

City of Garden Grove

INTER-DEPARTMENT MEMORANDUM

To: Matthew J. Fertal  
Dept: City Manager  
Subject: RECOMMENDATION TO REALLOCATE GRANT FUNDS AND AWARD A CONTRACT TO INSTALL A WIRELESS IN-CAR VIDEO SYSTEM FOR THE POLICE DEPARTMENT

From: Joseph M. Polisar  
Dept: Police Department  
Date: December 14, 2010

OBJECTIVE

To reallocate the 2009 American Reinvestment and Recovery Act Justice Assistance Grant (ARRA JAG) funds and award a contract to furnish all labor, materials, training and maintenance of a wireless in-car video system (IVS) to be deployed in all law enforcement marked vehicles and police motorcycles operated by the City of Garden Grove Police Department.

BACKGROUND

The Garden Grove Police Department has had its existing IVS deployed for over five years now. During this period of time, the Police Department has discovered certain transmission limitations in the existing system. Despite several different attempts to remedy these limitations, they persist. This coupled with the age and resulting maintenance needed on the current system makes replacing the current system the most efficient and economically viable solution.

ANALYSIS

As a result, the Police Department began researching what systems are available on the market to replace the current system. Over the past year, systems from a variety of vendors have been reviewed and, in some cases, tested in our patrol cars. The vendors included: CDWG/Panasonic, Coban, Digital Ally, iCop, Kustom, L3 and Robovu. Demo testing was performed for at least a one-month period on all of the systems listed except for Kustom. Kustom is the current vendor whose system retains the currently existing transmission limitations.

As each system was installed in the patrol cars, a specific set of officers were trained on the system, asked to use it and provided feedback in terms of its ease of use and form factor. At the same time, management personnel reviewed the back end hardware and software to evaluate it for ease of use, video and sound clarity and security. At the completion of these tests, we reached a consensus that the L3 system was the best system for officer ease of use, video and audio clarity and, most importantly, reliability. In addition to our current system capabilities, the L3 system also has a solution for motorcycle units. As part of this project, the Police Department will be expanding its IVS to include police motorcycles.

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The L3 system is already in use in a variety of agencies in Orange County. One such agency is the Orange County Sheriff's Department (OCSD). In contacting them, we learned that they had already performed an RFP process that led to their purchase of L3 systems for their patrol vehicles. In addition, L3 was willing to honor the pricing quoted in the OCSD contract if we decided to "piggy-back" our purchase on the OCSD RFP process.

The Police Department worked with purchasing to pursue this option and has since received approval to make our purchase based upon the OCSD RFP and pricing. All insurance and permitting requirements have already been addressed through purchasing and risk management and we have a contract in hand with L3's necessary signatures affixed (see attached proposed contract). This contract will provide all hardware, software, installation and training for 50 patrol vehicles and 8 police motorcycles and the system to download, store and manage the videos recorded by the system.

FINANCIAL IMPACT

The Police Department has secured grant funding for the majority of expenditures associated with this project. The Traffic Offender Fund will support the remaining costs and the General Fund should not be impacted.

On September 8, 2009, the City Council approved allocation of the 2009 American Reinvestment and Recovery Act Justice Assistance Grant (ARRA JAG) funds toward the purchase of an automated report writing system (ARWS). Since that time however, alternate funding sources were located for that project and it is already in progress. In November of this year, the Police Department received approval from the Department of Justice to modify its use of the ARRA JAG allocation from the ARWS to purchasing the IVS system (see attached DOJ ARRA JAG Reallocation Approval). The City Council having previously allocated these funds toward the ARWS would now need to approve utilizing these funds for the IVS.

If the reallocation of the ARRA JAG funds is approved, the following is an itemized list of the funding sources for this project:

• 2009 ARRA JAG	\$267,655
• 2008-09 SLESF Fund	\$165,801
• Traffic Offender Fund	\$74,942
• <b>Total</b>	<b>\$508,398</b>

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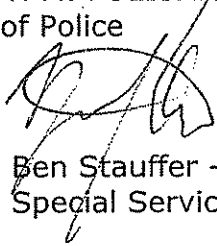
RECOMMENDATION

It is recommended the City Council:

- Authorize the reallocation of the 2009 American Reinvestment and Recovery Act Justice Assistance Grant (ARRA JAG) funds from the Automated Report Writing System (ARWS) to the In-Car Video System (IVS);
- Award a contract to L3 Communications Corporation, in the firm fixed price amount of \$508,398.00, to include maintenance for the first five years; and
- Authorize the City Manager to execute this agreement and make minor modifications to the agreement on behalf of the City.



JOSEPH M. POLISAR  
Chief of Police



By: Ben Stauffer - Lieutenant  
Special Services Division

Attachment 1: L-3 Communications Corporation Proposed Contract  
Attachment 2: DOJ ARRA JAG Grant Adjustment Notice

**Recommended for Approval**



**Matthew Fertal**  
City Manager



US DEPARTMENT OF JUSTICE  
OFFICE OF JUSTICE PROGRAMS

**GRANT ADJUSTMENT NOTICE**

Grantee Information				
<b>Grantee Name:</b>	County of Orange	<b>Project Period:</b>	03/01/2009 - 02/28/2013	<b>GAN Number:</b> 008
<b>Grantee Address:</b>	10 CIVIC CENTER PLAZA SANTA ANA, 92701	<b>Program Office:</b>	BJA	<b>Date:</b> 11/18/2010
<b>Grantee DUNS Number:</b>	11-195-0874	<b>Grant Manager:</b>	Dean Iwasaki	
<b>Grantee EIN:</b>	95-6000928	<b>Application Number (s):</b>	2009-F1801-CA-SB	
<b>Vendor #:</b>	950009281	<b>Award Number:</b>	2009-SB-B9-0271	
<b>Project Title:</b>	FY 2009 Recovery Act Justice Assistance Grant Program	<b>Award Amount:</b>	\$3,959,880.00	

Change Project Scope				
*Scope Change Types				
Altering programmatic activities	Altering the purpose of the project			
Changing the project site	Change in organization with primary responsibility for implementation of grant			
Contracting out, sub-granting or otherwise obtaining the services of a third party to perform activities that are central to the purpose of the award	Other (Please enter type of scope change below)			
<b>*Required Justification for Change Project Scope:</b>				
Garden Grove wishes to change from purchasing ARWS to an IVS system for patrol vehicles.				
<b>Attachments:</b>				
<b>Filename:</b>	<b>User:</b>	<b>Timestamp:</b>	<b>Action:</b>	
Garden Grove ARRA JAG Mod.pdf	olsenb	11/03/2010 4:46 PM		
Revised Budget - Garden Grove Sub-Grantee.docx	iwasakid	11/18/2010 3:18 PM		
2009 ARRA JAG-Garden Grove GAN Chage in Project_Cost Breakdown.pdf	olsenb	11/17/2010 5:24 PM		
<b>Actions:</b>				
<input type="button" value="Close"/>				
<input type="button" value="Printer Friendly Version"/>				
<b>Audit Trail:</b>				
<b>Description:</b>	<b>Role:</b>	<b>User:</b>	<b>Timestamp:</b>	<b>Note:</b>
Approved-Final	PO - GAN 1st Line Supervisor	youngj	11/18/2010 4:08 PM	View Note
Submitted	PO - Grant Manager	olsenb	11/17/2010 5:25 PM	View Note
Change Requested	EXTERNAL - External User	iwasakid	11/04/2010 8:49 AM	View Note
Change Requested	PO - Grant Manager	iwasakid	11/04/2010 8:49 AM	View Note
Submitted	PO - Grant Manager	olsenb	11/03/2010 4:46 PM	View Note



# CITY OF GARDEN GROVE POLICE DEPARTMENT

A NATIONALLY  
ACCREDITED LAW  
ENFORCEMENT  
AGENCY

JOSEPH M. POLISAR  
CHIEF OF POLICE

September 21, 2010

Susie Cabrera  
Orange County Sheriff-Coroner Department  
Administrative Manager/Grants

Re: 2009 Recovery Act JAG Modification Request – Garden Grove Police Department

The City of Garden Grove proposes to amend the use of the 2009 Justice Assistance Grant funding as follows:

The original ARRA JAG proposal was written solely for the purchase of an ARWS. However, other funding sources have been awarded, which the Dept will use to fund that project. Therefore, the Dept would like to use our 09 ARRA JAG award to fund a new project, which is outlined below.

Proposals were submitted for the ARRA JAG grant in early April 2009. However, we did not receive official notification of a \$200,000 DOJ COPS Technology appropriation until September 21, 2009. We now have more money earmarked for the ARWS project than we need. Therefore, the Garden Grove Police Department is requesting to modify their use of ARRA JAG funds to include the purchase and installation of wireless in-car video systems (IVS) for all patrol vehicles.

#### Amended Project Objectives:

The City of Garden Grove proposes to use ARRA JAG funds to replace the in-car video system (IVS) in each patrol vehicle. The current system has been in use for five years now. It predominantly utilizes DVD RAM discs and wireless microphones, each of which has proven to be unreliable. The video system is often unable to initialize due to corrupt discs. In addition, when the system does function, the system often does not capture audio in conjunction with the video recording, due to the inferior microphones.

As a result, the City of Garden Grove has done extensive unit testing in search of a replacement system. The replacement system will be a wireless system that does away with the DVD RAM disc hardware and replaces it with a hard drive locally mounted in the vehicle with wireless sync capabilities. When each patrol vehicle pulls into the police station, the system will recognize it is in range of the station and download its videos to a mainframe server in the police building.

The new system will also utilize a different wireless microphone design that has proven effective over much greater distances and with more reliability than our current system microphone. This microphone has proven to be much more effective than the current system at longer distances in a line-of-sight situation. When transmitting through barriers, this system has proven to be useful in certain situations, where the current system is completely unable to overcome any kind of line-of-sight barrier.

The new system will incorporate a speed activation trigger to start recording whenever a certain speed is exceeded, as well as a crash sensor. It will also have the capability for the City to implement an automatic vehicle locator using the onboard GPS sensor in the in-car video system.

Amended Goal:

By replacing the current in-car video system, the City of Garden Grove expects to see three results:

- Boost the reliability of the system to ensure it initializes and is ready to record on the officers' demand or when situational triggers cause it to activate;
- Ensure effective transmission of the audio portion of incidents back to the car to be recorded in conjunction with the video; and
- Enhance safety and dispatch effectiveness by incorporating an automatic vehicle locator into the CAD system in our dispatch center. This feature will allow the system to recommend the closest unit to dispatch to a call for service, and give the dispatchers the ability to locate units in distress using their GPS location.

Amended Quantifiable Performance Measures:

- Reduced liability through reliable recording of both audio and video of incidents that result in detention or arrest, as well as pursuits or collisions involving Garden Grove Police vehicles.
- Reduced response time to in-progress, high-priority calls and foot pursuits through the use of the automatic vehicle locator function and its CAD integration (recommend closest unit capabilities).

Amended Timeline or Project Plan:

The project is currently in the RFP phase and expected to begin implementation within the next several months.

Funding:

Total Allocation:	\$330,439
PROACT Contribution (10%)	\$ 33,044
Administrative Fee (9.0%)	\$ 29,740
Funds Retained by City:	\$267,655

Respectfully,

Joseph M. Polisar  
Chief of Police

Garden Grove Police Department  
ARRA JAG Modification Request Info

The Garden Grove Police Department would like to retain \$267,655 of their 2009 ARRA JAG allocation. The Department intends to use this allocation to assist in funding the purchase of new wireless in-car video (IVS) systems for fifty (50) police patrol cars and eight (8) police motorcycles, as well as the backbone hardware and software required to operate these systems. The total cost of the IVS project will exceed \$267,655; therefore the difference will be supported through other funding sources available to the city.

The total cost breakdown for the ARRA JAG allocation is as follows:

- Police Motorcycle-mounted Digital Video Recording System –  
Eight (8) @ \$4,995 ea. = \$39,960
  
- Police Patrol Vehicle Digital Video Recording System –  
Fifty (50) @ \$4,495 ea. = \$224,750
  
- Police Patrol Vehicle Instant Replay Camera with Cables –  
Thirty seven (37) @ \$185 ea. = \$6,845

The remaining \$100 will go towards shipping costs.



## PROFESSIONAL SERVICES AGREEMENT

**THIS AGREEMENT** is made this \_\_\_\_\_ day of \_\_\_\_\_, 2010, by the **CITY OF GARDEN GROVE**, a municipal corporation, ("CITY") and **L3 Communications Mobile-Vision, Inc. c/o L3 Communications Corporation**, herein after referred to as "CONTRACTOR".

### RECITALS

The following recitals are a substantive part of this Agreement:

1. This Agreement is entered into pursuant to Garden Grove COUNCIL AUTHORIZATION, DATED \_\_\_\_\_.
2. CITY desires to utilize the services of CONTRACTOR to Furnish Annual Maintenance and Support and all labor, materials, equipment, software, to provide and install Digital In-Car Video Systems for the Garden Grove Police Department.
3. CONTRACTOR is qualified by virtue of experience, training, education and expertise to accomplish services.

### AGREEMENT

THE PARTIES MUTUALLY AGREE AS FOLLOWS:

1. **Term and Termination.** The term of the agreement shall be for period of four (4) years from full execution of the agreement, with an option to extend said agreement additional two (2) years, for a total performance period of six (6) years. Option years shall be exercised one (1) year at a time, at the sole option of the CITY. This agreement may be terminated by the CITY without cause. In such event, the CITY will compensate CONTRACTOR for work performed to date in accordance with proposal which is attached as Attachment A and is hereby incorporated by reference. Contractor is required to present evidence to support performed work.
2. **Services to be Provided.** The services to be performed by CONTRACTOR shall consist of tasks as set forth in the Proposal. The Proposal is attached as Attachment A, and is incorporated herein by reference. The Proposal and this Agreement do not guarantee any specific amount of work.
3. **Compensation.** CONTRACTOR shall be compensated as follows:
  - 3.1 **AMOUNT.** Total Compensation under this agreement for the first four years, is not to exceed (NTE) the amount of Five Hundred Eight

Thousand Three Hundred Ninety Eight Dollars (\$508,398.00), payable in arrears and in accordance with proposal in Attachment "A" and cooperative bid number SXZ0000142 with the Orange County Sheriff's Department which is attached as Attachment "B" and is incorporated herein by reference.

- 3.2 Payment. For work under this Agreement, payment shall be made per invoice for work completed. For extra work not a part of this Agreement, a written authorization by CITY will be required, and payment shall be based on schedule included in Proposal (Attachment A).
- 3.3 Records of Expenses. CONTRACTOR shall keep complete and accurate records of all costs and expenses incidental to services covered by this Agreement. These records will be made available at reasonable times to CITY.
- 3.4 Termination. CITY shall have the right to terminate this agreement, without cause, by giving thirty (30) days written notice of termination. If the Agreement is terminated by the CITY, then the provisions of paragraph 3 would apply to that portion of the work completed.

#### 4. Insurance requirements.

- 4.1 COMMENCEMENT OF WORK. CONTRACTOR/CONSULTANT shall not commence work under this Agreement until all certificates and endorsements have been received and approved by the CITY. All insurance required by this Agreement shall contain a Statement of Obligation on the part of the carrier to notify the CITY of any material change, cancellation, or termination at least thirty (30) days in advance.
- 4.2 WORKERS COMPENSATION INSURANCE. During the duration of this Agreement, CONTRACTOR and all subcontractors shall maintain Workers Compensation Insurance in the amount and type required by law, if applicable.
- 4.3 INSURANCE AMOUNTS. CONTRACTOR shall maintain the following insurance for the duration of this Agreement:
  - (a) Commercial general liability in an amount of \$1,000,000.00 per occurrence (**claims made and modified occurrence policies are not acceptable**); Insurance companies must be acceptable to CITY and have a Best's Guide Rating of A-, Class VII or better, as approved by the CITY.

- (b) Automobile liability in an amount of \$1,000,000.00 combined single limit (**claims made and modified occurrence policies are not acceptable**); Insurance companies must be acceptable to CITY and have a Best's Guide Rating of A-, Class VII or better, as approved by the CITY.
  
- (c) Professional liability in an amount not less than \$1,000,000. Insurance companies must be admitted and licensed in California and have a Best's Guide Rating of A-, Class VII or better, as approved by the City. If the policy is written on a "claims made" basis, the policy shall be continued in full force and effect at all times during the term of the agreement, and for a period of three (3) years from the date of the completion of services provided. In the event of termination, cancellation, or material change in the policy, professional/consultant shall obtain continuing insurance coverage for the prior acts or omissions of professional/consultant during the course of performing services under the term of the agreement. The coverage shall be evidenced either by a new policy evidencing no gap in coverage, or by obtaining separate extended "tail" coverage with the present or new carrier

An **On-Going and Completed Operations Additional Insured Endorsement** for the policy under section 4.3 (a) shall designate CITY, its officers, officials, employees, agents, and volunteers as additional insureds for liability arising out of work or operations performed by or on behalf of the CONTRACTOR. CONTRACTOR shall provide to CITY proof of insurance and endorsement forms that conform to CITY's requirements, as approved by the CITY.

An Additional Insured Endorsement for the policy under section 4.3 (b) shall designate CITY, its officers, officials, employees, agents, and volunteers as additional insureds for automobiles, owned, leased, hired, or borrowed by the CONTRACTOR. CONTRACTOR shall provide to CITY proof of insurance and endorsement forms that conform to CITY's requirements, as approved by the CITY.

For any claims related to this Agreement, CONTRACTOR's insurance coverage shall be primary insurance as respects CITY, its officers, officials, employees, agents, and volunteers. Any insurance or self-insurance maintained by the CITY, its officers, officials, employees, agents, and volunteers shall be excess of the CONTRACTOR's insurance and shall not contribute with it.

5. **Non-Liability of Officials and Employees of the CITY.** No official or employee of CITY shall be personally liable to CONTRACTOR in the event of any default or breach by CITY, or for any amount which may become due to CONTRACTOR.
  
6. **Non-Discrimination.** CONTRACTOR covenants there shall be no discrimination against any person or group due to race, color, creed, religion, sex, marital status, age, handicap, national origin, or ancestry, in any activity pursuant to this Agreement.
  
7. **Independent Contractor.** It is agreed to that CONTRACTOR shall act and be an independent contractor and not an agent or employee of the CITY, and shall obtain no rights to any benefits which accrue to CITY'S employees.
  
8. **Compliance with Law.** CONTRACTOR shall comply with all applicable laws, ordinances, codes, and regulations of the federal, state, and local government.
  
9. **Notices.** All notices shall be personally delivered or mailed to the below listed address, or to such other addresses as may be designated by written notice. These addresses shall be used for delivery of service of process.
  - a. (Contractor)  
**L3 Communications Mobile-Vision, Inc.**  
**c/o L3 Communications Corporation**  
 Attention: Louis W. Blanco, President  
 90 Fanny Road  
 Boonton, NJ 07005
  
  - b. (Address of CITY) (with a copy to):  
 City of Garden Grove Garden Grove City Attorney  
 11222 Acacia Parkway 11222 Acacia Parkway  
 Garden Grove, CA 92840 Garden Grove, CA 92840
  
10. **CONTRACTOR'S PROPOSAL.** This Agreement shall include CONTRACTOR'S proposal or bid which shall be incorporated herein by reference. In the event of any inconsistency between the terms of the proposal and this Agreement, this Agreement shall govern.
  
11. **Licenses, Permits, and Fees.** At its sole expense, CONTRACTOR shall obtain a Garden Grove Business License, all permits, and licenses as may be required by this Agreement.
  
12. **Familiarity with Work.** By executing this Agreement, CONTRACTOR warrants that: (1) it has investigated the work to be performed; (2) it has investigated the site of the work and is aware of all conditions there; and (3) it understands the facilities, difficulties, and restrictions of the work under this

Agreement. Should Contractor discover any latent or unknown conditions materially differing from those inherent in the work or as represented by CITY, it shall immediately inform CITY of this and shall not proceed, except at CONTRACTOR'S risk, until written instructions are received from CITY.

13. **Time of Essence.** Time is of the essence in the performance of this Agreement.
14. **Limitations Upon Subcontracting and Assignment.** The experience, knowledge, capability, and reputation of CONTRACTOR, its principals and employees were a substantial inducement for CITY to enter into this Agreement. CONTRACTOR shall not contract with any other entity to perform the services required without written approval of the CITY. This Agreement may not be assigned voluntarily or by operation of law, without the prior written approval of CITY. If CONTRACTOR is permitted to subcontract any part of this Agreement, CONTRACTOR shall be responsible to CITY for the acts and omissions of its subcontractor as it is for persons directly employed. Nothing contained in this Agreement shall create any contractual relationship between any subcontractor and CITY. All persons engaged in the work will be considered employees of CONTRACTOR. CITY will deal directly with and will make all payments to CONTRACTOR.
15. **Authority to Execute.** The persons executing this Agreement on behalf of the parties warrant that they are duly authorized to execute this Agreement and that by executing this Agreement, the parties are formally bound.
16. **Indemnification.** CONTRACTOR agrees to protect, defend, and hold harmless CITY and its elective or appointive boards, officers, agents, and employees from any and all claims, liabilities, expenses, or damages of any nature, including attorneys' fees, for injury or death of any person, or damage to property, or interference with use of property, arising out of, or in any way connected with performance of the Agreement by CONTRACTOR, CONTRACTOR'S agents, officers, employees, subcontractors, or independent contractors hired by CONTRACTOR. The only exception to CONTRACTOR'S responsibility to protect, defend, and hold harmless CITY, is due to the sole negligence of CITY, or any of its elective or appointive boards, officers, agents, or employees.

