, Dome,
and Minibox

CAMERA COMPARISON	Eyeball AHD Camera	Dome AHD Camera	Minibox AHD Camera
True Wide Dynamic Range	✓	✓	✓
1080p/720p HD Resolution	✓	✓	✓
Day/Night Viewing	✓	✓	✓
Interior Use	✓	✓	✓
Exterior Use Waterproof Connection	✓		
Proprietary Optimized Audio	✓	✓	✓
Optimized IR For Eliminating Hot Spots	✓	✓	✓
Adjustable Camera Angle	✓	✓	✓
Tamper Resistance	✓	✓	✓
Water Resistance	IP69k	IP67	IP65
Gorilla Glass	✓		
Wide FOV Option	✓	✓	
Ultra-Wide FOV Option			✓
AdjustableAudio		✓	✓

Eyeball AHD



Dome AHD



Minibox AHD



Built to thrill, REI's newest AHD 1080p/720p cameras are designed and tested to provide crystal-clear images while enduring tough, over-the-road conditions. Choose from a variety of analog high-definition (AHD) cameras with smart, innovative features. Each camera performs to REI's high standards to capture whatever views you need. Let us customize surveillance solutions for your fleet.

7.9 System Playback Software

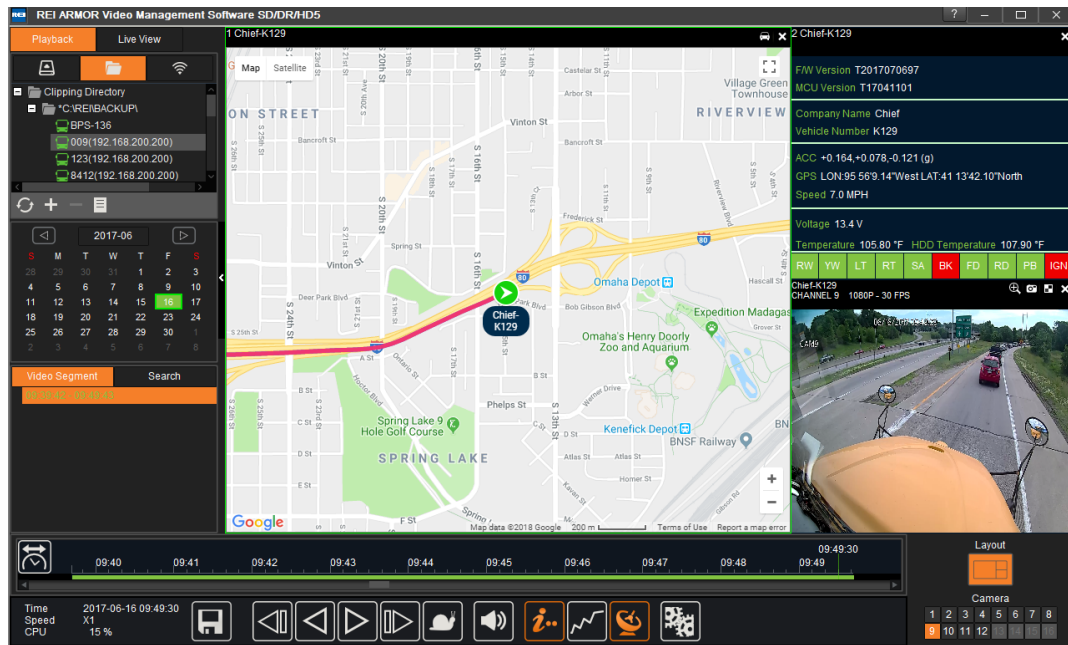
REI's Video Management Software (VMS) provides simple access to all recorded videos and is proprietary and protected. Searching is easily accessible via the search option (image shown below). VMS provides the ability to capture images and save video footage. Images and video are easily saved to CD-ROM, DVD or USB memory. VMS is available at no cost from REI's support website (www.radioeng.info). Software updates and support are freely available through the REI website and 24/7/365 Technical Support Line at (877-726-4617). VMS may be installed on Windows 7 / Windows 10 computers.