This hold harmless agreement shall apply to all liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by CONTRACTOR.

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(Agreement Signature Block On Next Page)

**IN WITNESS THEREOF**, these parties have executed this Agreement on the day and year shown below.

Date: \_\_\_\_\_

**"CITY"  
CITY OF GARDEN GROVE**

By: \_\_\_\_\_  
**City Manager**

**ATTESTED:**

\_\_\_\_\_  
**City Clerk**

Date: \_\_\_\_\_

**"CONTRACTOR"  
L3 Communications Mobile-Vision, Inc.  
c/o L3 Communications Corporation**

By: Charles A. Vicek

Name: Charles A. Vicek

Title: Vice President of Sales & Marketing

Date: 9-9-10

Tax ID No. 22-2893537

Contractor's License: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

If CONTRACTOR is a corporation, a Corporate Resolution and/or Corporate Seal is required. If a partnership, Statement of Partnership must be submitted to CITY.

**APPROVED AS TO FORM:**

[Signature]  
Garden Grove City Attorney

9/13/10  
Date



**communications**  
Mobile-Vision, Inc.

**ATTACHMENT "A"**

**Quotation**

Garden Grove Police Department  
11301 Acacia Parkway  
GARDEN GROVE, CA 92842

Date: 8/19/2010

Quotation Number: 0084442

Prices Valid Until: 10/18/2010

Attention: Lt. Ben Stauffer

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QTY	DESCRIPTION	UNIT PRICE	AMOUNT
8	MVD-FB2DVS-CV-2 System, Cyclevision 2 with VLP2 Assy, Flashback 2 Digital Video Recorder	\$4,495.00	\$35,960.00
8	MVD-ANT-DM-BK42 Antenna, Dome, Black, wlan/gps, Stud Mount, 42" leads	\$0.00	\$0.00
50	MVD-FB2DVS-2 Flashback 2 Digital Video System w/VLP2 assy	\$4,495.00	\$224,750.00
2	MVD-FB2DVS-2 Flashback 2 Digital Video System w/VLP2 assy	\$4,495.00	\$8,990.00
	Spare:Flashback 2's		
52	MVD-FB-CK5 Cable Kit, DVR, trunk mount/OHC	\$0.00	\$0.00
50	MVD-IR-CAM Option, Flashback IR Camera w/cables	\$185.00	\$9,250.00
52	MVD-DM2-24/55BK Stud mount antenna 18' cables (RF-195 & RG-174) with SMA/SMA bolt configuration (not mag mount) black Dome Antenna	\$0.00	\$0.00
0	/MISC Optional	\$303.00	\$0.00
	Vision Communications to extract complete existing in car units from vehicles.		
0	/MISC Optional - Extract in car htdw	\$105.00	\$0.00
	Vision Communications to extract existing in car hardware only, from vehicles		
58	/INSTALLATION Installation by Vision Comm.	\$330.00	\$19,140.00
170	MVD-FB2-USB-128 Key, USB, 128 for Flashback 2	\$0.00	\$0.00
50	MVD-USB-EXT-TM Option, TM DVR USB Ext, with MTG Bracket, 22FT	\$0.00	\$0.00
50	MVD-CRASH-BAT Collision Sensor (Triggers DVR for recording when involved in crash) Assembly product	\$150.00	\$7,500.00
0	MVD-FB2-V-V-TM Optional - Vehicle Viewer, Flashback 2 Trunk Mount	\$295.00	\$0.00
50	W-FB-MC-GPS-22 Cable, Monitor Console DVR GPS/PC 22ft	\$0.00	\$0.00
	Note: Replacing W-FB-MC-DVR-22 on the CK5		
51	MVD-VLP2-DL-TM Option, Trunk Mounted Dual Voice Link Plus 2 Wireless Microphone System	\$565.00	\$28,815.00
	Listed Below is all Backend Equipment		
1	LSMVDVDBR1X1 Workstation, Tower, 140GB DASD, 2 Core Intel Processors, 1 GB RAM. DVD Backup System, 2.8 GHz Dual Core Processor, 1 GB RAM, 140GB DASD Windows XP, DVD-RW, Monitor, Keyboard, Mouse MVI Archiving Software, Blu-Ray Robot 2/100 disc capacity, 100 DVD-R Discs	\$2,984.00	\$2,984.00

Continued



**communications**  
Mobile-Vision, Inc.

ATTACHMENT "A"

Quotation

Garden Grove Police Department  
11301 Acacia Parkway  
GARDEN GROVE, CA 92842

Date: 8/19/2010

Quotation Number: 0084442

Prices Valid Until: 10/18/2010

Attention: Lt. Ben Stauffer

Page 2

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
58	LSSWRPRODVR Software, digital Evidence PRO per DVR Digital Evidence Software Includes: Base Module, Intelligent Downloading Module, Archiver Module, Case Module, Consumer DVD Module	\$300.00	\$17,400.00
1	LSCMPR500 Computer, Rack, 2 x 2.26GHz Quad Core Xenon Processors, 4GB 1066MHz RAM, 73GB Usable RAID 6 DASD	\$4,745.00	\$4,745.00
3	MVD-NEMAPOE-DAL Nema POE Enclosure, Dual Port, w/AP & Lightning Protection	\$1,993.00	\$5,979.00
1	MVD-8675-A-ASSY Wireless Access Point w/External Mounted Antenna 802.11(a) Wireless Access point Antenna and Cabling (Note: Pricing does not include installation)	\$795.00	\$795.00
6	MVD-ANT-KIT-A Antenna Kit, WLAN 802.11a, Exterior Building Mounted	\$176.00	\$1,056.00
1	/INSTALLATION Install WAP/ANT by Vision Comm	\$5,860.00	\$5,860.00
1	MVD-DEP-BT3 Solution Configuration / Training System build out and configuration plus 1 day (on-site) training	\$4,350.00	\$4,350.00
Extended Maintenance for In Car Portion			
60	/EMA STD YR 1 Sales EMA Standard Yr 1	\$300.00	\$18,000.00
60	/EMA STD YR 2 Sales EMA Standard Yr 2	\$325.00	\$19,500.00
60	/EMA STD YR 3 Sales EMA Standard Yr 3	\$350.00	\$21,000.00
60	/EMA STD YR 4 Sales EMA Standard Yr 4	\$350.00	\$21,000.00
Extended Maintenance for the DEP Software			
1	/EMA SWRDEP80 EMA YR 1 - SWR DEP80/SERVER	\$3,152.00	\$3,152.00
1	/EMA SWRDEP80 EMA YR 2 - SWR DEP80/SERVER	\$3,152.00	\$3,152.00
1	/EMA SWRDEP80 EMA YR 3 - SWR DEP80/SERVER	\$3,152.00	\$3,152.00
1	/EMA SWRDEP80 EMA YR 5 - SWR DEP80/SERVER	\$3,152.00	\$3,152.00
Extended Maintenance for the DVD Blu Ray			
1	/MVD-EMA-DVD EMA YR 1 - DVD	\$600.00	\$600.00
1	/MVD-EMA-DVD EMA YR 2 - DVD	\$600.00	\$600.00

Continued





**communications**  
Mobile-Vision, Inc.

ATTACHMENT "A"

Quotation

Garden Grove Police Department  
11301 Acacia Parkway  
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Page 3

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
1	/MVD-EMA-DVD      EMA YR 3 - DVD	\$600.00	\$600.00
1	/MVD-EMA-DVD      EMA YR 4 - DVD	\$600.00	\$600.00
Extended Maintenance for the LSCMPR500 - Hardware			
1	/MISC                  EMA YR 1 LSCMPR500 - Hardware	\$569.00	\$569.00
1	/MISC                  EMA YR 2 LSCMPR500 - Hardware	\$569.00	\$569.00
1	/MISC                  EMA YR 3 LSCMPR500 - Hardware	\$569.00	\$569.00
1	/MISC                  EMA YR 4 LSCMPR500 - Hardware	\$569.00	\$569.00

*Note: Pricing does not include installation of the ICV's antenna, network wiring or wireless access points where noted.*

**DELIVERY:** 30 Days or Less ARO

**CREDIT TERMS:** Net 30 Days

**OTHER STATE/LOCAL FEES:** Not Included

SUBTOTAL:	\$474,358.00
Sales Tax (As Required):	\$ 30,940.00
Shipping w/n the continental USA via UPS Ground:	\$3,100.00
<b>TOTAL:</b>	<b>\$508,398.00</b>



Attachment "B"

**ORIGINAL**

**Proposal For:**



**Orange County Sheriff's Department**

320 N. Flower St., 2<sup>nd</sup> Floor  
Santa Ana, CA 92703

SEALED PROPOSAL:

**Digital In-Car Video System**

RFP No: **SXZ0000142**

Point of Contact: **Joe Urbano**

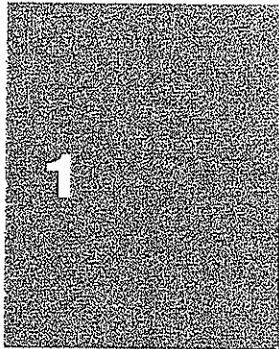
BID DUE DATE: November 7, 2007 at 4:00PM

Submitted by:

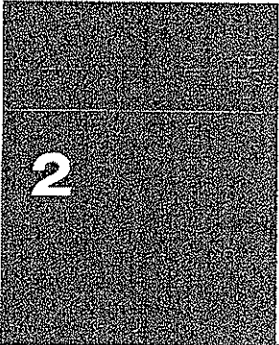


**communications**

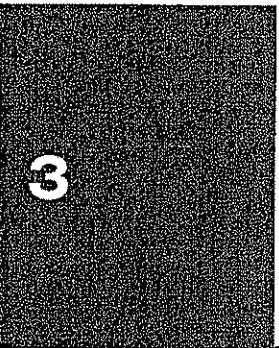
Mobile-Vision, Inc.



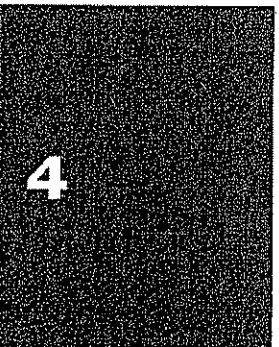
**PART 1**



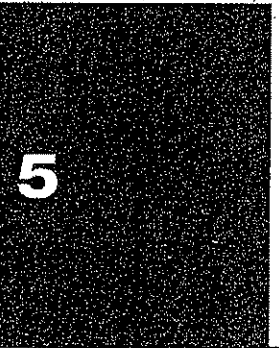
**PART 2:  
COMPANY PROFILE**



**PART 3:  
OFFEROR'S PROPOSAL**



**PART 4:  
REFERENCES**



**PRODUCT BROCHURE**

**REQUEST FOR PROPOSAL**



County of Orange  
 Sheriff-Coroner  
 Purchasing Services Bureau  
 320 N. Flower Street  
 Santa Ana, CA 92703  
 (714) 834-4700

PROPOSALS MUST BE RECEIVED BY OR  
 PRIOR TO:  
 4:00 P.M. PT

ON OR BEFORE  
**11/07/07**  
 Proposal Number  
**SXZ0000142**  
 File Folder No: 579184

**INSTRUCTIONS**

1. SUBMIT 1 ORIGINAL, 5 COPIES AND 1 CD ROM IN MS WORD 2003 OF YOUR PROPOSAL.
2. RETURN THIS PAGE SIGNED, WITH PROPOSAL.
3. ALL PROPOSALS ARE TO BE IDENTIFIED WITH RFP #, AND RETURNED IN A SEALED ENVELOPE OR PACKAGE.
4. FOR FURTHER INFORMATION, CONTACT:  
 Joe Urbano  
 jurbano@ocsdfinancial.org  
 FAX (714) 834-6411

**DATE: September 24, 2007**

**REQUEST FOR PROPOSAL ("RFP")  
 COVER PAGE**

**Project Title: Digital In-Car Video System (PVS) hereinafter referred to as ("PVS")**

The County is seeking proposals from Offeror(s) who can provide and install Digital In-Car Video Systems (PVS) in the Orange County Sheriff's Department 200 law enforcement vehicles. Offerors are invited to propose a Digital In-Car Video System in accordance with the terms and conditions set forth in Section III – Model Contract, including Attachments. Refer to Section III, Attachment A, of this RFP for an expanded description of the Scope of Work to be performed.

A detailed Scope of Work concerning the County's requirements is provided herein as Attachment A.

This Request for Proposal(s) is set out in the following format:

- SECTION I. Introduction and Instructions to Offerors
- SECTION II. Proposal Response Requirements/Minimum Qualifications
- SECTION III. Model Contract with Attachments & Exhibits.

**PROPOSALS ARE DUE ON OR BEFORE November 7, 2007, 4:00 PM Pacific Time.**

Proposals must be submitted in sealed packages. See complete instructions in Section I.

All questions and inquiries related to this RFP must be directed to: **Joe Urbano** (hereinafter referred to as "Assigned Buyer") Orange County Sheriff's Department – Purchasing Bureau, 320 N. Flower Street, 2<sup>nd</sup> floor, Santa Ana, CA 92703. Email address: jurbano@ocsdfinancial.org, Fax: (714) 834-6411.

Offerors are not to contact other County personnel with any questions or clarifications concerning this RFP. The Sheriff's Department will provide all official communication concerning this RFP. Any County response relevant to this RFP other than through or approved by Sheriff's Department is unauthorized and will be considered invalid.

<input checked="" type="checkbox"/> I HAVE READ, UNDERSTOOD AND AGREE TO THE TERMS AND CONDITIONS HERewith AND I AM SUBMITTING A RESPONSE TO THIS SOLICITATION.		
November 5, 2007		L-3 Communications Mobile-Vision, Inc.
Date		Company Name
	Louis W. Blanco	President
*Authorized Signature	Print Name	Title
	Walter Horetsky	Corporate Secretary
*Authorized Signature	Print Name	Title

\*If a corporation, this document must be signed by two corporate officers. The first signature must be either the Chairman of the Board, President, or any Vice President. The second signature must be the Secretary, an Assistant Secretary, the Chief Financial Officer, or any Assistant Treasurer.  
 RETURN THIS SHEET WITH YOUR RESPONSE



communications

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Mobile-Vision, Inc.  
90 Fanny Road  
Boonton, NJ 07005  
800-336-8475 Fax: 973-257-3024  
www.L-3Com.com/mv

November 6, 2007

Orange County Sheriff's Department  
Attn: Mr. Joe Urbano, Assigned Buyer  
Purchasing Bureau  
320 N. Flower Street, 2<sup>nd</sup> Flr.  
Santa Ana, CA 92703

RE: Request for Proposal Number: SXZ00000142  
Digital In-car Video System (PVS)

Dear Mr. Urbano:

L-3 Communications Mobile-Vision, Inc. is pleased to submit the accompanying response to the County's digital in-car video requirements. We are the nation's leading supplier of digital in-car recording technology for law enforcement and the current supplier of the VHS in-car video systems currently in use by the Orange County Sheriff's Department. Our company is well versed in large, multi-location digital in-car video implementations and our list of references, found in Part 4 of our response, lists some of these agencies.

The County's requirements have been carefully reviewed and we have responded with a complete solution that addresses all aspects of an efficient and secure in-car digital program. The deliverables proposed include our new Flashback-II™ Digital In-Car Video Recording System and Digital Evidence Pro™ (DEP) digital video management system. The Flashback-II Digital In-car Video Recording System is an update of our widely used Flashback system. It provides full D-1 resolution, up to 32 GB of solid-state memory and the latest digitizing technology enabling it to produce very high quality images with minimal file size requirements. The DE-Pro video evidence management solution utilizes a Dell server with RAID storage and our patent pending Intelligent Volume Management™. Additional storage capacity can be economically added if required in the future. Also included is a DVD robot which will automatically copy all files to write-once DVD making them available long after they have been purged from RAID and a Tape Back-up for the North and South offices. The Digital Evidence Pro management application will:

- Control the automatic upload of digital video files from cars to the secure DEP server
- Automate file archiving, backup and restoration using a robotic DVD burner
- Control system access and create a log of all database activity
- Allow file searches by a number of key data fields
- Enable cases to be built around individual video files

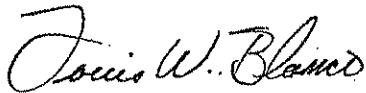
- Allow other digital media, such as jpegs, and PDFs to be imported into case files
- Provide automatic purging routines

Our proposal includes all the deliverables required to implement a successful digital in-car video program including licenses, training, warranty support and extended maintenance. Not included at this time is the installation of the wireless access points which cannot be quoted until a carefully survey of each location is conducted.

As a division of L-3 Communications Corporation, a Fortune 200 technology company, L-3 Mobile-Vision is recognized as the premier provider of digital in-car video equipment to law enforcement and public safety agencies throughout the US. Since inception, we have provided over 65,000 in-car video systems to more than 4,500 agencies within the US. We currently have over 6,600 of our digital Flashback systems in operation and the digital video files which they generate have withstood legal challenge.

Thank you for the consideration that will be given to this proposal

Sincerely

A handwritten signature in cursive script that reads "Louis W. Blanco".

Louis W. Blanco  
President

**L-3 COMMUNICATIONS MOBILE-VISION, INC.**

**UNANIMOUS WRITTEN CONSENT  
of  
THE SOLE DIRECTOR  
TO ACTION IN LIEU OF MEETING**

**Effective Date: As of June 17, 2005**

The undersigned, being the sole member of the Board of Directors (the "Board of Directors") of L-3 Communications Mobile-Vision, Inc., (the "Corporation"), hereby consents to the adoption of the following resolutions and to the taking of the actions contemplated thereby:

**GENERAL CORPORATE MATTERS**

RESOLVED, that the following persons be, and they hereby are, elected to the office(s) set forth opposite their respective names, to serve, subject to their earlier resignation or removal in accordance with the By-laws of the Corporation and the laws of the State of New Jersey, until the first meeting of the Board of Directors of the Corporation following the next annual meeting of stockholders of the Corporation and until their respective successors are elected and shall have qualified:

<u>Name</u>	<u>Office</u>
Frank C. Lanza	Chairman and Chief Executive Officer
Louis Blanco	President
Michael T. Strianese	Chief Financial Officer
Christopher C. Cambria	Vice President, Secretary
Stephen M. Souza	Vice President, Treasurer
Kenneth R. Goldstein	Vice President, Taxes and Assistant Treasurer
Walter Horetsky	Assistant Secretary

RESOLVED, that all actions heretofore taken by any director or officer of the Corporation in connection with any matter referred to in the foregoing resolutions are hereby approved, ratified and confirmed in all respects;

RESOLVED, that the officers of the Corporation be, and each of them hereby is, authorized and directed to do and perform, or cause to be done and performed, all such acts, deeds and things and to make, execute and deliver, or cause to be made, executed and delivered, all such agreements, undertakings, documents, instruments or certificates in the name and on behalf of the Corporation or otherwise as each such officer may deem necessary or appropriate to effectuate or carry out fully the purpose and intent of the foregoing resolutions and any of the transactions contemplated thereby;

RESOLVED, that the Secretary or the Assistant Secretary of the Corporation is hereby authorized to certify and deliver, to any person to whom such certification and delivery may be deemed necessary or appropriate in the opinion of such Secretary or Assistant Secretary, a true copy of the foregoing resolutions; and

RESOLVED, that a copy of this written consent be filed with the minutes of proceedings of the Corporation.

IN WITNESS WHEREOF, the undersigned, being the sole director of the Corporation, has executed this written consent as of the date and year first above written.

  
\_\_\_\_\_  
CHRISTOPHER C. CAMBRIA



## EXECUTIVE SUMMARY

The response submitted herein is for a complete turnkey digital in-car recording solution for the Orange County Sheriff's Department. The OCSD is currently transitioning from VHS technology. The fleet will include 235 digitally equipped units which will be distributed, in unequal number, among six divisional offices.

Our proposal is complete with the exception of the installation of wireless access points at each location. It includes:

- 235 Flashback-II Digital In-car Systems
- Installation of the Flashback-II Systems
- Digital Evidence Pro video management systems at the North Office, South Office, West Office, San Clemente Office, John Wayne Airport and OCT Airport.
- Installation of all Digital Evidence Pro video management systems.
- All software licenses
- Training
- Warranties and Support
- Extended Maintenance

The solution we proposed meets nearly all of the County's requirements. We have responded to these requirements in Part 3, Section I of our response and have identified and explained all exceptions in Part 1.

The proposed Flashback-II System is a recent update of our popular Flashback solid-state recording system of which more than 7000 units are in operation. Flashback-II is the result of an intensive, 18 month, engineering effort to utilize the latest technology enabling us to produce high quality, full resolution, video files while maintaining file sizes comparable to the original Flashback DVR. In production this month, the Flashback-II will be available for this project and represents a significant upgrade from the legacy product. Like the original Flashback DVR, the Flashback-II DVR records to solid-state flash memory instead of a hard drive making it nearly immune to shock, vibration and temperature extremes. As proposed, the Flashback-II DVR will be supplied with 17GB of flash memory of which 1GB will be internal memory. This is far more that will be needed given the fact that cars will return to the office at least twice a day.

In our proposed solution files will automatically and wirelessly upload from cars to secure servers located at each district office. Our patent pending "load balancing" technology will assure the fastest upload times by dynamically matching car to access point based on predetermined criteria. Our wireless upload technology is so refined that we are suggesting that no consideration be given to making provisions for a hardwired file transfer.

Each District Office will be equipped with a Digital Evidence Pro video management system. This is the most comprehensive management system available today. File upload, archiving and purging are based on predetermined rules that tailor the system to the County's operational methods. Files are stored either online using RAID 6 or near line via tape or DVD. A perpetual record of all files is maintained and files that have been purged from online storage can quickly located and restored years afterward. As with our wireless solution, security is paramount and multiple layers of security are provided for.

The proposed solution can be easily upgraded by the addition of a centrally located Agency Server. With modest connectivity between district offices and headquarters the Agency Server can have global knowledge of video that resides at each district. High priority video and video that have been converted into "cases" will be automatically pulled through the network to reside on the Agency Server which becomes a central depository for high level files.

Our response includes a comprehensive implementation plan. While this is a large project, when broken down to six smaller projects it can easily be completed within 90 days of receipt of order. Because of the importance of this project an assistant Project Manager will be assigned to aide the primary manager. Many of the logistical issues, such as scheduling and training can be resolved in the initial Project Review Meeting and we understand the need to be flexible and sensitive to the County's requirements.

The Training Plan included within our response recognizes that the County desires to have training across many disciplines. This concept can be applauded as it allows the County to derive the maximum value from the proposed solution while maintaining a high level of self sufficiency. We will endeavor to ensure that the County's training objectives are fulfilled.

Extensive detail is provided within Part 3, Section 10 regarding the proposed solution architecture, hardware requirements for each location and the basis by which this hardware was sized and selected. We invite dialogue with the County to fine tune the County's requirements to ensure a solution that is truly custom tailored to the County's needs.

L-3 Mobile-Vision has extensive experience supporting customers throughout the country. Our support balances responsiveness and costs. In the interest of providing fast and economical support we have specialized in remote database and system support. Via a high speed connection we are able to provide file maintenance, install updates and upgrades and perform many diagnostic tasks. Dell components will come with next business day onsite support from Dell. Other components qualify for factory support but we will endeavor to provide an advanced replacement or loaner wherever possible. Regardless of our level of commitment, our company has a reputation to do whatever it takes to restore our customers to full operation.

Finally, in reviewing this proposal the reader needs to understand that L-3 Mobile-Vision is a pioneer in the in-car video industry. We have provided almost 70,000 systems to over 5000 agencies. We have been successful because we make sure that our customers are successful. The OCSD is about to make a very large investment in technology and can take comfort in knowing that L-3 Mobile-Vision is a part of L-3 Communications Corporation, the sixth largest defense company in the country and a Fortune 200 company. We have the financial and technical resources to assure the success of this project and we will be here years from now as your digital in-car video partner.

Part 1:

(Complete this section and submit as Part I in first tabbed section of Proposal)

1. Cover Letter

All proposals must be accompanied by a cover letter of introduction and executive summary of the Proposal. The cover letter must be signed by person(s) with authority to bind the Offeror. If the Offeror is a corporation, then the signature of two corporate specific officers as follows is required. The first signature must be one of the following: a) the chairman of the Board; or b) the president; or c) any vice president. The second signature must be one of the following: a) secretary; or b) the chief financial officer; or c) any assistant secretary; or d) any assistant treasurer. In the alternative, a single corporate signature is acceptable when accompanied by a corporate resolution demonstrating the legal authority of the signator to bind the corporation. An unsigned or improperly signed Proposal submission may be grounds for rejection of the proposal and disqualification from further participation in this RFP process. All Proposals shall include in this first tabbed section, the Cover Page of this RFP and any subsequent addenda issued to this RFP with appropriate signatures as required.

2. Validity of Proposal

The County requires that all Proposals be valid for at least three hundred and sixty five (365) days. Submissions not valid for at least three hundred and sixty five (365) days will be considered non-responsive. The Offeror shall state the length of time for which the submitted proposal shall remain valid below:

365 days

Validity of Response (in days)

Josie W. Blanco  
Signature required

3. Certification of Understanding

The County assumes no responsibility for any understanding or representation made by any of its officers or agents during or before the execution of any Contract resulting from this RFP unless:

- A. Such understanding or representations are expressly stated in the Contract; and
- B. The Contract expressly provides that the County therefore assumes the responsibility.

Representations made but not expressly stated and for which liability is not expressly assumed by the County in the Contract shall be deemed only for the information of the Offeror.

By signing below, Offeror certifies that such understanding has been considered in this response.

Josie W. Blanco  
(Signature required)

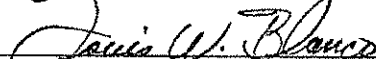
4. Minimum Qualifications Statement

Offeror shall certify that it meets all minimum qualifications and requirements set forth above in this Section II by signing below.

Josie W. Blanco  
(Signature required)

5. Certificate of Insurance

The Offeror shall certify their willingness and ability to provide the required insurance coverage and certificates as set forth in Section III, Model Contract by signing below (see General Terms and Conditions, Article P for insurance requirements).

  
\_\_\_\_\_  
(Signature required)

A. If Offeror takes any exception to article P. Insurance Provisions, as set forth in Section III. Model Contract; please see section 8 Statement of Compliance below.

6. Child Support Enforcement and EDD Independent Contractor Requirements

The Offeror shall certify Offeror's willingness and ability to provide the required Orange County Child Support Enforcement and EDD Independent Contractor Reporting Requirements as indicated in Section I by signing below. (see Exhibits I and II to the Model Contract for this RFP).

  
\_\_\_\_\_  
(Signature required)

7. Conflict of Interest

Disclose any financial, business or other relationship with the County of Orange or other entity that the County of Orange Board of Supervisors governs, which may have an impact, effect or influence on the outcome of the services you propose to provide. Provide a list of current clients, employees, principals or shareholders (including family members) who may have a financial interest in the outcome of services you proposed to provide. Disclose any financial, business or other relationship within the last three years with any firm or member of any firm who may have a financial interest in the outcome of the work. If you believe that no conflict of interest exists or would exist, sign below.

  
\_\_\_\_\_  
(Signature required)

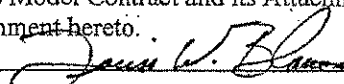
8. Statement of Compliance

A statement of compliance with all parts of this RFP or a listing of exceptions and suggested changes must be submitted in response to this RFP. Offeror shall not submit its licensing agreement as a proposed substitute and/or addition to the County's terms and conditions. If Offeror submits its licensing agreement as a proposed substitute and/or addition to the County's terms and conditions, it may be deemed non-responsive. Offer shall not submit a blanket objection to the entire Model Contract. If Offeror submits a blanket objection to the entire Contract without a list of exceptions to each clause as required under B (1), it may be deemed non-responsive at the sole discretion of the County. **Offeror must certify either A or B by signing below:**

A. This proposal is in strict compliance with said Request for Proposals, including the terms and conditions set forth in the Model Contract and its Attachments, and no exceptions thereto are proposed.

\_\_\_\_\_  
(Signature required)  
OR

B. This proposal is in strict compliance with said Request for Proposals, including the terms and conditions set forth in the Model Contract and its Attachments, except for those proposed exceptions listed in a separate attachment hereto.

  
\_\_\_\_\_  
(Signature required)

1. The attachment for each proposed exception must include the following:
  1. The complete provision Offeror is taking exception to
  2. The RFP page number and section of the provision Offeror is taking exception to;
  3. The Offeror's suggested rewording;
  4. Reason(s) for submitting the proposed exception; and
  5. Any impact the proposed exception may have on cost, scheduling, or other areas.

## Statement of Compliance

**1.3: TRUE Infrared Capability (850nm) – 0.7 lux (color) and 0.04 lux (BW)**  
Page: 42; Specification 1.3

Suggested Rewording: "Extended low light capability 0.7 lux to 0.04 lux.

Reason for submitting proposed exception: There are various ways to achieve low light capability. Our technology provides for up to .03 lux, exceeding the County's requirement but does not use infrared.

Impact the proposed exception may have: More cameras will meet the requirement and there will be no impact in performance.

**1.8: Motorized telephoto lens – minimum 22x Optical Zoom**  
Page 42; Specification 1.8

Suggested Rewording: "Minimum of 12x optical zoom."

Reason for submitting proposed exception: Not all leading in-car video manufacturers offer 22x optical zoom. Changing the requirement makes it more inclusive by accepting proven products by other major manufacturers.

Impact the proposed exception may have: In reality 12X zoom is more than sufficient for this application. There will be no negative impact.

**1.1.2: Autozoom configurable through software for degree and time at zoom level.** Page 42; Specification 1.1.2

Suggested Rewording: Autozoom, factory configured or configurable through software for degree and time at zoom level.

Reason for submitting proposed exception: Ability to change autozoom levels can create inconsistency between vehicles. Factory configured autozoom has proven to be adequate for thousands of agencies.

Impact proposed exception may have: None

**1.1.8: Front of camera has record indicator, visible from front of vehicle.**  
Page 43; Specification 1.1.8

Suggested rewording: RECORD indicator that is visible from the front of the vehicle.

Reason for submitting proposed exception: LED indicator located on front of camera may lead to glare issues on recorded video. Also, our solution allows for the County to choose which location on the vehicle they wish to mount the RECORD indicator.

Impact proposed exception may have: Will allow County to choose mounting option that best suits their needs.

**3.5:** Bracket mounts in existing holes in the vehicle (no extra holes to be drilled).  
Page 44; Specification 3.5

Suggested rewording: Bracket mounts in existing holes in the vehicle (no extra holes to be drilled) or windshield mounted

Reason for submitting proposed exception: Our NiteWatch camera is small and very light weight. It is usually mounted directly to the windshield just to the right of the rear view mirror and out of the airbag zone.

Impact proposed exception may have: Camera will be mounted out of the airbag zone on a mount that will yield on impact reducing the risk of occupant injury.

**4.1.6:** Audio monitor speaker is automatically disabled when in-car microphone is enabled. Page 45; Specification 4.1.6

Suggested rewording: Eliminate requirement 4.1.6

Reason for submitting proposed exception: Officers should be trained to always keep the volume turned down, except when playing back recordings, to prevent subjects in custody from eavesdropping on conversations between officers that may take place outside of vehicle.

Impact proposed exception may have: Increased privacy with regard to conversations outside of vehicle.

**5.1:** Pre-event recording programmable by an administrator from 0 to 180 seconds.  
Page 45; Specification 5.1

Suggested rewording: Pre-event recording programmable by an administrator from 0 to 60 seconds, minimum.

Reason for submitting proposed exception: 60 seconds of pre-event record has proven to be more than sufficient by law enforcement agencies throughout the Country with very few using more than 20 seconds of pre-event.

Impact proposed exception may have: None

**5.8:** Removable hard drive shall have the capacity to store at least 24 hours of audio/video at the specified resolution.

Page 46; Specification 5.8

Suggested rewording: Removable media shall have the capacity to store at least 24 hours of audio/video at the specified resolution.

Reason for submitting proposed exception: Our solution can meet this requirement using solid-state flash memory which is virtually immune from the vibration, shock and temperature extremes that would damage a hard drive. Flash memory also reduces power requirements and allows the same DVR to be used affectively on other vehicles such as motorcycles and helicopters.

Impact proposed exception may have: Better reliability under all conditions, longer life, less failures, smaller size, less weight, lower power consumption.

**5.1.7-0.03:** Driver's Door

Page 47; Specification 5.1.7-0.03

Suggested rewording: Eliminate requirement.

Reason for submitting proposed exception: Allowing the DVR to be triggered into record mode whenever the Driver's Door is opened would result in numerous unnecessary recordings and would prevent automatic wireless uploading at the end of a shift since the DVR would be activated when the officer exited his/her vehicle.

Impact proposed exception may have: Unnecessary recordings would be eliminated and upload functionality would not be hindered.

**5.1.7 – 0.06:** Radar

Page 47; Specification 5.1.7 – 0.06

Suggested rewording: None

Reason for submitting the proposed exception: We do not comply

Impact proposed exception may have: Radar will not trigger DVR into record.



**5.1.13 – 0.03: Heading**  
Page 48; Specification 5.1.13 – 0.03

Suggested rewording: None

Reason for submitting the proposed exception: Do not comply.

Impact proposed exception may have: Heading will not be recorded, however, vehicle position is recorded which allows the heading to be determined. Our solution also permits the vehicles position to be displayed on mapping software through which its heading is easily determined.

**5.1.13 – 0.13: Crash Sensor**  
Page 49; Specification 5.1.13 – 0.13

Suggested rewording: Eliminate requirement to Record Crash Sensor Trigger

Reason for submitting the proposed exception: Even though the Crash sensor will activate the RECORD mode it cannot be displayed as metadata because it is a momentary trigger.

Impact proposed exception may have: There will be no impact on performance. The Crash Sensor will simply not be recorded as metadata.

**5.1.13 – 0.17: Vehicle Speed Sensor**  
Page 49; Specification 5.1.13 – 0.17

Suggested rewording: Vehicle Speed Sensor or GPS

Reason for submitting the proposed exception: Some well proved solutions measure vehicle speed using GPS and not a vehicle speed sensor. Vehicle speed sensors are specific to make, model and year of car making them difficult to update when systems are migrated from an old vehicle to a newer one.

Impact proposed exception may have: Accurate readings of vehicle speed could, on very rare occasions, be temporarily interrupted due to lost or weak GPS signals. However, speed readings should be accurate 99.9% of the time. However, the equipment will work in any make, model or year of vehicle.

Orange County Sheriff's Department  
RFP SXZ0000142  
Digital In-Car Video Systems (PVS)

**13.1:** Complete turnkey system, excepting LAN and LAN connected computers.  
Page 56; Specification 13.1

Suggested Rewording: Complete turnkey system, excepting LAN and LAN connected computers and the installation of the wireless network components.

Reason for submitting the proposed exception: A thorough site evaluation has not been completed at each of the County's locations. There may be many variables that affect the cost of installing wireless access points at each location. Once the County allows vendors to perform site visits, an accurate quote can be obtained and submitted to the County.

Impact proposed exception may have: The County will most likely save money since quotations will not be inflated to protect against possible unknown difficulties associated with the installation of wireless access points.

Part 2:

Company Profile

(Complete this form and submit as Part 2 in second tabbed section of response)

Company Legal Name: L-3 Communications Mobile-Vision, Inc.

Company Legal Status (corporation, partnership, sole proprietor etc.): Corporation

Business Address: 90 Fanny Rd.; Boonton, NJ 07005

Website Address: www.L-3com.com/MV

Telephone Number: ( ) (800) 336-8475 Facsimile Number: ( ) (973) 257-3024

Email Address: Louis.Blanco@L-3com.com

Length of time the firm has been in business: 20 Years Length of time at current location: 20 Years

Is your firm a sole proprietorship doing business under a different name:      Yes   X   No  
If yes, please indicate sole proprietor's name and the name you are doing business under: \_\_\_\_\_

Is your firm incorporated:   X   Yes      No If yes, State of Incorporation: New Jersey

Federal Taxpayer ID Number 22-2893537

Regular business hours: Monday through Friday, 8:00AM through 6:30PM (EST)

Regular holidays and hours when business is closed: Closed on: President's; Good Friday; Memorial; Independence; Labor; Thanksgiving; Christmas; and New Year's Days

Contact person in reference to this solicitation: Louis W. Blanco

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Email Address: Louis.Blanco@L-3com.com

Contact person for accounts payable: Robin Wohlgemuth

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Email Address: Paul.Augustyniak@L-3com.com

**In the event of an emergency or declared disaster, the following information is required;**

Name of contact during non-business hours: Chris Kadoch

Telephone Number: ( ) (973) 255-0963 Facsimile Number: ( ) (973) 257-3024

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**PART 3:**

**L-3's PROPOSAL**

## **PART 3**

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# **1: Scope of Work**

Item #	Sub-Set	CAI	FEATURES / DESCRIPTION	YES	NO	COMMENTS
1			PRIMARY CAMERA			
	1.1		COLOR DIGITAL, NOT ANALOG, ANALOG OUTPUT	X		
	1.2		1/3 CCD (MINIMUM 380,000 PIXELS) PER MANUFACTURER'S SPECIFICATIONS	X		
	1.3		TRUE INFRARED CAPABILITY (850nm) - 0.7 LUX (COLOR) AND 0.04 LUX (BW)	X		Extended low light 0.7 lux to 0.04 lux using frame stacking technology.
	1.4		AUTO SWITCHING BETWEEN COLOR AND INFRARED/B&W MODES	X		
	1.5		AUTO FOCUS	X		
	1.6		AUTO IRIS	X		
	1.7		AUTO WHITE BALANCE	X		
	1.8		MOTORIZED TELEPHOTO LENS - MINIMUM 22X OPTICAL ZOOM	X		Motorized zoom lens with 12x optical zoom.
	1.9		STANDARD LENS - 68 DEGREE VIEWING ANGLE, OR HORIZONTAL COVERAGE OF 27 FEET AT A DISTANCE OF 20 FEET	X		
	1.1.1		AUTO ZOOM (FROM COMPUTER TOUCH SCREEN, ON CAMERA OR BY TRIGGER INPUT)	X		
	1.1.2		AUTO ZOOM CONFIGURABLE THROUGH SOFTWARE FOR DEGREE AND TIME AT ZOOM LEVEL	X		Configurable at factory
	1.1.3		MANUAL ZOOM FROM COMPUTER TOUCH SCREEN OR ON-CAMERA CONTROL.	X		

Item #	Sub-Seq	QAT	FEATURES / DESCRIPTION	YES	NO	COMMENTS
	1.1.4		AUTO BACKLIGHT COMPENSATION	X		
	1.1.5		NOT BE SUBJECT TO BURN-IN, MAGNETIC FIELD DISTORTION, GEOMETRIC DISTORTION, IS RF SHIELDED AND HIGHLY SHOCK RESISTANT	X		
	1.1.6		DIMENSIONS, INCLUDING CASE, NOT TO EXCEED 7"(L) X 3.5" (W) X 3.5" (H)	X		
	1.1.7		ENVIRONMENTAL OPERATION FROM 10 TO 175 DEGREES FAHRENHEIT AT 90% HUMIDITY	X		
	1.1.8		FRONT OF CAMERA HAS RECORD INDICATOR, VISIBLE FROM FRONT OF VEHICLE		X	Record indicator can be mounted in windshield or grill.
2			<b>SECONDARY (REAR-FACING) CAMERA</b>			
	2.1		SAME SPECIFICATIONS AS PRIMARY WITH THE FOLLOWING EXCEPTIONS:			
	2.2		COMPACT IN SIZE	X		
	2.3		NOT DETECTABLE BY REAR SEAT OCCUPANT (PRISONER)	X		
	2.4		FIXED WIDE-ANGLE LENS (COVERS THE ENTIRE REAR SEAT AND OCCUPANTS)	X		
3			<b>CAMERA MOUNTING BRACKET</b>			
	3.1		SECURELY MOUNTED AS TO NOT INHIBIT OR PREVENT SAFE OPERATION OF VEHICLE	X		
	3.2		BRACKET ALLOWS CAMERA TO SWIVEL 180 DEGREES HORIZONTAL WITHOUT THE USE OF TOOLS	X		
	3.3		BRACKET ALLOWS THE CAMERA TO TILT 90 DEGREES UP AND DOWN	X		



Item #	SUB-SET	CAI	FEATURES / DESCRIPTION	YES	NO	COMMENTS
	3.4		BRACKET MATERIAL RUGGED, NOT TO VIBRATE OR DISTORT WHILE IN PURSUIT	X		
	3.5		BRACKET MOUNTS IN EXISTING HOLES IN THE VEHICLE (NO EXTRA HOLES TO BE DRILLED)	X		Windshield mount.
	3.6		DESIGNED SPECIFICALLY FOR CAMERA TO BE USED, NOT A 'UNIVERSAL' TYPE BRACKET	X		
	3.7		MUST MOUNT OUTSIDE THE AIRBAG ZONE; INCLUDED WITH SYSTEM NOT AN EXTRA COST ACCESSORY.	X		
	AUDIO SYSTEM					
	4.1		TECHNOLOGY TO ALLOW AT LEAST 20 USERS ON SCENE WITHOUT ANY INTERFERENCE	X		
	4.2		NO TWO TRANSMITTERS USE THE SAME CODE	X		
	4.3		IN-VEHICLE DOCKING STATION CAPABLE OF RE-CHARGING TRANSMITTER'S BATTERY	X		
	4.4		TRANSMITTER AND DOCKING STATION CAPABLE OF SENDING AND RECEIVING SIMULTANEOUS VOICE AND DATA	X		
	4.5		DUPLEX DATA STREAM TO CARRY STATUS INFORMATION BETWEEN DOCKING STATION AND TRANSMITTER	X		
	4.6		ANY TRANSMITTER AUTOMATICALLY SYNCHRONIZES TO ANY DOCKING STATION - ONCE SYNCHRONIZED, STAYS SYNCHRONIZED UNTIL DOCKING STATION IS CHANGED	X		
	4.7		TRANSMITTER RECHARGEABLE BATTERY GIVES MINIMUM OF 12 HOURS TALK TIME AND 40 HOURS STANDBY TIME	X		