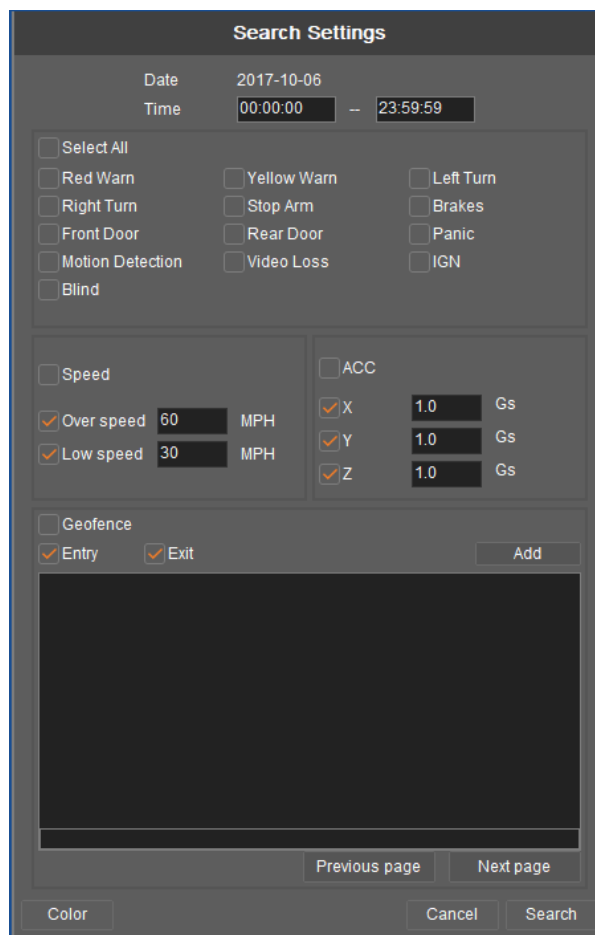
VMS software screenshot – interior and exterior camera views



VMS software screenshot – map, exterior camera views



VMS software screenshot – map and metadata



VMS screenshot of search parameters

7.10 A.R.M.O.R. Wireless Suite

A.R.M.O.R (Asset Reporting & Management/Observation & Recording) Wireless Suite is REI's signature web-based software available as an all-in-one solution, offering more than just video. Building on the REI free Video Management Software (VMS), A.R.M.O.R. provides added and expanded features by automating the entire process to save time and money.

Through lot-based event downloads, A.R.M.O.R. provides surveillance by completely automating video and fleet data. Utilizing a Wi-Fi equipped DVR, commercial access points, and/or a cellular router, video and metadata is transferred to a server when vehicles are started, returned to the lot, or at preconfigured times. Flexible scheduling prioritizes downloads to obtain the most critical information right away. Layered privileges control who has access to the different modules to increase security and provide cost savings.

Powered with A.R.M.O.R., it is possible to calculate ROI on personnel and time savings while alleviating the potential daily risk. Existing hardware infrastructure serves as the support mechanism to maximize video viewing and performance through the A.R.M.O.R. suite. With a variety of cameras and digital video recorders positioned in and around vehicles, there is less uncertainty and more security for passengers, vehicles and fleet.

The REI complete surveillance system is equipped with a digital video recorder (DVR), high-definition color cameras, user-friendly software and accessories, creating administrative ease. The addition of wireless connectivity allows DVR, vehicle, and fleet reporting to enhance efficiency and productivity.

A.R.M.O.R. provides:

- automated video retrieval
- surveillance equipment and vehicle health checks
- historical and live route data
- critical driver information such as obtain fleet analytics, driver metrics, monitor idling and fuel usage
- exportable reports

how it works

At REI, we do not have a one-size-fits-all mentality. We believe in providing the most options to tailor a solution based on your specific needs. This includes software as well as hardware.

A.R.M.O.R. builds on our free Video Management Software (VMS) with added and expanded features. More importantly, it automates the entire process to save you time and money. Features include wireless video retrieval, system and vehicle health checks, historical fleet data and driver report cards - all while having the option to download the files for VMS's many features.



VS.



	VMS	A.R.M.O.R. software suite
Individual vehicle information	✓	✓
Fleet vehicle information	✓	✓
View on PC through hard drive, SD card, flash drive or remotely	✓	✓
Zoom, snapshot & blur features	✓	✓
Graph speed, acceleration, voltage & temperature	✓	✓
Track up to 8 inputs of a vehicle	✓	✓
Track excessive acceleration, hard braking or collisions	✓	✓
Monitor passive location & speed of a vehicle	✓	✓
Search function for metadata using 'or' metrics	✓	✓
Save or convert clips for later viewing & sharing	✓	✓
Accessible through any device with an internet connection		✓
Events are automatically downloaded upon return to lot		✓
Share video within or outside your organization with link		✓
Ability to lock any video from being overwritten or deleted		✓
Automated system health checks		✓
Vehicle health checks through J1939 CAN-BUS interface		✓
Configure the DVR from anywhere		✓
Track vehicles in real time; entire fleet or a specific group		✓
Plot, export or request video using multiple 'and/or' metrics		✓
Graph RPM, odometer levels, tire pressure & fuel levels		✓
Customizable driver parameters & rankings		✓