Item #	Sub-Seq	CAT	FEATURES / DESCRIPTION	YES	NO	COMMENTS
	4.8		TYPICAL TRANSMITTER RANGE IS 1000 FEET	X		
	4.9		DOCKING STATION AUTOMATICALLY ACTIVATES TRANSMITTER UPON ANY SYSTEM TRIGGER INPUT	X		
	4.1.1		TRANSMITTER CAN REMOTELY START RECORD MODE	X		
	4.1.2		TRANSMITTER HAS DETACHABLE MICROPHONE CORD WITH WINDSCREEN AND CLOTHING CLIP	X		
	4.1.3		TRANSMITTER HAS BUILT-IN MICROPHONE	X		
	4.1.4		TRANSMITTER CAN DETECT BAD EXTERNAL MICROPHONE CORD WITH AUTO-SWITCHING TO INTERNAL MICROPHONE IF EXTERNAL IS BAD	X		
	4.1.5		TRANSMITTER ANTENNA IS PART OF, OR INTERNAL TO, THE CASE (AN EXTERNAL ANTENNA IS UNACCEPTABLE)	X		
	4.1.6		AUDIO MONITOR SPEAKER IS AUTOMATICALLY DISABLED WHEN IN-CAR MICROPHONE IS ENABLED		X	
	4.1.7		IN CAR MICROPHONE CONTROLLED BY SWITCH INTEGRATED WITH VIDEO SYSTEM	X		
	4.1.8		IN-CAR MICROPHONE IS ON A SEPARATE AUDIO TRACK FROM REMOTE MICROPHONE (AUDIO IS NOT SUMMED OR MIXED - CHANNELS WILL REMAIN SEPARATE)	X		
5	<b>DIGITAL VIDEO RECORDER</b>					
	5.1		PRE-EVENT RECORDING PROGRAMMABLE BY AN ADMINISTRATOR FROM 0 TO 180 SECONDS	X		Exception - Programmable 0-60 seconds.
	5.2		RECORD TWO EACH VIDEO AND THREE EACH AUDIO CHANNELS SIMULTANEOUSLY FROM MULTIPLE SOURCES	X		

Item	Sub-Item	Category	Features/Description	Yes	No	Comments
	5.3		REMOVABLE STORAGE MEDIA HOLDS MINIMUM 24 HOURS OF VIDEO/DATA AND AUDIO AT THE SPECIFIED VIDEO RESOLUTION	X		
	5.4		VIDEO CODEC OPTIMIZED FOR LAW ENFORCEMENT APPLICATIONS	X		
	5.5		VIDEO QUALITY IS MINIMUM 704 x 480 AT 30 FRAMES PER SECOND	X		
	5.6		INTERNAL GPS PROVIDING VEHICLE SPEED, COURSE AND POSITION	X		
	5.7		GPS SETS INTERNAL DVR CLOCK	X		
	5.8		REMOVABLE HARD DRIVE SHALL HAVE THE CAPACITY TO STORE AT LEAST 24 HOURS OF AUDIO/VIDEO AT THE SPECIFIED RESOLUTION	X		Removable 16GB Compact Flash memory.
	5.9		EACH INDIVIDUAL VIDEO FRAME IS ENCRYPTED	X		
	5.1.1		VIDEO FILE TRANSFER BY EITHER MEDIA SWAP, WIRED ETHERNET OR INTERNAL WIRELESS ETHERNET (ETHERNET TO BE GIGABIT)	X		
	5.1.2		DVR BACKLIT FRONT PANEL BUTTONS FOR MANUAL CONTROL: RECORD, STOP, PLAY/PAUSE, FAST FORWARD, FAST REVERSE, MARK AND TRACE	X		
	5.1.3		FRONT PANEL LIGHTED INDICATORS: POWER ON, RECORD AND PLAY	X		
	5.1.4		LOCKABLE STORAGE DEVICE DOOR (DISABLES RECORD FUNCTION WHEN OPEN)	X		
	5.1.5		DVR POWERS ON AUTOMATICALLY WITHIN 30 SECONDS AFTER IGNITION SWITCH IS TURNED ON	X		
	5.1.6		DVR POWERS OFF AUTOMATICALLY WHEN IGNITION SWITCH IS TURNED OFF, UNLESS IN RECORD OR DOWNLOAD MODES	X		

Item #	Sub-Set	CAF	FEATURES/DESCRIPTION	YES	NO	COMMENTS
5.1.7			MINIMUM DVR RECORD TRIGGERS:			
	0.01		LIGHTS	X		
	0.02		SIREN	X		
	0.03		DRIVER'S DOOR	X		Can be wired to auxiliary input but not recommended.
	0.04		CRASH SENSOR	X		
	0.05		SHOTGUN RACK	X		
	0.06		RADAR		X	
	0.07		REMOTE MICROPHONE	X		
	0.08		MAXIMUM SPEED THRESHOLD	X		
	0.09		AUXILIARY (PROGRAMMABLE)	X		
5.1.8			SYSTEM IS CAPABLE OF INTERFACING WITH MAJOR RADAR MANUFACTURERS' TRAFFIC RADAR UNITS, PRESENT AND FUTURE (UPGRADEABLE)	X		
5.1.9			DVR ABLE TO TAG INCIDENTS AT ONE OF FIVE DIFFERENT PRIORITY LEVELS (DEFINED BY AGENCY ADMINISTRATOR DURING SETUP)	X		
5.1.10			RECORDING STOP ACCOMPLISHED ONLY BY MANUALLY PRESSING THE 'STOP' BUTTON ON THE DVR CONTROL PANEL	X		

Item #	SRD-SEC1	CAT	FEATURES/DESCRIPTION	YES	NO	COMMENTS
	5.1.11		PRESSING DVR 'PLAY' BUTTON LISTS PRIOR RECORDINGS FOR USER SELECTION	X		
	5.1.12		EDITING AND/OR DELETING RECORDINGS CAN ONLY BE DONE BY AN ADMINISTRATOR AFTER THE RECORDING IS UPLOADED TO THE SYSTEM	X		Can only be purged. Metadata resides on server indefinitely.
	5.1.13		CAPABLE OF RECORDING AGENCY'S CHOICE OF THE FOLLOWING:			
		0.01	POSITION - LATITUDE/LONGITUDE	X		
		0.02	SPEED	X		
		0.03	HEADING		X	
		0.04	OFFICER NAME	X		
		0.05	VEHICLE NUMBER	X		
		0.06	DATE/TIME	X		
		0.07	SIREN	X		
		0.08	EMERGENCY LIGHTS	X		
		0.09	BRAKE	X		
		0.10	MICROPHONE #1	X		

REQ#	INDENT	CAT	FEATURES/DESCRIPTION	YES	NO	COMMENTS
		0.11	MICROPHONE #2	X		
		0.12	MICROPHONE #3	X		
		0.13	CRASH SENSOR	X		Crash sensor will trigger Record. It cannot be displayed as metadata because it is a momentary trigger.
		0.14	AUXILIARY #1	X		
		0.15	AUXILIARY #2	X		
		0.16	RECORD TRIGGER SOURCE	X		
		0.17	VEHICLE SPEED SENSOR		X	Vehicle speed is measured by GPS and displayed on screen and by metadata.
		0.18	VOLTAGE (AS MEASURED INSIDE DVR)	X		
		0.19	TEMPERATURE (AS MEASURED AT DVR PROCESSOR)	X		
		0.20	RADAR INFORMATION	X		
		0.21	REMAINING RECORDING TIME AVAILABLE ON MEDIA	X		
5.1.14			PROPRIETARY SOFTWARE TO IDENTIFY ANY FILE ALTERATION ATTEMPT	X		
5.1.15			TIME DISPLAYED IN 24 HOUR FORMAT (HH:MM)	X		

ITEM #	SUB-SET	QAT	FEATURES/DESCRIPTION	YES	NO	COMMENTS
	5.1.16		DISPLAYS REMAINING RECORDING TIME WHEN IN 'STOP' MODE	X		
	5.1.17		SOUNDS AUDIBLE BEEP AT THIRTY MINUTES OR LESS RECORDING TIME, REPEATED EVERY MINUTE	X		
	5.1.18		DVR HOUSED IN STAINLESS STEEL OR EXTRUDED ALUMINUM CASE	X		
	5.1.19		MAXIMUM DVR SIZE EQUAL OR LESS THAN 7" x 6.26" x 2.5" (W x D x H) UNLESS TRUNK MOUNTED	X		
	5.1.20		DVR OPERATES BETWEEN 9 AND 18 VDC WITH UNDER/OVER VOLTAGE PROTECTION	X		
	5.1.21		DVR MAXIMUM CURRENT DRAW EQUAL OR LESS THAN 1.5 AMPS AT 13.8 VDC	X		
	5.1.22		DVR MANUFACTURED IN ISO-9000 CERTIFIED FACTORY	X		
	5.1.23		REMOVABLE DEVICE RUGGED (150G SHOCK, 15G VIBRATION, MTBF 1,000,000 HOURS OR 30,000 CONNECTIONS AND 100,000 READ/WRITE CYCLES)	X		
	5.1.24		DVR MEETS FCC PART 15 SPECIFICATIONS AND IS FCC PART 15 TYPE-ACCEPTED	X		
6	VIDEO DOWNLOADING AND UPLOADING					
	6.1		WIRED VIDEO TRANSFER - STANDARD LAN CONNECTIVITY - EASILY ACCESSIBLE FROM DRIVER'S SEAT	X		
	6.2		WIRELESS VIDEO TRANSFER -- STANDARD LAN CONNECTIVITY	X		
	6.3		WIRELESS TRANSFER IS FULLY AUTOMATIC (TRANSFER, CONFIRM RECEIPT OF AND CLEAR STORAGE MEDIA AS APPROPRIATE)	X		

Item #	Sub-req	CAT	FEATURES/DESCRIPTION	YES	NO	COMMENTS
	6.4		STATUS OF LAN CONNECTION, SPEED AND ACTIVITY FOR WIRED AND WIRELESS	X		
	6.5		STORAGE MEDIA REMOVAL FOR UPLOAD VIA DOCKING STATION	X		
	6.6		STORAGE MEDIA REMOVAL/INSERTION REQUIRES NO ADDITIONAL INPUT FROM OFFICER	X		
7	SYSTEM ACCESS					
	7.1		SINGLE LICENSE COVERS SERVER AND ALL CLIENTS - NO MAXIMUM	X		
	7.2		STANDARD LAN CONNECTIVITY - NO SPECIAL CLIENT SOFTWARE LICENSING	X		
	7.3		ABLE TO SUPPORT HIERARCHICAL ACCESS PRIVILEGE ASSIGNMENT	X		
	7.4		SUPPORTS SPECIAL CLASS USER AS LIMITED DISPLAY ONLY UNDER CONTROLLED CONDITIONS	X		
8	SYSTEM VIDEO STORAGE MANAGEMENT					
	8.1		ALL VIDEO REMAINS ON AGENCY LAN	X		
	8.2		ALL ACTIVITY TRACKED AND LOGGED	X		
	8.3		USES RAID FOR ONLINE STORAGE	X		
	8.4		USES ARCHIVAL MEDIA SYSTEM FOR RAID BACKUP	X		
	8.5		BACKUP PROCESS IS AUTOMATIC	X		



Item #	Sub-Item	Cat	FEATURES / DESCRIPTION	YES	NO	COMMENTS
	8.6		USES SEPARATE ARCHIVAL MEDIA SYSTEM FOR LONG-TERM STORAGE	X		
	8.7		ARCHIVAL PROCESS IS AUTOMATIC AFTER ONLINE STORAGE PERIOD HAS EXPIRED	X		
	8.8		ARCHIVES ARE AUTOMATICALLY CATALOGUED AND MARKED FOR AUTOMATIC RETRIEVAL	X		
	8.9		ONLINE AND ARCHIVED FILES ARE SEARCHABLE FOR RETRIEVAL	X		
	8.1.1		FILE INFORMATION REMAINS ON ONLINE SERVER, EVEN AFTER FILES HAVE ROLLED OFF THE ARCHIVE SERVER FOR TRACTABILITY AND RETRIEVAL	X		
	8.1.2		ARCHIVED FILES ARE RETRIEVED AND RELOADED AUTOMATICALLY	X		
	8.1.3		ARCHIVED FILES ARE REMOVED FROM ARCHIVE SERVER AND ELECTRONICALLY TAGGED FOR RETRIEVAL	X		
	8.1.4		ALL ACTIVITY TRACKED AND 'CHAIN OF CUSTODY' DOCUMENT AUTOMATICALLY GENERATED	X		
	8.1.5		DEFINABLE REVIEW PERIOD WHERE FILES REMAIN ONLINE	X		
	8.1.6		AUTOMATED POSSIBLE EVIDENCE TAGGING VIA PRIORITY DESIGNATION AT TIME OF INCIDENT	X		
	8.1.7		MANUAL TAGGING AVAILABLE AFTER FILE HAS BEEN REVIEWED	X		
9			<b>USER INTERACTIONS &amp; CAPABILITIES</b>			
	9.1		AGENCY LOGO PROMINENTLY DISPLAYED ON ALL INTERFACE WINDOWS	X		

Item #	Sub-Item #	Cat	Features/Description	Yes	No	Comments
	9.2		WEB BASED INTERFACE THAT REQUIRES NO SPECIAL TRAINING (ANY BROWSER CAPABLE)	X		
	9.3		SIMPLE KEY DATA FOR SEARCH:			
		0.01	OFFICER NAME	X		
		0.02	VEHICLE IDENTIFIER	X		
		0.03	DATE/TIME	X		
		0.04	PRIORITY LEVEL	X		
		0.05	GPS LOCATION	X		
		0.06	VIDEO STATE	X		
	9.1.1		SIMPLE DISPLAY USING STANDARDIZED ICONS, RELEVANT TEXT AND THUMBNAIL IMAGE OF VIDEO	X		
	9.1.2		VIEWING USES STANDARDIZED VCR/DVD PLAYER CONTROL BUTTONS	X		
	9.1.3		CAPABLE OF CAPTURING STILL PICTURES FROM WITHIN A VIDEO FILE	X		
	9.1.4		SIMPLE 'CLICK' FUNCTION TO MARK POTENTIAL EVIDENCE FILES	X		
	9.1.5		SIMPLE CREATION OF CASE FOLDERS CONTAINING SUCH AS THE FOLLOWING:	X		

Item #	sub-sect	CAT	FEATURES / DESCRIPTION	YES	NO	COMMENTS
		0.01	CASE #	X		
		0.02	CITATION #	X		
		0.03	SUSPECT'S NAME	X		
		0.04	RACE	X		
		0.05	GENDER	X		
9.1.6			AGENCY DEFINABLE NOTATION BOXES SUCH AS:			
		0.01	DUI	X		
		0.02	DOMESTIC	X		
		0.03	ACCIDENT	X		
		0.04	MINOR	X		
		0.05	HOMICIDE	X		
9.1.8			FACILITATES USE OF VIDEO FOR COURT AND INVESTIGATIONS	X		

Item #	sub-set	CAT	FEATURES / DESCRIPTION	YES	NO	COMMENTS
10			ADMINISTRATOR INTERACTIONS & CAPABILITIES			
	10.1		ADMINISTRATOR HAS FULL ACCESS	X		
	10.2		ADMINISTRATOR :	X		
		0.01	ADD / DELETE USERS	X		
		0.02	ADD / REMOVE VEHICLES	X		
		0.03	DEFINE CASE NOTATIONS	X		
		0.04	ASSIGN IDENTIFIERS	X		
		0.05	ASSIGN OPERATING RULES TO IN CAR PRIORITY LEVELS	X		
		0.06	SINGLE PHYSICAL OUTPUT POINT FOR SECURITY AND EVIDENCE CONTROL	X		
11			OTHER MEDIA MANAGEMENT			
	11.1		DIGITAL EVIDENCE MANAGEMENT SOLUTION SUPPORTS UPLOADING/MANAGEMENT OF OTHER TYPES OF DIGITAL MEDIA FILES	X		
12			FILE OUTPUT			
	12.1		ALLOWS FOR OUTPUT REQUESTS	X		
	12.2		SUPPORTS EXPORTING IN NATIVE FORMAT, AVI, WMV OR OTHER DIGITAL MEDIA FORMAT	X		

Item	sub-set	CAT	FEATURES/DESCRIPTION	YES	NO	COMMENTS
	12.3		CAN BE TRANSFERRED TO DVD OR OTHER RECORDABLE MEDIA	X		
	12.4		FILES VIEWABLE BY STANDARD, OFF-THE-SHELF SOFTWARE AND/OR HARDWARE	X		
	12.5		FILE VALIDITY CHECK ON MEDIA ALONG WITH CHAIN OF CUSTODY LOG	X		
13			<b>HARDWARE ARCHITECTURE</b>			
	13.1		COMPLETE TURNKEY SYSTEM, EXCEPTING LAN AND LAN CONNECTED COMPUTERS	X		Price does not include installation of wireless access points which can only be quoted after a thorough survey of all facilities
	13.2		USES INDUSTRY ACCEPTED STANDARDS/COMPONENTS AND SUBSYSTEMS (NO PROPRIETARY EQUIPMENT)	X		
	13.3		EXPANDABLE AS NEEDED	X		
	13.4		REMOTEY ACCESSIBLE BY MANUFACTURER FOR SUPPORT	X		
14			<b>WARRANTY</b>			
	14.1		1 YEAR MINIMUM, PARTS AND LABOR	X		
	14.2		RESPONSE TIME: WITHIN 4 HOURS OF INITIAL CALL TO CUSTOMER SERVICE / ACCOUNT REPRESENTTIVE; 24 HOURS / DAY, 7 DAYS A WEEK	X		
	14.3		FULL MANUFACTURER'S PARTS AND SERVICE SUPPORT FOR A MINIMUM OF 10 YEARS	X		
15			<b>TRAINING &amp; DOCUMENTATION FOR TECHNICAL REPAIR/MAINTENANCE</b>			
	15.1		PROVIDES COMPREHENSIVE TRAINING FOR INSTALLATION	X		

item #	sub-req	CAI	FEATURES DESCRIPTION	YES	NO	COMMENTS
	15.2		PROVIDES COMPREHENSIVE TRAINING FOR USERS	X		
	15.3		PROVIDES COMPREHENSIVE TRAINING FOR SERVICE/MAINTENANCE	X		
	15.4		PROVIDES COMPREHENSIVE DOCUMENTATION (AS BUILTS, DETAILED SERVICE MANUALS, USER MANUALS)	X		
	15.5		PROVIDE ACCESS TO ALL NECESSARY SPARE/REPAIR PARTS FOR SUPPORT PERIOD (10 YEARS MINIMUM)	X		
	15.6		DETAILED SYSTEM, INSTALLATION AND OTHER TECHNICAL SCHEMATICS IN AUTOCAD FORMAT	X		

### Detailed Scope of Work / Project Deliverables

#### *Introduction*

The Orange County Sheriff's Department is accepting proposals to provide and install digital in-car video systems (PVS) in its 200 law enforcement vehicles. Proposals must be for a turnkey system that includes the in-vehicle system, three video download methods as specified herein, and a "backend" system for managing and storing all video and related data for no less than one year. Proposals must also include operator and technical training as specified herein.

#### *System Description*

The PVS shall consist of:

- Digital video recorder
- Micro-processor based control system
- Primary windshield mounted miniature color camera with articulating mount and zoom capability
- Secondary rear (back seat) facing camera
- Color LCD monitor with audio and system controls
- Bi-directional digital spread spectrum wireless microphone system
- Additional microphone mounted within the law enforcement vehicle

Comply

The system shall be capable of providing a clear audio and video record of traffic stops, pursuits, sobriety tests, prisoner transport, etc.

Comply

Video authentication shall be provided in a manner that will ensure any attempts to alter the video are detected. Specialized software designed to detect and reveal alterations to video files shall be supplied as required.

Comply

The system shall be able to record video at a minimum resolution of 704 x 480 at a minimum 30 fps per camera when activated.

Full D-1 Resolution which is 720 x 480 at 30 fps.

The system shall allow for viewing a front end software application which is capable of a complete system user interface on the existing mobile data computer's screen. The interface shall be easily manipulated via the in car computer touch screen if available or by a mouse. This interface shall be able to be minimized at any time so as not to interfere with other computer applications and the interface shall allow the user to switch between a day and night time viewer. This shall allow the user to easily view the screen in the daytime while reducing the light at night so as not to become a potential target.

Comply. Interfacing with a Mobile Data Computer requires purchase of our Vehicle Viewer (MVD-FB-V-V) at an additional charge of \$225.00 per vehicle. Certain VPN applications, such as NetMotion may hinder operation of the Vehicle View Laptop interface.

COUNTY OF ORANGE – SHERIFFS DEPARTMENT  
RFP NUMBER SXZ0000142  
L-3 COMMUNICATIONS – MOBILE-VISION, INC.

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The system shall provide indicators that show when the system is turned on, when the system is recording, and how much recording space is left before data must be off-loaded from the primary storage device.

Comply

The main control, or Video and Audio processor, shall be small enough to be able to be conveniently mounted in the front compartment or in the trunk depending on user preference. The main unit shall be sealed so as not to allow spilled material such as coffee, water, or the like to seep into the unit or cause damage.

Comply

The system components shall be rugged and able to withstand heat, dust, moisture and vibration such as may be encountered while installed in the trunk or passenger compartment of a police vehicle.

Comply – The Flashback-II records to flash memory and has no moving parts. It can withstand extreme shock, vibration and temperatures.

The system shall include software that allows a department administrator to configure camera settings, recording bit rate, power constraints and limits, system triggers and definable screen markers, as well as a number of other functions as described in this RFP. Further, this software must be based on Open Systems Architecture so as to accommodate other backend systems that may or may not be recommended by the vendor.

Camera settings are not configurable in field. We comply with the remaining requirements.

Software updates shall occur automatically by push technology from the back-end server. It shall not be acceptable to update software by changing IC's (modules) or downloading software from another computer.

Comply

The system shall have the ability to create bookmarks identifying a specific portion of video either during or after the video has been recorded in the car. These bookmarks must include free text fields so that the officer can add comments or information to the bookmark, such as vehicle description, suspect information, case information, file number or any other comments he or she deems relevant or as dictated by department protocols.

The Flashback-II has the ability to create bookmarks in the car, at the time a video is recorded or after the file has been uploaded to the management server. Free text fields cannot be added in the car. Once the video resides on the server a "case" can be created and text added.

The system shall allow the officer to record live snapshots or record snapshots at any time of any selected frame of video. That snapshot shall be capable of being stored as a JPEG or Bitmap file on a designated location on the storage media of the video system. The snapshot function will provide a designated user with the ability to 'enhance' the video snapshot without affecting the integrity of the original video file.

Comply. Snapshots are available once video has been uploaded to the Digital Evidence Pro server.

The system, via the connection of a GPS system or via a connection to the vehicle's speed sensor, shall be capable of recording GPS data and the vehicle's speed as metadata while the video is being recorded.

Comply. The Flashback-II uses GPS to record vehicle speed.

All cables, hardware and incidentals required for installation shall be supplied.

Comply.



**Primary Camera**

The camera shall be a color digital camera with analog video output.  
Comply.

The camera shall have a minimum 1/3 CCD (charged couple device) image sensor with a minimum effective area of 380,000 pixels.  
Comply.

The camera shall include TRUE built in infrared capability to 850 nm, and be rated with low-light light sensitivity of 0.7 lux in the color mode and 0.04 lux in the infrared/ black and white mode to allow officers to record in almost total darkness or where there is very little ambient light.  
The NiteWatch™ camera provided uses “frame stacking” to achieve a low light sensitivity of 0.03 lux.

The camera must include automatic switching between color and infrared/black and white. The camera shall include the capability for manual switching by the officer.  
Comply.

The camera shall incorporate Auto Focus.  
Comply.

The camera shall incorporate an Auto Iris that shall automatically adjust for varying light levels.  
The camera shall include a motorized Telephoto Zoom Lens with a minimum optical zoom of 22X and include a digital zoom capability of 10X that can be disabled by the operator. The lens shall be capable of providing a minimum 68 degree horizontal viewing angle (horizontal coverage of 27 ft. when the camera is pointing to an object 20 ft away).  
The NiteWatch camera incorporates an Auto Iris and has an Optical Zoom of 12X and includes a digital zoom of 12X. This provides a total of 144X zoom.

The camera shall have automatic White Balance.  
Comply.

The camera shall have Automatic Zoom function that can either be activated at the camera or from a touch screen computer if applicable. The primary function of the automatic Zoom is to capture license plates with the recording system.  
The Automatic Zoom Function can be activated at the camera only.

The auto zoom shall be capable of being configured by software to set the degree of zoom, the time the camera holds that zoom level, and when it returns to the default setting.  
Comply. Auto Zoom is pre-set from the factor to 8x. Should the Orange County Sheriff's Department wish to alter this setting, it can be done at the factory, prior to shipment.

The camera shall have a Manual Zoom function that can either be activated at the camera or from a touch screen computer if applicable.  
The Manual Zoom function can be activated at the camera only.

The camera shall have automatic Backlight Compensation.  
Comply.

The camera shall not be subject to burn in, blooming, streaking, geometric distortion or affected by magnetic fields and shall be highly resistant to shock and vibration.  
Comply.

The camera's dimensions shall not exceed 7"(L) x 3.5"(W) x 3.5"(H)  
Comply.

The camera shall operate in temperatures from 10' F to 175'F.  
Comply.

The system shall include a video record indicating LED. The LED will be visible from the front of the vehicle, to allow the officer to easily ascertain from outside the vehicle if the primary camera is being recorded.

The NiteWatch camera does not include a record indicting LED however, a record indicating LED will be provided that can be mounted in the windshield or vehicle grill.

#### ***Secondary (Rear-Facing) Camera***

The rear-facing camera shall meet same specifications and requirements as the primary camera with the following exceptions:

The rear facing camera shall be compact in size and not detectable by the prisoner.  
Comply.

The rear-facing camera shall have a fixed wide angle lens capable of recording the entire rear seat and its occupants.  
Comply.

#### ***Digital Camera Mounting/Bracket Specifications***

The camera Mounting Bracket shall securely mount the camera in the front inside compartment of the vehicle so as not to inhibit or prevent the occupant from safely operating the vehicle.  
Comply.

The camera Mounting Bracket will allow the camera to swivel 180 degrees from forward, sideways in either direction allowing the camera to capture 360 degrees of video without the use of tools.  
Comply.

The camera Mounting Bracket shall be such that the camera can also be tilted 90 degrees up and 90 degrees down by the officer.  
Comply.

The camera Mounting Bracket shall be constructed of a material that is rugged and not subject to distortion under extreme temperature conditions nor sustain damage through forces exerted through the typical operation of a police vehicle.  
Comply.

The Mounting Bracket shall be specifically designed for the digital camera that it supports to enable it to be able to withstand vibration, including vibration due to camera's mass in relationship to the attachment points of the bracket.  
Comply.

The Mounting Bracket shall be constructed in such a manner that it does not require the user to drill extra holes in the vehicle to accomplish the mounting of this device.

Comply.

The mounting bracket must be designed to support the camera so that it is NOT in the airbag zone.

Comply.

The Mounting Bracket shall be included in the camera kit and not sold as an accessory.

Comply.

***High Performance Audio Transmitter/Receiver System***

The system shall include a fixed in-car microphone and a wireless microphone system, to allow the officer to record audio originating inside the vehicle, and to maintain audio recording during traffic stops while outside the vehicle. Typical operating range (transmitter on officer to receiver in car) shall be 1000 feet (305 m).

Comply.

The wireless microphone system shall allow a minimum of 20 transmitter/receiver pairs in close proximity at a scene without interfering with one another. System needs to be capable of ensuring that no two transmitters use the same code.

Comply.

The system shall provide an in-vehicle docking station for the wireless microphone transmitter. This station shall include the system's receiver and shall be capable of recharging the transmitter's battery.

Comply.

Both the transmitter and docking station shall have the ability of sending simultaneous audio and data streams. The data stream shall be used to send status information between the transmitter and the docking station.

Comply.

The transmitter shall program/sync its unique code into the docking station whenever it is placed in the docking station. Once programmed, the receiver shall only communicate with that transmitter. Any transmitter shall be capable of programming and use with any docking station.

Comply.

The transmitter shall include a rechargeable battery. This battery shall provide 12 hours of ON time, and 40 hours of service in the standby mode.

Comply.

The docking station shall have the ability to automatically activate the officer-worn audio transmitter whenever the video system receives a record command from the light bar, siren or record switch.

Comply.

The wireless transmitter microphone shall have the ability to start the recorder from outside the vehicle.

Comply.

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The transmitter shall include a detachable microphone cord with clip to allow the microphone to be placed anywhere on the officer's uniform. A windscreen shall be provided with the microphone to reduce wind noise.

Comply.

The transmitter shall also include a built-in microphone as an alternative to its corded microphone or as a back-up should the microphone cord become damaged.

Comply.

The transmitter's antenna shall be built into the case. No external antenna shall be acceptable.

Comply.

A hard-wired in-car microphone shall be available to record conversations inside the patrol vehicle simultaneously with conversations recorded via the wireless microphone. The in-car microphone shall mount inside the passenger compartment, and be controlled by a switch integrated with the video system. The in-car microphone shall automatically be activated when the rear-facing camera is activated. The in-car microphone shall be compact in size and not detectable by the prisoner.

Comply.

When the in-car microphone is switched on, the monitor's speaker shall automatically be turned off. This shall prevent feedback and insure that recorded conversations will not be heard over the monitor's speaker.

We do not comply. Officers are trained to always keep the volume turned down, except when playing back recordings, to prevent subjects in custody from eavesdropping on conversations.

The in-car microphone shall not affect use of the officer's wireless microphone. Each audio source shall be recorded simultaneously onto separate audio tracks.

Comply.

It shall not be acceptable to sum the two audio sources (in-car and wireless) onto one audio track, nor shall it be acceptable to turn the wireless microphone's audio off when the in-car microphone is turned on.

Comply.

### **Digital Video Recorder – DVR**

The system shall incorporate pre-event recording that is user configurable from 0 to 180 seconds. Pre-event recording is configurable up to 60 seconds.

The DVR shall utilize a codec that has been optimized for law enforcement applications. The codec shall allow for simultaneous recording of two video channels and three audio channels as well as multiple sources of metadata.

Comply.

The DVR shall include an internal GPS receiver to provide vehicle position, course and speed information. The GPS receiver shall also be used to set the internal DVR clock to the proper time and date so that all vehicles display and record proper time.

Comply.

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Digital video files shall be transferred from the DVR by all of the following methods:

- a. Removal of the hard drive/storage media  
Comply.
- b. Through a hardwired Ethernet connection to the DVR's  
Comply.
- c. Automatically via the DVR's internal 802.11 wireless LAN  
Comply.

The front panel of the DVR shall have backlit controls for: RECORD, STOP, PLAY/PAUSE, FAST FORWARD, FAST REVERSE and TRACE.

Comply.

The front panel of the DVR shall have lighted indicators for: POWER ON; RECORD and PLAY.

Comply.

A lockable door shall be provided on the front panel of the DVR to secure the removable hard drive. The DVR RECORD function shall be disabled whenever this door is open.

Comply.

The DVR to be able to record within thirty seconds after the vehicle's ignition is switched on.

Comply.

The DVR shall automatically power down after the vehicle's ignition is turned off, provided the DVR is not in RECORD and is not in the process of downloading files via its built-in 802.11 wireless link or through a hardwired Ethernet connection.

Comply.

Manual activation of the DVR into the RECORD mode shall be by means of a backlit push button on the face of the DVR.

Comply.

Automatic activation of the DVR into the RECORD mode shall be provided by any combination of the following user programmable methods:

Activation of the vehicle's emergency lights

Comply

Activation of the vehicle's siren

Comply.

Activation of any auxiliary input

Comply.

Activation of air bag, seat belt or collision sensors to detect impacts from all four sides of the vehicle  
Comply. Optional Collision Sensor (MVD-CRASH-BATT) will be provided. This unit includes a backup battery that will allow the DVR to record for up to 15 minutes should the vehicles electrical system be disabled in a server collision.

Activation of rack mounted shotgun or other rifle lock sensor

Comply – requires that gun release has an electrical activator.

Activation of wireless microphones

Comply.

Exceeding a predetermined GPS speed threshold

Comply.

Opening of driver's door

We do not comply. Activation when the driver's door is opened would cause numerous unnecessary recordings. It would also mean that the RECORD mode would activate when an officer was leaving the vehicle at the end of shift. This would prevent the automatic wireless upload of files and leave the DVR in the RECORD mode until its storage was at full capacity.

The DVR shall provide a means to tag an incident at the time it is recorded with a priority designation. There shall be five priority levels available and they shall be able to be defined/assigned by the agency upon system set-up.

Comply.

Activation of the DVR's STOP mode shall be accomplished only by pressing the backlit STOP button on the face of the DVR.

Comply.

When the DVR's backlit PLAY button is pressed a list of all prior recordings shall appear on the LCD monitor screen. The user may select any recording to view using function keys on the face of the DVR.

Comply.

It shall be impossible to edit or delete recordings from within the vehicle. Proprietary software must identify any attempt to alter the file.

Comply.

The DVR shall be capable of recording the agency's choice of the following as metadata and/or on screen display:

- Position – longitude and latitude
- Speed
- Heading
- Officer Name
- Vehicle Number
- Date/Time
- Siren
- Lights
- Brake
- Mic 1, Mic 2, Mic 3
- Vehicle Impact Sensor (option)
- Auxiliary 1
- Auxiliary 2
- RECORD trigger source
- Vehicle Speed Sensor (VSS)
- Voltage, measured in DVR
- Temperature, measured at the DVR processing IC
- Auxiliary interface (RADAR)
- Recording time remaining/storage available

Comply to all except heading.

The system shall be capable of interfacing with traffic radar units. Target and vehicle speeds shall be capable of being displayed on the in-car computer monitor and recorded on the digital media as meta data while the video is being recorded.

Comply.

When in the STOP mode, the system's LCD monitor shall display the remaining storage capacity in bytes. When in the RECORD mode, the system's LCD monitor shall display the remaining storage capacity in a 24-hour (HH:MM) format. An audible beep shall warn the operator once each minute when there is thirty minutes, or less, record time remaining.

Comply.

The DVR shall be housed in an extruded aluminum or stainless steel case and utilize die cast front and rear panels for maximum strength and to provide full RFI/EMI shielding and immunity.

Comply.

The DVR shall not exceed 7"X6.25"X2.5" (W x D x H), unless it will be trunk-mounted.

Comply.

The DVR shall operate on 9 VDC to 18 VDC. Maximum current shall not exceed 1.5 amperes at a nominal 13.8 VDC.

Comply.

The DVR shall be manufactured in a factor that is ISO-9001 certified.

Comply.

The DVR shall be FCC Part 15 accepted.

Comply.

Recorded files shall be stored on removable device that is housed in a die cast aluminum case that is rugged enough to withstand heat, dust, moisture and vibration (anti-shock up to 150G & anti-vibration up to 15G) with a mean time between failure allowing the device to be inserted and removed from its internal connection bay 30,000 times and re-recorded up to 100,000 times.

Comply – files are stored on a 16GB compact flash card. Storage can be expanded to 32 GB.

## DIGITAL EVIDENCE MANAGEMENT SOLUTION SPECIFICATIONS

### *System Description*

The digital evidence management solution shall consist of:

Video transfer system

Comply

Management

Comply

Storage server

Comply

Distribution server

Comply

Backup storage

Comply

Output system

Comply

It shall be capable of automatically or manually downloading video from the mobile systems and managing access and distribution through the agency's LAN.

Comply

The digital evidence management solution shall be capable of automatically receiving all data from the vehicle (including video, metadata and incident priority designations) and shall transfer the data rapidly utilizing layered industry standard secure transfer methods.

Comply

Using digital evidence management application software, the system shall be capable of organizing and managing files based on evidence state and priority and managing their lifecycle accordingly. All user interactions shall require no special skills to use. The application software shall facilitate video utilization through simple key data search, evidence tagging of video, case file creation, distribution, outputting of videos, etc. The application software shall also manage cataloging and migration of files to-from RAID/TAPE in order to facilitate the instant access with long-term storage and security.

Comply

The digital evidence management solution shall maintain video evidence integrity and security in all operations. Video evidence shall be secure and stored redundantly using dual media architecture. Original video files shall be unchallengeable and maintained securely. The system shall track video throughout its lifetime. All activity shall be logged (viewing, outputting, commenting, etc.) and the system shall output a simple Chain of Custody report documenting the file's history.

Comply

#### ***Video Downloading and Uploading***

Each mobile unit shall have the capability to download video and data via wireless, removable



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hard drive or hardwire Ethernet connection.

Comply - because our wireless solution is exceptionally effective, downloading via a hardwire Ethernet connection will never be required. Therefore our proposal does not include an Ethernet jack near the driver's control console. However, an Ethernet jack can be provided as an option for an additional cost.

The digital evidence management solution shall transfer all the requisite data including video, metadata and incident priority designations.

Comply

The wireless transfer of the data shall be automatic and shall not require manual intervention. This data shall include all video, all audio channels and all metadata recorded on the storage media. The transfer shall commence as the car enters a designated access zone (hot spot) and automatically transfers, confirms receipt of, and clears the DVR's memory appropriately. Wireless coverage should encompass the entire parking lot.

Comply

There will be 6 locations where backend servers will reside and downloaded data will be stored:

- North Patrol, Santa Ana
- South Patrol, Aliso Viejo
- West Patrol, Stanton
- San Clemente Substation, San Clemente
- John Wayne Airport, Irvine
- OCTA, Garden Grove

Comply. Our proposal includes the wireless access points and antennas for each of these locations. Because access to these locations was not permitted prior to the submission of this response, and a careful survey is required to determine the location of access points and the costs associated with installing them at these locations, our proposal does not include the cost of installation - time and materials - to install the wireless components. Parking configurations could also necessitate the need for additional wireless access points at some facilities.

The removable hard drive shall be of sufficient capacity to retain at least 24 hours of video/data at the video resolution specified herein. The removal and reinsertion of the hard drives shall not require any additional input from the user. Hardware and software shall be capable of making the necessary changes to have the system ready for the deputy to use.

Comply

The wired Ethernet connection shall be easily accessible from the driver's seat. LED indicators on the

RJ45 jack need to clearly indicate proper connection with the server.

Optional - because our wireless solution is so effective downloading via a hardwire Ethernet connection will never be required. Therefore our proposal does not include an Ethernet jack near the driver's control console. However, an Ethernet jack can be provided as an option for an additional cost.

***System Access***

The digital evidence management solution shall utilize standard LAN-connected agency PCs as clients and shall not require any special client software licensing.

Comply

The digital evidence management solution shall support hierarchical access privileges that are definable by the agency.

Comply

The digital evidence management solution shall support the creation of special classes of users that are intended to function as display-only (either video or case) accounts for simple, secure, controlled and limited viewing by non-standard users. These shall be intended for prosecutors and court usage.

Comply

The digital evidence management solution shall support the ability for remote prosecutor/court access, provided sufficient bandwidth and a common LAN is utilized.

Comply

***System Video Storage Management***

The digital evidence management solution shall utilize a dual-tiered architecture that shall insure that all user interactions are through the agency LAN so that no video can be compromised or lost.

Comply

All activity shall be tracked and logged. A Chain of Custody document containing the agency logo and an easy-to-follow categorized history of activity shall be automatically generated.

Comply

The digital evidence management solution architecture shall utilize both RAID 6 on-line storage (for instant access) and secondary media for redundancy, security, long-term archiving and disaster recovery.

Comply

The archiving backup process shall be automatic. Disk/tape writing and labeling/cataloging shall occur without manual intervention. The system shall require only the periodic loading.

Comply

The digital evidence management solution shall automatically back up utilizing the same process thus eliminating the need for periodic administrator tape backups.

Comply

The digital evidence management solution shall support a definable review period (defined by the administrator) wherein all video shall be maintained on-line and available for potential evidence review. During this period, the system shall allow for the tagging of video as potential video evidence through a simple post-collection web search/retrieval interface.

Comply

The digital evidence management solution shall also support the automated tagging of potential evidence at the time the incident is recorded, through the processing of a priority designation, assigned in the vehicle at the time of the incident. This automated incident management shall support five priority levels, each with definable assignments and processing rules.

Comply

All video files shall be searchable and trackable even if not designated as evidence and/or has not rolled from the RAID system. The metadata shall remain on the server after the video has rolled off, providing an easily searchable database of the archived files and facilitating their restoration and utilization.

Comply

All archived video shall be capable of being reloaded back into the system through a simple automated process. The system shall automatically identify the appropriate archived media and shall notify the administrator for video restoration.

Comply

#### *User Interactions & Capabilities*

The digital evidence management solution user interface shall prominently display the agency's identification logo.

Comply

All user interactions shall be through a simple web-based interface and shall utilize the agency's LAN connected PCs. The application shall require no special skills other than basic web-like navigation.

Comply

The digital evidence management solution shall provide simple key data based search capabilities for easy location of video files. Data shall include: deputy's name, vehicle identifier, date/time, priority level, GPS location and PVS status.

Comply

The digital evidence management solution shall allow for the simple display of search results and shall include standardized icons, relevant text and a thumbnail image from the video. For easy data access, the results shall be sorted on any designated data column.

Comply

The digital evidence management solution shall display the video metadata and shall allow for the simple viewing of video utilizing VCR-like controls through the web interface.

Comply

The digital evidence management solution shall be capable of capturing digital stills from within a video file.

Comply

The digital evidence management solution shall utilize a simple click designation to tag videos as having potential evidence value. Such tagging shall extend the on-line lifetime of the video.

Comply

The digital evidence management solution shall be capable of the simple creation of virtual case folders. These case folders shall contain extended case related, key data fields such as: case #, citation #, suspect's name, race, gender, etc. Agency definable notation boxes for standard case information such as: DUI, domestic, accident, minor, etc. may also be added.

Comply

The digital evidence management solution shall provide simple key data-based search capabilities for easy location of case files. This data shall include extended case key data such as: case #, citation #, officer's name, suspect's name, date/time, etc.

Comply

The digital evidence management solution shall facilitate the use of video for investigations and court. The system shall be capable of simply adding multiple video files to the case folder as well as digital stills, digital documents, and any other digital files. This case folder shall be tracked as a complete unit and controlled and outputted as such.

Comply

#### ***Administrator Interactions & Capabilities***

The digital evidence management solution's administrative interface shall prominently display the agency's identification logo.

Comply

The digital evidence management solution administrator shall have full user capabilities to search and utilize video files.

Comply

The digital evidence management solution administrator shall have the ability to set up users as well as assign and remove access privileges and capabilities.

Comply

The administrator shall have the ability to add and remove vehicles to the system.

Comply

The administrator shall have the ability to define the case notations that appear when a user creates a case file.

Comply

The digital evidence management solution administrator shall have the ability to assign identifiers and operating rules to the in-car designated incident classification priority levels.

Comply

The digital evidence management solution administrator shall be designated as the single physical output point (for security and evidence control).

Comply

The digital evidence management solution shall manage the administrator's operational duties such as output to DVD/tape and video restoration from archive so as to facilitate and simplify the administrator duties. This shall include the automatic labeling of DVDs for output and the identification of archived DVD/tape number for restoration.

Comply

#### ***Other Media Management***

The digital evidence management solution shall support the uploading and management of other digital media files including: digital stills from digital cameras, digital documents, graphics, digital audio recordings, etc.

Comply

#### ***File Output***

The digital evidence management solution shall allow for output requests to be processed through LAN connected PCs. However, the physical output shall be capable of being constrained to a single station for security and evidence control.

Comply

The digital evidence management solution shall support the exporting of an event in the native format or as a converted AVI or WMV file format. Exported files can then be transferred to DVDs or other media for records exchange. The labeling of the DVD shall be automatic and contain all relevant identifying numbers. These files shall be viewable by off-the-shelf commercially available software.

Comply

The evidence DVDs shall include all necessary elements to perform an evidence validity check on the disk. DVDs may also contain other relevant digital files and the Chain of Custody

document.

Comply

***Hardware Architecture***

Except for the LAN connected PCs and the LAN network itself, the digital evidence management solution shall be provided as a complete turnkey solution containing all necessary components to download, manage, store and distribute the video for the agency.

Comply (Note, this proposal does not include the installation of wireless access points and associated network cable. However, access points and antennas are included.)

The digital evidence management solution shall use industry accepted and supportable components and subsystems.

Comply

The digital evidence management solution shall be expandable.

Comply

The digital evidence management solution shall be capable of being remotely accessed and supported by the manufacturer's personnel.

Comply

***Warranty***

All system components will be covered by a manufacture's warranty for no less than one year. Warranty will include all parts and labor. Response to calls for warranty service must be made within twenty four (24) hours. Manufacturer shall provide support for parts and service for 10 years.

Comply

- Flashback-II In-car system has a one-year parts and labor factory warranty. L-3 Mobile-Vision will pay shipping in both directions to our nearest factory service center. On site or local service may be available for an additional charge.
- Dell components have a one-year, next day, onsite warranty. Other backend components carry a one-year factory warranty by their respective manufacturers.
- The Digital Evidence Pro software application has a one-year warranty that includes remote troubleshooting and maintenance (requires server access via a high speed connection).

In all cases L-3 Mobile-Vision will endeavor to restore operation as expeditiously as possible.

***Training and Documentation of Technical Repair/Maintenance***

The Orange County Sheriff's Communications will provide maintenance and repair service during and after the warranty period expires. To this end the successful Bidder shall provide comprehensive training to Sheriff Personnel in the following areas:

Installation process and basic troubleshooting of system

Comply

Operation and use of the system  
Comply

Repair and maintenance to include detailed service manuals and access to all necessary repair parts  
Comply

The successful bidder will provide detailed documentation with screenshots of all applicable areas, including installation and maintenance of all hardware and software, proper use of equipment, administration of back end server with associated peripherals.  
Comply

Detailed system diagrams and other technical schematics shall be provided in AutoCAD format.  
Comply

***Evaluation Unit and Demonstration***

Prior to award, bidders may be required to furnish a complete sample unit (Front end PVS and back end server) for evaluation and testing within two weeks. The sample unit must be of the exact configuration proposed by bidder. The sample units will be returned upon the completion of the evaluation.  
Comply

## **2: Proposal Cost/Compensation**



**2. Proposal Cost/Compensation**

**ATTACHMENT B**

**COST/COMPENSATION FOR  
CONTRACTOR SERVICES**

**PAYMENT:** The total Contract amount for the first three years shall not exceed: \$ 1,808,832.00.  
Please see pages that follow for a comprehensive break down of costs.

<b><u>Year One Potential Costs</u></b>	
Flashback-II Digital In-car PVS for 235 vehicles including Perpetual Software Licenses	\$ 1,204,375
Digital Evidence Pro Backend Management Systems for all locations including Wireless Access Points and Antennas, Server, Storage, Archiving and Perpetual Software Licenses	\$ 301,447
Software/Hardware Configuration and integration with other County Systems (LAN at each location).	\$ 19,500
Installation of Flashback-II Digital PVS	\$ 81,075

<b><u>Year Two Costs</u></b> – see attached Recurring EMA Cost worksheet	
Extended Maintenance Agreement – all hardware/software	\$ 98,280

<b><u>Year Three Costs</u></b> – see attached Recurring EMA Cost worksheet	
Extended Maintenance Agreement – all hardware/software	\$ 104,155

<b><u>Year Four Costs</u></b> – see attached Recurring EMA Cost worksheet	
Extended Maintenance Agreement – all hardware/software	\$ 126,488

<b><u>Year Five Costs</u></b> – see attached Recurring EMA Cost worksheet	
Extended Maintenance Agreement – all hardware/software	\$ 126,488



**In-Car Components**

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
235	<b>MVD-FBDVS</b> FlashBack™ Digital Video Recorder (DVR) L-3 Mobile-Vision In-Car Digital Video Recording (DVR) solution with: • Nite-Watch™ Color camera with a 12X Optical – 144X Digital zoom • Standalone Active Matrix Color 3.5" LCD Monitor • VoiceLink Plus™ 900MHz DSS Wireless Microphone • Overwrite Protection feature • Wireless 802.11(g) LAN Card and Antenna • 16GB Flash Memory Card • GPS Receiver and Antenna • All mounts, cables and hardware • 1-Year Factory Parts and Labor Warranty	\$ 4,495.00	\$ 1,056,325.00
235	<b>MVD-IR-CAM</b> Backseat IR Camera Allows for video recording in the backseat of a patrol vehicle in low light conditions. Includes Infrared Illumination LED's and functions in both black	\$ 185.00	\$ 43,475.00
235	<b>MVD-CRASH-BAT</b> Collision Sensor (Triggers DVR for recording when involved in crash)	\$ 150.00	\$ 35,250.00
235	<b>MVD-FB-V-V</b> Laptop Interface Module	\$ 225.00	\$ 52,875.00
235	<b>MVD-FB-GRL-LT</b> Flashback In-Car Grill Light provides external confirmation of "recording enabled".	\$ 45.00	\$ 10,575.00
SUBTOTAL			\$ 1,198,500.00
SALES TAX (as required)			NA
Shipping w/n the continental USA via UPS Ground			\$ 5,875.00
<b>TOTAL</b>			<b>\$ 1,204,375.00</b>



**North Patrol - Server/Infrastructure**

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
<b><u>L-3 Mobile-Vision Digital Evidence Pro</u></b>			
L-3 Mobile-Vision's Digital Evidence Pro Solution features Network access and viewing of evidence video. It provides the department with a centralized, secure cost effective method of storing and managing video files. Featuring search capabilities via various "Key Data" including: officer name, vehicle, date, time, etc. Case file creation "Rich Media" support (digital photo's, digital audio, documents, etc.) extended case "Key Data" search. Secure chain of custody with user profiles and access rights. Provides fast search, retrieval and copy capabilities. Allows for playback of videos with "VCR like" on-screen controls and easy exporting of video to portable media. Fully supports wireless download from the Flashback™ recorder via 802.11 (a/g) standard.			
1	<b>MVD-DEP2700-3XRD1616-750</b> DVM Server, Storage & Distribution System Dell Server: Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 L-3 Mobile-Vision Digital Evidence Pro Software Redhat Linux Op Syst / Postgresql Database DVD-Rom, Floppy, Monitor, Keyboard, Mouse Power Connect Switch 10/100/1000  DASS: U320 SCSI, 3 x 16 x 750GB HDD SATA RAID 6 Hot Swappable Drives and Power Supply	\$ 53,693.00	\$ 53,693.00
9	<b>MVD-8675-A-ASSY</b> Wireless Access Point w/External Mounted Antenna 802.11(a) Wireless Access point Antenna and Cabling	\$ 795.00	\$ 7,155.00
1	<b>MVD-DVD/BU</b> DVM Backup/Archiving Station Controller - Dell PC Primera Bravo II DVD writer /printer w/25 DVD capacity Windows XP Op. System/DVD+R/RW L-3 Mobile-Vision DVD Archiving Software 100 pack: white printable DVD-R media	\$ 2,984.00	\$ 2,984.00
1	<b>MVD-124T-LTO3-2</b> Tape Backup/Archiving Station PowerVault 128T (or equivalent) with 2 x 8 Bay Cassettes Archiving and Control Software Application 2 X LTO-3 Tapes	\$ 12,376.00	\$ 12,376.00
1	<b>MVD-UPS1500</b> UPS 1500 VA (OPTIONAL)	\$ 865.00	\$ 865.00
<b>SUBTOTAL</b>			<b>\$ 77,073.00</b>
SALES TAX (as required)			<b>NA</b>
Shipping w/in the continental USA via UPS Ground			<b>\$ 75.00</b>
<b>TOTAL</b>			<b>\$ 77,148.00</b>



**South Patrol - Server/Infrastructure**

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
<b>L-3 Mobile-Vision Digital Evidence Pro</b>			
<p>L-3 Mobile-Vision's Digital Evidence Pro Solution features Network access and viewing of evidence video. It provides the department with a centralized, secure cost effective method of storing and managing video files. Featuring search capabilities via various "Key Data" including: officer name, vehicle, date, time, etc. Case file creation "Rich Media" support (digital photo's, digital audio, documents, etc.) extended case "Key Data" search. Secure chain of custody with user profiles and access rights. Provides fast search, retrieval and copy capabilities. Allows for playback of videos with "VCR like" on-screen controls and easy exporting of video to portable media. Fully supports wireless download from the Flashback™ recorder via 802.11 (a/g) standard.</p>			
1	<b>MVD-DEP2700-3XRD1616-750</b> DVM Server, Storage & Distribution System Dell Server: Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 L-3 Mobile-Vision Digital Evidence Pro Software Redhat Linux Op Syst / Postgresql Database DVD-Rom, Floppy, Monitor, Keyboard, Mouse Power Connect Swltch 10/100/1000  DASS: U320 SCSI, 3 x 16 x 750GB HDD SATA RAID 6 Hot Swappable Drives and Power Supply	\$ 53,693.00	\$ 53,693.00
9	<b>MVD-8675-A-ASSY</b> Wireless Access Point w/External Mounted Antenna 802.11(a) Wireless Access point Antenna and Cabling	\$ 795.00	\$ 7,155.00
1	<b>MVD-DVD/BU</b> DVM Backup/Archiving Station Controller - Dell PC Primera Bravo II DVD writer /printer w/25 DVD capacity Windows XP Op System/DVD+R/RW L-3 Mobile-Vision DVD Archiving Software 100 pack: white printable DVD-R media	\$ 2,984.00	\$ 2,984.00
1	<b>MVD-124T-LTO3-2</b> Tape Backup/Archiving Station PowerVault 128T (or equivalent) with 2 x 8 Bay Cassettes Archiving and Control Software Application 2 X LTO-3 Tapes	\$ 12,376.00	\$ 12,376.00
1	<b>MVD-UPS1500</b> UPS 1500 VA (OPTIONAL)	\$ 865.00	\$ 865.00
SUBTOTAL			\$ 77,073.00
SALES TAX (as required)			NA
Shipping w/n the continental USA via UPS Ground			\$ 75.00
<b>TOTAL</b>			<b>\$ 77,148.00</b>



**West Patrol - Server/Infrastructure**

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
<b>L-3 Mobile-Vision Digital Evidence Pro</b>			
<p>L-3 Mobile-Vision's Digital Evidence Pro Solution features Network access and viewing of evidence video. It provides the department with a centralized, secure cost effective method of storing and managing video files. Featuring search capabilities via various "Key Data" including: officer name, vehicle, date, time, etc. Case file creation "Rich Media" support (digital photo's, digital audio, documents, etc.) extended case "Key Data" search. Secure chain of custody with user profiles and access rights. Provides fast search, retrieval and copy capabilities. Allows for playback of videos with "VCR like" on-screen controls and easy exporting of video to portable media. Fully supports wireless download from the Flashback™ recorder via 802.11 (a/g) standard.</p>			
1	<b>MVD-DEP2730</b> DVM Server, Storage & Distribution System Dell Server: Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 L-3 Mobile-Vision Digital Evidence Pro Software Redhat Linux Op Syst / Postgresql Database DVD-Rom, Floppy, Monitor, Keyboard, Mouse Power Connect Switch 10/100/1000  DASS: U320 SCSI, 2 x 16 x 500GB HDD SATA RAID 6 Hot Swappable Drives and Power Supply	\$ 33,995.00	\$ 33,995.00
8	<b>MVD-8675-A-ASSY</b> Wireless Access Point w/External Mounted Antenna 802.11(a) Wireless Access point Antenna and Cabling	\$ 795.00	\$ 6,360.00
1	<b>MVD-DVD/BU</b> DVM Backup/Archiving Station Controller - Dell PC Primera Bravo II DVD writer /printer w/25 DVD capacity Windows XP Op System/DVD+R/RW L-3 Mobile-Vision DVD Archiving Software 100 pack: white printable DVD-R media	\$ 2,984.00	\$ 2,984.00
1	<b>MVD-UPS1500</b> UPS 1500 VA (OPTIONAL)	\$ 865.00	\$ 865.00
SUBTOTAL			\$ 44,204.00
SALES TAX (as required)			NA
Shipping w/n the continental USA via UPS Ground			\$ 50.00
<b>TOTAL</b>			<b>\$ 44,254.00</b>



**San Clemente - Server/Infrastructure**

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
<b>L-3 Mobile-Vision Digital Evidence Pro</b>			
<p>L-3 Mobile-Vision's Digital Evidence Pro Solution features Network access and viewing of evidence video. It provides the department with a centralized, secure cost effective method of storing and managing video files. Featuring search capabilities via various "Key Data" including: officer name, vehicle, date, time, etc. Case file creation "Rich Media" support (digital photo's, digital audio, documents, etc.) extended case "Key Data" search. Secure chain of custody with user profiles and access rights. Provides fast search, retrieval and copy capabilities. Allows for playback of videos with "VCR like" on-screen controls and easy exporting of video to portable media. Fully supports wireless download from the Flashback™ recorder via 802.11 (a/g) standard.</p>			
1	<b>MVD-DEP2730</b> DVM Server, Storage & Distribution System Dell Server: Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 L-3 Mobile-Vision Digital Evidence Pro Software Redhat Linux Op Syst / Postgresql Database DVD-Rom, Floppy, Monitor, Keyboard, Mouse Power Connect Switch 10/100/1000  DASS: U320 SCSI, 2 x 16 x 750GB HDD SATA RAID 6 Hot Swappable Drives and Power Supply	\$ 33,995.00	\$ 33,995.00
9	<b>MVD-8675-A-ASSY</b> Wireless Access Point w/External Mounted Antenna 802.11(a) Wireless Access point Antenna and Cabling	\$ 795.00	\$ 7,155.00
1	<b>MVD-DVD/BU</b> DVM Backup/Archiving Station Controller - Dell PC Primera Bravo II DVD writer /printer w/25 DVD capacity Windows XP Op System/DVD+R/RW L-3 Mobile-Vision DVD Archiving Software 100 pack white printable DVD-R media	\$ 2,984.00	\$ 2,984.00
1	<b>MVD-UPS1500</b> UPS 1500 VA (OPTIONAL)	\$ 865.00	\$ 865.00
<b>SUBTOTAL</b>			\$ 44,999.00
SALES TAX (as required)			NA
Shipping w/n the continental USA via UPS Ground			\$ 50.00
<b>TOTAL</b>			\$ 45,049.00



JWA - Server/Infrastructure

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
<b>L-3 Mobile-Vision Digital Evidence Pro</b>			
<p>L-3 Mobile-Vision's Digital Evidence Pro Solution features Network access and viewing of evidence video. It provides the department with a centralized, secure cost effective method of storing and managing video files. Featuring search capabilities via various "Key Data" including: officer name, vehicle, date, time, etc. Case file creation "Rich Media" support (digital photo's, digital audio, documents, etc.) extended case "Key Data" search. Secure chain of custody with user profiles and access rights. Provides fast search, retrieval and copy capabilities. Allows for playback of videos with "VCR like" on-screen controls and easy exporting of video to portable media. Fully supports wireless download from the Flashback™ recorder via 802.11 (a/g) standard.</p>			
1	<b>MVD-DEP2715</b> DVM Server, Storage & Distribution System Dell Server: Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 L-3 Mobile-Vision Digital Evidence Pro Software Redhat Linux Op Syst / Postgresql Database DVD-Rom, Floppy, Monitor, Keyboard, Mouse Power Connect Switch 10/100/1000  DASS: U320 SCSI, 16 x 500GB HDD SATA RAID 6 Hot Swappable Drives and Power Supply	\$ 21,845.00	\$ 21,845.00
5	<b>MVD-8675-A-ASSY</b> Wireless Access Point w/External Mounted Antenna 802.11(a) Wireless Access point Antenna and Cabling	\$ 795.00	\$ 3,975.00
1	<b>MVD-DVD/BU</b> DVM Backup/Archiving Station Controller - Dell PC Primera Bravo II DVD writer /printer w/25 DVD capacity Windows XP Op System/DVD+R/RW L-3 Mobile-Vision DVD Archiving Software 100 pack: white printable DVD-R media	\$ 2,984.00	\$ 2,984.00
1	<b>MVD-UPS1500</b> UPS 1500 VA (OPTIONAL)	\$ 865.00	\$ 865.00
SUBTOTAL			\$ 29,669.00
SALES TAX (as required)			NA
Shipping w/n the continental USA via UPS Ground			\$ 50.00
<b>TOTAL</b>			<b>\$ 29,719.00</b>



**OCTA - Server/Infrastructure**

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
<b><u>L-3 Mobile-Vision Digital Evidence Pro</u></b>			
<p>L-3 Mobile-Vision's Digital Evidence Pro Solution features Network access and viewing of evidence video. It provides the department with a centralized, secure cost effective method of storing and managing video files. Featuring search capabilities via various "Key Data" including: officer name, vehicle, date, time, etc. Case file creation "Rich Media" support (digital photo's, digital audio, documents, etc.) extended case "Key Data" search. Secure chain of custody with user profiles and access rights. Provides fast search, retrieval and copy capabilities. Allows for playback of videos with "VCR like" on-screen controls and easy exporting of video to portable media. Fully supports wireless download from the Flashback™ recorder via 802.11 (a/g) standard.</p>			
1	<b>MVD-DEP2715</b> DVM Server, Storage & Distribution System Dell Server: Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 L-3 Mobile-Vision Digital Evidence Pro Software Redhat Linux Op Syst / Postgresql Database DVD-Rom, Floppy, Monitor, Keyboard, Mouse Power Connect Switch 10/100/1000  DASS: U320 SCSI, 16 x 500GB HDD SATA RAID 6 Hot Swappable Drives and Power Supply	\$ 21,845.00	\$ 21,845.00
3	<b>MVD-8675-A-ASSY</b> Wireless Access Point w/External Mounted Antenna 802.11(a) Wireless Access point Antenna and Cabling	\$ 795.00	\$ 2,385.00
1	<b>MVD-DVD/BU</b> DVM Backup/Archiving Station Controller - Dell PC Primera Bravo II DVD writer /printer w/25 DVD capacity Windows XP Op System/DVD+R/RW L-3 Mobile-Vision DVD Archiving Software 100 pack: white printable DVD-R media	\$ 2,984.00	\$ 2,984.00
1	<b>MVD-UPS1500</b> UPS 1500 VA (OPTIONAL)	\$ 865.00	\$ 865.00
SUBTOTAL			\$ 28,079.00
SALES TAX (as required)			NA
Shipping w/n the continental USA via UPS Ground			\$ 50.00
<b>TOTAL</b>			<b>\$ 28,129.00</b>





In-Car Components

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
235	DVR Installation Installation of the in-car camera elements into standard vehicles.	\$ 345.00	\$ 81,075.00
6	MVD-DEP-BT2 Server Solution Configuration / Training System build out and configuration plus 1 days (on site) training for each site	\$ 3,250.00	\$ 19,500.00
SUBTOTAL			\$ 100,575.00
SALES TAX (as required)			NA
Shipping w/n the continental USA via UPS Ground			NA
TOTAL			\$ 100,575.00



**Recurring EMA Costs**

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
<b>Year Two Costs</b>			
<b>235</b>	In-Car Equipment - Extended Maintenance and Support - Year 2	\$ 300.00	\$ 70,500.00
1	North Patrol - Extended Maintenance and Support for DEP2700-3XRD1616-750: YR2	\$ 5,543.00	\$ 5,543.00
1	South Patrol - Extended Maintenance and Support for DEP2700-3XRD1616-750: YR2	\$ 5,543.00	\$ 5,543.00
1	West Patrol - Extended Maintenance and Support for DEP2730: YR2	\$ 3,629.00	\$ 3,629.00
1	San Clemente - Extended Maintenance and Support for DEP2700-2XRD1616-750: YR2	\$ 4,355.00	\$ 4,355.00
1	JWA - Extended Maintenance and Support for DEP2715: YR2	\$ 4,355.00	\$ 4,355.00
1	OCTA - Extended Maintenance and Support for DEP2715: YR2	\$ 4,355.00	\$ 4,355.00
<b>Year 2 Total</b>			<b>\$ 98,280.00</b>

<b>Year Three Costs</b>			
<b>235</b>	In-Car Equipment - Extended Maintenance and Support - Year 3	\$ 325.00	\$ 76,375.00
1	North Patrol - Extended Maintenance and Support for DEP2700-3XRD1616-750: YR3	\$ 5,543.00	\$ 5,543.00
1	South Patrol - Extended Maintenance and Support for DEP2700-3XRD1616-750: YR3	\$ 5,543.00	\$ 5,543.00
1	West Patrol - Extended Maintenance and Support for DEP2730: YR3	\$ 3,629.00	\$ 3,629.00
1	San Clemente - Extended Maintenance and Support for DEP2700-2XRD1616-750: YR3	\$ 4,355.00	\$ 4,355.00
1	JWA - Extended Maintenance and Support for DEP2715: YR3	\$ 4,355.00	\$ 4,355.00
1	OCTA - Extended Maintenance and Support for DEP2715: YR3	\$ 4,355.00	\$ 4,355.00
<b>Year 3 Total</b>			<b>\$ 104,155.00</b>

<b>Year Four Costs - If Renewed</b>			
<b>235</b>	In-Car Equipment - Extended Maintenance and Support - Year 4	\$ 350.00	\$ 82,250.00
1	North Patrol - Extended Maintenance and Support for DEP2700-3XRD1616-750: YR4	\$ 9,570.00	\$ 9,570.00
1	South Patrol - Extended Maintenance and Support for DEP2700-3XRD1616-750: YR4	\$ 9,570.00	\$ 9,570.00
1	West Patrol - Extended Maintenance and Support for DEP2730: YR4	\$ 6,958.00	\$ 6,958.00
1	San Clemente - Extended Maintenance and Support for DEP2700-2XRD1616-750: YR4	\$ 8,350.00	\$ 8,350.00
1	JWA - Extended Maintenance and Support for DEP2715: YR4	\$ 4,895.00	\$ 4,895.00
1	OCTA - Extended Maintenance and Support for DEP2715: YR4	\$ 4,895.00	\$ 4,895.00
<b>Year 4 Total</b>			<b>\$ 126,488.00</b>

<b>Year Five Costs - If Renewed</b>			
<b>235</b>	In-Car Equipment - Extended Maintenance and Support - Year 5	\$ 350.00	\$ 82,250.00
1	North Patrol - Extended Maintenance and Support for DEP2700-3XRD1616-750: YR5	\$ 9,570.00	\$ 9,570.00
1	South Patrol - Extended Maintenance and Support for DEP2700-3XRD1616-750: YR5	\$ 9,570.00	\$ 9,570.00
1	West Patrol - Extended Maintenance and Support for DEP2730: YR5	\$ 6,958.00	\$ 6,958.00
1	San Clemente - Extended Maintenance and Support for DEP2700-2XRD1616-750: YR5	\$ 8,350.00	\$ 8,350.00
1	JWA - Extended Maintenance and Support for DEP2715: YR5	\$ 4,895.00	\$ 4,895.00
1	OCTA - Extended Maintenance and Support for DEP2715: YR5	\$ 4,895.00	\$ 4,895.00
<b>Year 5 Total</b>			<b>\$ 126,488.00</b>

<b>SUBTOTAL</b>	<b>\$ 455,411.00</b>
SALES TAX (as required)	NA
Shipping w/n the continental USA via UPS Ground	NA
<b>TOTAL</b>	<b>\$ 455,411.00</b>



**L3 communications**  
Mobile-Vision, Inc.

**OPTIONAL AGENCY SERVER - Server/Infrastructure**

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
<b>L-3 Mobile-Vision Digital Evidence Pro</b>			
L-3 Mobile-Vision's Digital Evidence Pro Solution features Network access and viewing of evidence video. It provides the department with a centralized, secure cost effective method of storing and managing video files. Featuring search capabilities via various "Key Data" including: officer name, vehicle, date, time, etc. Case file creation "Rich Media" support (digital photo's, digital audio, documents, etc.) extended case "Key Data" search. Secure chain of custody with user profiles and access rights. Provides fast search, retrieval and copy capabilities. Allows for playback of videos with "VCR like" on-screen controls and easy exporting of video to portable media. Fully supports wireless download from the Flashback™ recorder via 802.11 (a/g) standard.			
1	<b>MVD-DEP2715AG</b> DVM Server, Storage & Distribution System Dell Server: Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 L-3 Mobile-Vision Digital Evidence Pro Software Redhat Linux Op Syst / Postgresql Database DVD-Rom; Floppy, Monitor, Keyboard, Mouse Power Connect Switch 10/100/1000  DASS: U320 SCSI, 16 x 500GB HDD SATA RAID 6 Hot Swappable Drives and Power Supply	\$ 23,345.00	\$ 23,345.00
1	<b>MVD-DVD/BU</b> DVM Backup/Archiving Station Controller - Dell PC Primera Bravo II DVD writer /printer w/25 DVD capacity Windows XP Op System/DVD+R/RW L-3 Mobile-Vision DVD Archiving Software 100 pack: white printable DVD-R media	\$ 2,984.00	\$ 2,984.00
1	<b>MVD-UPS1500</b> UPS 1500 VA (OPTIONAL)	\$ 864.50	\$ 864.50
1	<b>DEP EMA-Y2</b> Extended Maintenance and Support for DEP2715: YR2	\$ 3,251.00	\$ 3,251.00
1	<b>DEP EMA-Y3</b> Extended Maintenance and Support for DEP2715: YR3	\$ 3,251.00	\$ 3,251.00
1	<b>DEP EMA-Y4</b> Extended Maintenance and Support for DEP2715: YR3	\$ 5,011.00	\$ 5,011.00
1	<b>DEP EMA-Y5</b> Extended Maintenance and Support for DEP2715: YR3	\$ 5,011.00	\$ 5,011.00
1	<b>MVD-DEP-BT2</b> Solution Configuration / Training System build out and configuration plus 1 days (on site) training	\$ 2,850.00	\$ 2,850.00
<b>SUBTOTAL</b>			<b>\$ 46,567.50</b>
SALES TAX (as required)			<b>NA</b>
Shipping w/n the continental USA via UPS Ground			<b>\$ 50.00</b>
<b>TOTAL</b>			<b>\$ 46,617.50</b>

### **3: Implementation Plan/Project Schedule**

### **3. Implementation Plan/Project Schedule**

#### **ATTACHMENT D**

#### **IMPLEMENTATION PLAN/PROJECT SCHEDULE**

#### **A. Description of L-3's proposed methodologies for accomplishing the work specified in Attachment A, "Scope of Work"**

##### **1. Phased Implementation:**

To assure success, a project of this scope must be thoughtfully orchestrated and systematically executed. The implementation plan proposed herein draws upon L-3's multiple experiences in successfully transitioning large law enforcement agencies to digital in-car technology.

To understand the scope of this project it is best to examine each phase of its implementation understanding that often multiple phases are concurrently active.

These include:

- a. Planning
- b. Production
- c. Vehicle Installation
- d. Network installation
- e. Server Installation
- f. Training
- g. Acceptance
- h. Program Support

- a. Planning – planning forms the foundation of a successful implementation and begins with a kick off meeting that identifies key vendor and agency personnel. During the Planning phase each installation site is surveyed and equipment locations determined; Vehicle installation configurations are considered and decided upon; Installation schedules are finalized; system configurations and programmable parameters are discussed relative to the OCSD in-car video recording policies; Training requirements and logistics are discussed and preliminary training schedules established.
- b. Production – Production encompasses the manufacturing of the PVS systems to OCSD specifications as well as the ordering, configuration and pre-testing of all backend equipment.
- c. Vehicle Installation – Depending on workload at the time an order is placed, vehicle installations can be expected to begin approximately 30 – 60 days after the receipt of a purchase order. It is suggested that vehicle installations be completed at one facility at a time. It is strongly suggested that installations begin at one of the smaller facilities so that a complete "working model" can quickly be established and staff trained. The cooperation of the OCSD in providing access to vehicles when needed will be paramount to the timely completion of this project.
- d. Network Installation – Wireless networks consisting of Access Points, Antennas and Network Cable will need to be installed at each facility. The Implementation Plan calls for installing the wireless network in each facility in close succession to reduce travel expenses of the installation crew. Therefore, the network will be installed in some locations well before needed.

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- e. Server Installation – will be synchronized to the completion of the vehicle installations at each facility. The installation will be performed by an L-3 field engineer who will configure the server to the LAN at each location, set-up and configure each access point, program each vehicle with the proper IP addresses and security information, test overall system and train the Agency's IT and support staff.
- f. Training – training will be conducted at each facility and scheduled to coincide with the completion of the installations at that facility. Training will be provided for system users (or departmental training officers) IT staff, Administrative Staff and Fleet personnel.
- g. Acceptance – Acceptance criteria is included in this proposal. The implementation at each location should be assessed against this criteria with final payment for the deliverables and service at that each location predicated upon Agency acceptance.
- h. Project Support – project support, including warranty support begins immediately after Acceptance. Project support also includes unlimited telephone support and additional training that may be required from time to time.

**2. Identification of Resource Requirements:**

<b>Orange County Sheriffs Office</b>	<b>L-3 Mobile-Vision</b>
Project Manager – key POC for all aspects of implementation.	Project Manager – key POC for all aspects of implementation.
	Assistant Project Manger – strategically located at L-3MVI Headquarters to coordinate internal activities.
Fleet Manager – POC for vehicle related issues and scheduling of in-car equipment installations.	Installation Technicians – in-car installations.
Facility Manager – POC for facility issues related to the installation of the wireless infrastructure.	Installation Technicians – wireless network components.
Director IT	Field Engineer – Installation of servers and configuration onto LAN
Training Officer – to assist in the planning of all training activities and customization of curriculum to the OCSD requirements.	Officer Trainer – this individual will train departmental training officers or directly train officers in the use of the Flashback In-car Recording System.
	Application Trainer – (typically L-3 Field Engineer) trains administrative staff in all aspects of the Digital Evidence Pro Backend management application. Also trains IT staff in application maintenance.
	Technical Trainer – trains departmental support personnel in all aspects of system troubleshooting and maintenance

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**B. Description of Deliverables:**

	<b>DELIVERABLE</b>	<b>INCLUDES</b>
1	Flashback-II Digital In-car Recording System	<ul style="list-style-type: none"> <li>a. Flashback-II DVR, D-1 Resolution, 16GB Flash Memory</li> <li>b. Nightwatch™ extended low light color zoom camera.</li> <li>c. Rear Seat Color Camera with Infrared illuminators</li> <li>d. VoiceLink Plus® 900 MHz Digital Spread Spectrum Bi-directional wireless microphone System.</li> <li>e. Rear Seat Microphone</li> <li>f. Monitor/Controller with 3.5 inch LCD monitor.</li> <li>g. Laptop interface</li> <li>h. Crash Sensor with battery back-up.</li> </ul>

2	<b>NORTH PATROL</b>	
	<b>Wireless Access Points</b> MVD-8675-A-ASSY	Nine (9) 802.11a wireless access points (cost proposal does not include installation since facilities were not made accessible in order to determine installation costs)
	<b>Digital Evidence Pro Video Management Server, Storage &amp; Distribution System</b> MVD-DEP2700-3XRD1616-750	Dell Server: Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 L-3 Mobile-Vision Digital Evidence Pro Application Software Redhat Linux Op Syst / Postgresql Database DVD-Rom, Floppy, Monitor, Keyboard, Mouse Power Connect Switch 10/100/1000  DASS: U320 SCSI, 3 x 16 x 750GB HDD SATA RAID 6 Hot Swappable Drives and Power Supply
	<b>Tape Backup/Archiving Station</b> MVD-124T-LTO3-2	PowerVault 128T (or equivalent) with 2 x 8 Bay Cassettes Archiving and Control Software Application 2 X LTO-3 Tapes
	<b>Tape Backup/Archiving Station</b> MVD-DVD/BU	DVM Backup/Archiving Station Controller - Dell PC Primera Bravo II DVD writer /printer w/25 DVD capacity Windows XP Op System/DVD+R/RW L-3 Mobile-Vision DVD Archiving Software 100 pack: white printable DVD-R media
	<b>UPS Supply</b> MVD-UPS1500	1500 VA Uninterruptible Power Supply
	<b>Warranty</b>	One-Year Parts and Labor Warranty

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3	<b>SOUTH PATROL</b>	
<b>Wireless Access Points</b> MVD-8675-A-ASSY	Nine (9) 802.11a wireless access points (cost proposal does not include installation since facilities were not made accessible in order to determine installation costs)	
<b>Digital Evidence Pro Video Management Server, Storage &amp; Distribution System</b> MVD-DEP2700-3XRD1616-750	Dell Server: Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 L-3 Mobile-Vision Digital Evidence Pro Application Software Redhat Linux Op Syst / Postgresql Database DVD-Rom, Floppy, Monitor, Keyboard, Mouse Power Connect Switch 10/100/1000  DASS: U320 SCSI, 3 x 16 x 750GB HDD SATA RAID 6 Hot Swappable Drives and Power Supply	
<b>Tape Backup/Archiving Station</b> MVD-124T-LTO3-2	PowerVault 128T (or equivalent) with 2 x 8 Bay Cassettes Archiving and Control Software Application 2 X LTO-3 Tapes	
<b>Tape Backup/Archiving Station</b> MVD-DVD/BU	DVM Backup/Archiving Station Controller - Dell PC Primera Bravo II DVD writer /printer w/25 DVD capacity Windows XP Op System/DVD+R/RW L-3 Mobile-Vision DVD Archiving Software 100 pack: white printable DVD-R media	
<b>UPS Supply</b> MVD-UPS1500	1500 VA Uninterruptible Power Supply	
<b>Warranty</b>	One-Year Parts and Labor	

4	<b>WEST PATROL</b>	
<b>Wireless Access Points</b> MVD-8675-A-ASSY	Eight (8) 802.11a wireless access points (cost proposal does not include installation since facilities were not made accessible in order to determine installation costs)	
<b>Digital Evidence Pro Video Management Server, Storage &amp; Distribution System</b> MVD-DEP2730	Dell Server: Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 L-3 Mobile-Vision Digital Evidence Pro Application Software Redhat Linux Op Syst / Postgresql Database DVD-Rom, Floppy, Monitor, Keyboard, Mouse Power Connect Switch 10/100/1000  DASS: U320 SCSI, 2 x 16 x 500GB HDD SATA RAID 6 Hot Swappable Drives and Power Supply	
<b>Tape Backup/Archiving Station</b> MVD-DVD/BU	DVM Backup/Archiving Station Controller - Dell PC Primera Bravo II DVD writer /printer w/25 DVD capacity Windows XP Op System/DVD+R/RW L-3 Mobile-Vision DVD Archiving Software 100 pack: white printable DVD-R media	
<b>UPS Supply</b> MVD-UPS1500	1500 VA Uninterruptible Power Supply	
<b>Warranty</b>	One-Year Parts and Labor	



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5	<b>SAN CLEMENTE</b>	
<b>Wireless Access Points</b> MVD-8675-A-ASSY	Nine (9) 802.11a wireless access points (cost proposal does not include installation since facilities were not made accessible in order to determine installation costs)	
<b>Digital Evidence Pro Video Management Server, Storage &amp; Distribution System</b> MVD-DEP2730	Dell Server: Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 L-3 Mobile-Vision Digital Evidence Pro Application Software Redhat Linux Op Syst / Postgresql Database DVD-Rom, Floppy, Monitor, Keyboard, Mouse Power Connect Switch 10/100/1000  DASS: U320 SCSI, 2 x 16 x 500GB HDD SATA RAID 6 Hot Swappable Drives and Power Supply	
<b>UPS Supply</b> MVD-UPS1500	1500 VA Uninterruptible Power Supply	
<b>Warranty</b>	One-Year Parts and Labor	

6	<b>JWA</b>	
<b>Wireless Access Points</b> MVD-8675-A-ASSY	Five (5) 802.11a wireless access points (cost proposal does not include installation since facilities were not made accessible in order to determine installation costs)	
<b>Digital Evidence Pro Video Management Server, Storage &amp; Distribution System</b> MVD-DEP2715	Dell Server: Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 L-3 Mobile-Vision Digital Evidence Pro Application Software Redhat Linux Op Syst / Postgresql Database DVD-Rom, Floppy, Monitor, Keyboard, Mouse Power Connect Switch 10/100/1000  DASS: U320 SCSI, 2 x 16 x 500GB HDD SATA RAID 6 Hot Swappable Drives and Power Supply	
<b>Tape Backup/Archiving Station</b> MVD-DVD/BU	DVM Backup/Archiving Station Controller - Dell PC Primera Bravo II DVD writer /printer w/25 DVD capacity Windows XP Op System/DVD+R/RW L-3 Mobile-Vision DVD Archiving Software 100 pack: white printable DVD-R media	
<b>UPS Supply</b> MVD-UPS1500	1500 VA Uninterruptible Power Supply	
<b>Warranty</b>	One-Year Parts and Labor	

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7	<b>OCTA</b>	
	<b>Wireless Access Points</b> MVD-8675-A-ASSY	Three (3) 802.11a wireless access points (cost proposal does not include installation since facilities were not made accessible in order to determine installation costs)
	<b>Digital Evidence Pro Video Management Server, Storage &amp; Distribution System</b> MVD-DEP2715	Dell Server: Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 L-3 Mobile-Vision Digital Evidence Pro Application Software Redhat Linux Op Syst / Postgresql Database DVD-Rom, Floppy, Monitor, Keyboard, Mouse Power Connect Switch 10/100/1000  DASS: U320 SCSI, 2 x 16 x 500GB HDD SATA RAID 6 Hot Swappable Drives and Power Supply
	<b>Tape Backup/Archiving Station</b> MVD-DVD/BU	DVM Backup/Archiving Station Controller - Dell PC Primera Bravo II DVD writer /printer w/25 DVD capacity Windows XP Op System/DVD+R/RW L-3 Mobile-Vision DVD Archiving Software 100 pack: white printable DVD-R media
	<b>UPS Supply</b> MVD-UPS1500	1500 VA Uninterruptible Power Supply
	<b>Warranty</b>	One-Year Parts and Labor
8	<b>User Training</b>	Either Train the Trainer or train all users in the operation of the Flashback-II In-car Recording System.
9	<b>Police Administrator Training</b>	Digital Evidence Pro Management Application and Flashback-II In-car Recording System.
10	<b>IT Administrator Training</b>	Digital Evidence Pro Solution Architecture, Configuration and Support. DE-Pro Application. Flashback-II In-car Recording System
11	<b>Fleet Support Training</b>	Flashback-II Installation, Set-up and Troubleshooting.

- C. Gantt chart plan of major tasks, milestones recommended timeframe and Contractor's/County's resources to complete them.

Task Name	Duration	Start	Finish
0 - Orange County Sheriff's Department Implementation Schedule	58 days	Mon 12/1/08	Mon 5/19/09
1 - Kick Off Meeting	1 day	Mon 1/21/09	Mon 1/21/09
2 - Project Review Meeting	1 day	Wed 1/23/09	Wed 1/23/09
3 - Site Review Meeting	3 days	Mon 1/26/09	Fri 2/1/09
4 - Project Build	18 days	Mon 2/1/09	Wed 2/25/09
5 - Install Wireless LAN (at all locations)	12 days	Mon 2/16/09	Tue 3/4/09
6 - West Patrol Install	16 days	Mon 2/23/09	Mon 3/17/09
7 - Deliver Equipment	5 days	Mon 2/23/09	Fri 2/27/09
8 - Installation	5 days	Mon 2/23/09	Fri 2/27/09
9 - Training	2 days	Mon 3/2/09	Tue 3/4/09
10 - Acceptance	1 day	Mon 3/17/09	Mon 3/17/09
11 - North Patrol Install	21 days	Mon 3/17/09	Mon 4/13/09
12 - Deliver Equipment	5 days	Mon 3/23/09	Fri 3/27/09
13 - Installation	10 days	Mon 3/23/09	Fri 4/10/09
14 - Training	2 days	Mon 3/17/09	Tue 3/18/09
15 - Acceptance	1 day	Mon 3/15/09	Mon 3/15/09
16 - South Patrol Install	27 days	Mon 3/17/09	Tue 4/20/09
17 - Deliver Equipment	20 days	Mon 3/17/09	Fri 4/10/09
18 - Installation	22 days	Mon 3/23/09	Tue 4/20/09
19 - Training	3 days	Mon 4/7/09	Wed 4/8/09
20 - Acceptance	1 day	Mon 4/20/09	Mon 4/20/09
21 - San Clemente Install	26 days	Mon 4/14/09	Mon 5/18/09
22 - Deliver Equipment	1 day	Mon 4/14/09	Mon 4/14/09
23 - Installation	3 days	Mon 4/14/09	Wed 4/22/09
24 - Training	2 days	Mon 4/27/09	Tue 4/28/09
25 - Acceptance	1 day	Mon 5/18/09	Mon 5/18/09
26 - JWA Install	11 days	Mon 4/28/09	Mon 5/18/09
27 - Deliver Equipment	1 day	Mon 5/18/09	Mon 5/18/09
28 - Installation	1 day	Mon 4/28/09	Mon 4/28/09
29 - Training	1 day	Mon 5/18/09	Mon 5/18/09
30 - Acceptance	1 day	Mon 5/18/09	Mon 5/18/09
31 - OCTA Install	16 days	Mon 4/28/09	Mon 5/18/09
32 - Deliver Equipment	1 day	Mon 5/18/09	Mon 5/18/09
33 - Installation	1 day	Mon 4/28/09	Mon 4/28/09
34 - Training	1 day	Mon 5/18/09	Mon 5/18/09
35 - Acceptance	1 day	Mon 5/18/09	Mon 5/18/09

Legend:
 

- Task
- Milestones
- Summary
- Group By Summary
- External Tasks
- Project Summary
- Rollup Progress
- Rollup Milestones
- Split
- Baseline

Project: Orange County, 11-05-07  
 Date: Mon 11/5/07  
 Page 1

## **4: Software Annual Maintenance & Support**

D. Training implementation plan to include all technical, administrative and user training.

Please See Response to Attachment G – TRAINING on page 49.

#### 4. Software Annual Maintenance & Support

### ATTACHMENT E SOFTWARE – MAINTENANCE

#### 1. SOFTWARE – ANNUAL MAINTENANCE

<u>Software Name and Version</u>	
Digital Evidence Pro Ver 2.0	Annual Maintenance cost for the Digital Evidence Pro software application is bundled with the backend hardware/software annual extended maintenance cost. The cost is determined by server capacity. Please see the page included with Attachment C entitled " <b>Recurring EMA Costs</b> "

C. The following services that are in addition to paragraph 32 of the Contract relating to updates are provided as Annual Maintenance:

- Software Upgrades
- 12 x 5 non-emergency telephone support
- 24 x 7 emergency telephone support
- Remote troubleshooting and support

D. L-3 Mobile-Vision provides Remote support for the Digital Evidence Pro application software. Remote support requires server access via a high speed connection.

E. In addition to paragraph G of the general terms and conditions of the Contract, Contractor shall provide the following warranty for the Digital In-Car Video System:

No additional Warranty is provided.

## **5: Acceptance and Testing Procedures**

**5. Acceptance and Testing Procedures**

**ATTACHMENT - F  
ACCEPTANCE AND TESTING PROCEDURES**

**Sample Acceptance Criteria**

Item	Description	L-3 Sign-off	OCSD Sign-off
	<b>FLASHBACK-II PVS</b>		
1	Zoom - optical 12X - digital 144X		
2	Illumination - <1lux		
3	Color capture		
4	LCD monitor		
5	30fps recording		
7	Automated event recording		
8	File time-stamp		
9	Capture radar data (requires optional interface)		
10	Capture GPS data - speed and position		
11	Manual stop recording		
12	Minimum of 24 hour recording		
13	Disallow editing of files		
14	Multiple cameras (2)		
15	Audio via wireless mic - multi channel capable		
16	720x480 recording		
	<b>Video Data Transfer</b>		
17	Automatic 801.11x wireless transfer		
18	Files encrypted		
19	Data to include video, audio, metadata		
20	Removable Flash Storage		
21	Power-down after file transfer		
	<b>Data Storage &amp; Management</b>		
22	Receive data via wireless or removable storage		
23	90 day on-line storage with longer retention of high priority files		
24	Minimum 1 year near-line storage		
25	Application to retrieve data both on-line and near-line		
26	Store data in case folders that can be exported		
27	Automated migration of data to near-line storage		
28	Retrieve near-line data back to on-line		
29	Search data based on officer name, date, time type of incident, etc		
30	Ability to specify the beginning and ending of a video clip		
31	Ability to mark video clips as evidence		
32	Create an chain of custody report		
33	Ability to export a clip to MPEG format		
34	Ability to create a still image from video clip		



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35	Ability to keep video in unaltered state		
36	Ability to specify users and levels of security		
	<b>Training</b>		
37	DVR officer training to training officers or directly to all officers		
38	Application training for command staff		
39	IT Administrative training		
40	Fleet Training - DVR installation and troubleshooting		
41	Technical Training - Repair and Maintenance of Flashback DVR		
	<b>Installation</b>		
42	Installation of Flashback DVR into OCSD Vehicles		
43	Installation of Wireless Access Points at each OCSD location		
44	Connection of Digital Evidence Servers at each OCSD location to WAN/LAN		

## **6: License Model**

6. **License Model:** Offer shall provide pricing for all available standard license models. The Offerer May not submit an additional license agreement or contract; any exception must be made to the Model Contract. In the event the Offer submits an additional license agreement or contract, it may be disqualified from this procurement.

A perpetual software license is rolled into the hardware cost for both the Flashback-II PVS as well as the Digital Evidence Pro video management systems.

## **7: Training**

## 7. Training

### ATTACHMENT G TRAINING

L-3 Mobile-Vision, Inc. will provide comprehensive training for the users of the Flashback-II In-car system, administrative personnel who will be using the Digital Evidence Pro backend management system, IT staff that will support the application and fleet technicians who will maintain and troubleshoot the Flashback-II system. Training will be tailored to the logistical requirements of the OCSD. The outline provided in this attachment is suggested only. It does not take into consideration key factors such as location of personnel, scheduling constraints and availability of training facilities. These details will be discussed early on in the joint Project Review meetings.

#### Recommended Training Plans:

1. Technical Training - will be provided for both the IT Support Staff as well as Fleet technicians.

##### IT Staff Training will include:

- Complete overview of system architecture
- Complete overview of Digital Evidence Pro Video Management Application software
- Complete overview of the Flashback-II Digital In-car Video Recording System
- Configuration of Wireless Access Points and Wireless Security
- Configuration of the Digital Evidence Pro Video Management Application software
- Configuration of the Flashback-II Digital In-car Video Recording System
- Backup, Restoring, Copying, adding vehicles, adding users, etc.
- Troubleshooting, implementing updates and upgrades

Typically, IT Staffs consist of only a few individual and these individuals typically work very closely with our technical personnel during the implementation process creating an ideal environment for the exchange of knowledge. In all likelihood a formal training session will not be required. However, if additional training is required for staff members who will not be involved in the implementation process formal classroom training will be provided at no additional cost.

##### Fleet Technician Training will include:

- Complete overview of system architecture
- Installation of the Flashback-II In-car video system

- Interfacing with lights, siren, shotgun lock, etc.
- Configuration of the Flashback-II In-car video system
- Operation of the in-car system
- Troubleshooting
- Removing, replacing and setting up individual system components

Time Required – 8 hours

Number of trainees – maximum of six per session

Training facility – classroom and shop

Note: In addition to formal classroom training trainees should be prepared to install, configure and confirm operation of a Flashback-II in-car video system under the direction of the instructor.

2. **Administrative Training** – training should be provided for administrative personnel at each facility who will have Administrator Rights to system and be responsible for adding vehicles and users, setting access rights and copying files.

**Administrative Training will include:**

- Complete overview of system architecture
- Configuring in-car equipment
- Adding and removing vehicles
- Adding and removing users
- Creating cases
- Search techniques
- Archiving files
- Setting purging rules
- Making copies including transcoded copies
- Running reports
- System troubleshooting

Time Required – 8 hours

Number of trainees – maximum of eight per session

Training facility – classroom or office with access to DE-Pro Server

Note: Training will include considerable “hands on” practice.

3. **User Training** – officers using the Flashback-II In-car Recording System can be trained directly by L-3 personnel or by departmental training officers. If trained by departmental training officers the training officers will also be provided with a comprehensive description of the entire solution.

**User Training will include:**

- Description of overall system including how files are transferred, stored, accessed and purged.
- Description of in-car components.
- Understanding the On-Screen Display
- Selecting camera view
- Methods of activating RECORD
- Tagging Incidents
- Setting Priority Level of Recordings
- Camera controls and their use
- Monitor Controls and their use
- Wireless Microphone Operation
- Playing back recordings in-car; selecting file, camera view and audio source.
- Pre-shift system test

Time Required – 3 hours

Number of trainees – maximum of 30 per session

Training facility – classroom

Note: Training should be scheduled to coincide with installation of the in-car components.

## **8: Staffing**



## 8. Staffing

Names and classification/titles of prime and alternate staff, including project manager and key personnel who will be assigned to this project.

Louis Blanco	President – Contract Management
Chris Kadoch	Chief Scientist – Solution Architecture
David Tindall	Project Manager
Yvonne Pyles	Assistant Project Manager
Brian Sladeczek	Systems Engineer – project implementation
Chris Carter	Alternate Systems Engineer
Paul Augustyniak	National Service Director
James Ward	Production Manager
Ray Keller	Account Manager

## RESUMES

### Chief Scientist

Chris Kadoch  
Vice-President

Mr. Kadoch is a pioneer and recognized expert in the area of Video Evidence Management for Law Enforcement. He serves as the Chief Digital Solutions Architect for Mobile-Vision, Inc. Prior to Mobile-Vision, Mr. Kadoch provided consultancy into the IACP and was President and Founder of a pioneering Video Evidence Management Company. He has also held executive positions within Eastman Kodak (Vice President) and Lockheed Martin. Where he held key positions in large scale endeavors to provide digital solutions for Law Enforcement (FBI and Scotland Yard) and several Defense Agencies. Mr. Kadoch is a co-inventor on several relevant technology Patents.

Mr. Kadoch holds a BS in Physics and Mathematics (from San Jose State University) and has with extensive post graduate work in imaging and pattern recognition.  
Project Office Location: Herndon, VA

### Project Manager

Yvonne Pyles

Yvonne has a broad communications background having held managerial and engineering positions with General Electric, 3Com Corporation, Cyberpath Inc. and Lucent Technologies. During her tenure at Lucent Technologies, she was responsible for managing the Broad Band Access Product Line ensuring timely delivery and implementation of software and hardware releases.

Prior to Lucent Technologies, Yvonne has held senior management positions at CyberPath Inc. and 3Com Corporation, leading the design, development and implementation of a family of SOHO Routers, WAN Access Servers, VoIP gateway and a CTI-enabled digital switch.

Yvonne started her career at General Electric as a network analyst designing and maintaining their internal network topology. She holds a Bachelors of Electrical Engineering degree from Stevens Institute of Technology.

**Project Manager**

David Tindall

David has been with L-3 Communications Mobile-Vision, Inc. since September of 2005. David first started his career at L-3 Communications Mobile-Vision, Inc. as a Technical Support Specialist. David is now a lead Project Manager for key accounts throughout the United States.

Before joining L-3 Communications Mobile-Vision, Inc. David held an IT position with Vingage Corporation. David holds a Bachelor's of Arts in Radio-Television from the University of Central Florida.

**Systems Engineer**

Brian Sladeczek

Brian holds a BS in Computer Engineering from Texas A&M and has diverse software/hardware experience in the defense, financial and entertainment sectors. Brian has contributed to the success of numerous Digital Evidence Pro Management System implementations. Brian is based out of our Dallas facility.

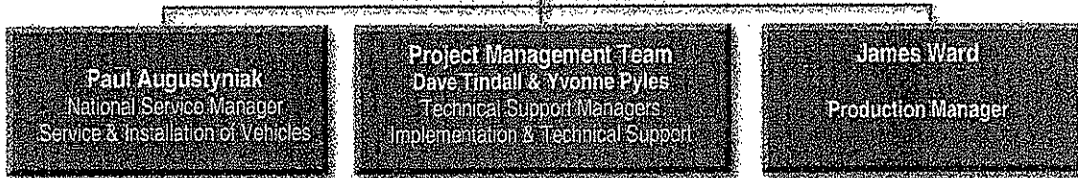
**Systems Engineer**

Christopher Carter

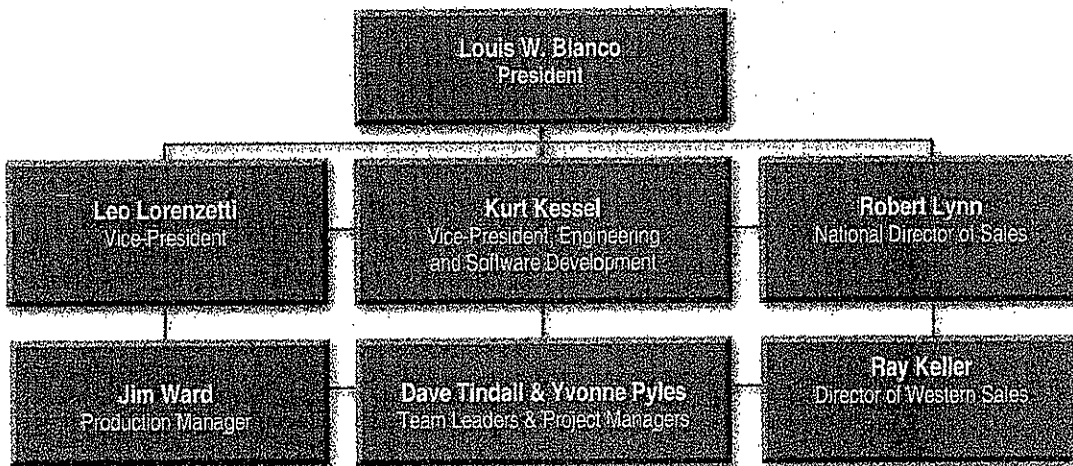
Chris holds a BS in Network and Communications Management from DeVry University, Irving, TX. He has held previous positions with Verizon and Arlington ISD and has experience in hardware integration and technical support. Chris has contributed to the success of numerous Digital Evidence Pro Management System implementations.



## Proposed Support Structure for: Orange County Sheriff's Department



## MANAGEMENT TEAM



## **9: Software Expansion**

**9. Software Expansion:**

- A. Offerer is to provide its capability to expand its system to add new functionality in subsequent phases of PVS.

The Digital Evidence Pro Video Management System was developed in-house by a staff of developers with an extensive background in the management of large video databases for commercial applications. New functionality to the core application is introduced, from time to time, as software upgrades which are provided our customers, who are covered by the original warranty or an extended maintenance agreement, at no charge. The most recent of these upgrades was Wireless Access Point Load Balancing. This patent pending technological advancement assigns access points to vehicles based upon signal strength and the age and priority level of the files to be uploaded.

Many customers who have purchased a Digital Evidence Pro solution have enhanced it by purchasing our Interview Room Module which enables the recording of interrogations in a manner that is compatible with the in-car recording process. Additional modules are scheduled for development which cannot be discussed in this forum.

## **10: Description of Technical Architecture**

**10. Description of the technical architecture:**

Offerer shall provide information about the overall systems architecture including the following:

(Note: Overall System Architecture is described in the Document – **OCSD Solutions Overview** which follows response, i.

a. Hardware Requirements

The hardware requirements will vary with each Patrol location. Document **10a. Hardware Requirements**, (page 68) describes the primary sizing assumptions and the storage requirements for each Patrol. Also included is a Hardware/Solution description of each Patrol.

b. Operating system/software environment

The server operating system is Linux Redhat. However, the solution is a web application and as such no dedicated software is required on any of the OCSD LAN connected PC's beyond IE (the clients can be Windows OS).

c. Network requirements and protocols

The existing OCSD network LAN/WAN infrastructure is likely sufficient. As mentioned previously the system is a web application operating on the standard IP protocols. A typical 10/100 network is sufficient for viewing the videos. The network "feeding" the access points should however be gig capacity.

d. Database environment and storage requirements

The L-3 solution uses Posgresql as the database. As mentioned previously the required storage will vary with each Patrol. See **10a Hardware Requirements** for the specific Patrol storage requirements.

e. Description of the user interface, including graphical-based and/or browser-based screens

The user interface is a simple web interface. For detailed descriptions see **10e Description of User Interface** (page 79).

f. Description of wireless technology (hardware requirements).

The hardware that is utilized includes application specific multi-polarized antennas, PROXIM AP-700 access points and intelligent load balancing algorithms hosted on the server. See **10f Description of Wireless Technology** (page 95) for solution description.

g. Description of video recording (technology)

The Flashback-II PVS uses an analog video camera whose output is digitized into MPEG4 (specifically H264) within a solid state DVR and stored on a 16GB flashcard. The resolution is 720x480 at 30 fps.

h. Description of file management and storage

A Digital Evidence Pro solution uses an advanced intelligent storage architecture that maximizes on-line lifetime with a minimum of storage. See **10a Hardware Requirements** (page 68) for the specific Patrol storage requirements.

- i. Description of the installation process.  
Vehicle Installations

Wireless Access Point Installation

Server/Storage Installation

- j. Description of security and auditing features (i.e. firewall);  
Please see document **10j. Security and Auditing Features**

- k. Capability to configure and customize the application, including reference tables, screen displays and ad hoc reporting;

The Digital Evidence Pro Solution has extensive application embedded reporting to track/display the history of critical elements including the following: a) All ingested files (upload dates, viewing, etc.), b) Upload history of any car, or access points (Mbps, files, etc.), c) Interaction such as outputting a DVD for court (status, etc.), as well as a series of user/car state lists, and server status reporting (usage, etc.).

L-3 continually upgrades its solution (including the reporting capabilities) per client requests and releases updates quarterly.

- l. Technical approach to system interfaces.

This is an evidence management system and as such all interfaces must be controlled so as to not compromise the evidence value of the content. That said, whenever possible the L-3 system utilizes an open systems approach e.g. virtually any file (regardless of file format) can be added tracked and outputted.

- m. Application scalability.

The Digital Evidence Pro application does not limit the scalability of the system. No seat license is required and there are no actual limits to the number of users exist.



## **PART 3 – Section 10 Documents**

- OCSD Technical Architecture Overview – pg. 56
- 10a. Hardware Requirements – pg. 68
- 10 e. Description of User Interface – pg. 79
- 10f. Description of Wireless Technology – pg. 95
- 10j. Security and Auditing Features - 97

## OCSD Technical Architecture Overview

### INTRODUCTION

The Orange County Sheriffs Department is looking to equip its fleet of vehicles with Digital Camera Systems; L-3 Communications Mobile-Vision, Inc. is the solution.

The desired system must support the intended Digital fleet. It must easily capture video at sufficient quality to support its use in court, provide a simple and seamless transfer mechanism from the car to a server/storage infrastructure, and store video for evidence review and output for internal and judicial use. The cars must operate per protocol (record all stops) and will automatically transfer video (wirelessly) to the office server on a shift basis in each of the distributed locations. The video must be easily accessible thereafter.

The distributed nature of the organization further requires that the solution provide a means of managing the content across the locations in a simple and integrated fashion.

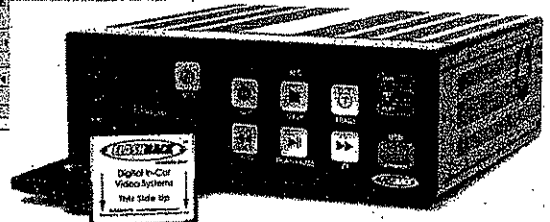
L3 Communications  
Mobile-Vision, Inc.  
proposes to support the  
Agency's needs and  
requirements by supplying  
our *Flashback-II* solid-  
state in-car camera and  
our integrated server  
solution the *Digital  
Evidence Pro (D-E Pro)*.

The transfer of files from  
the car to the server will be  
accomplished through a  
"hands off" wireless

transfer system. The storage, management and archiving of  
video will be accommodated through a server within each  
Patrol office. Inter-Patrol file management and tracking can  
be accomplished in the future through the agency WAN and the use of the (optional) *D-E Pro  
Headquarters Server*. The video can be accessed through any standard windows PC attached to the  
existing Department LAN. Additionally, the search and retrieval of video will be based on agency key  
data (officer, date, location, incident class, etc.) and case relevant data (citation #, class of infraction,  
suspects name, etc.).

This system will meet all these critical requirements and will further provide many other unique  
differentiating capabilities. The proposed solution is in production and not a prototype; it is robust and  
easy to use. It also brings with it the ability to manage all the digital rich media for OCSD (digital stills,  
etc.) and can be extended to support and manage the other video sources such as interview room  
video, crime scene video, surveillance video, etc.

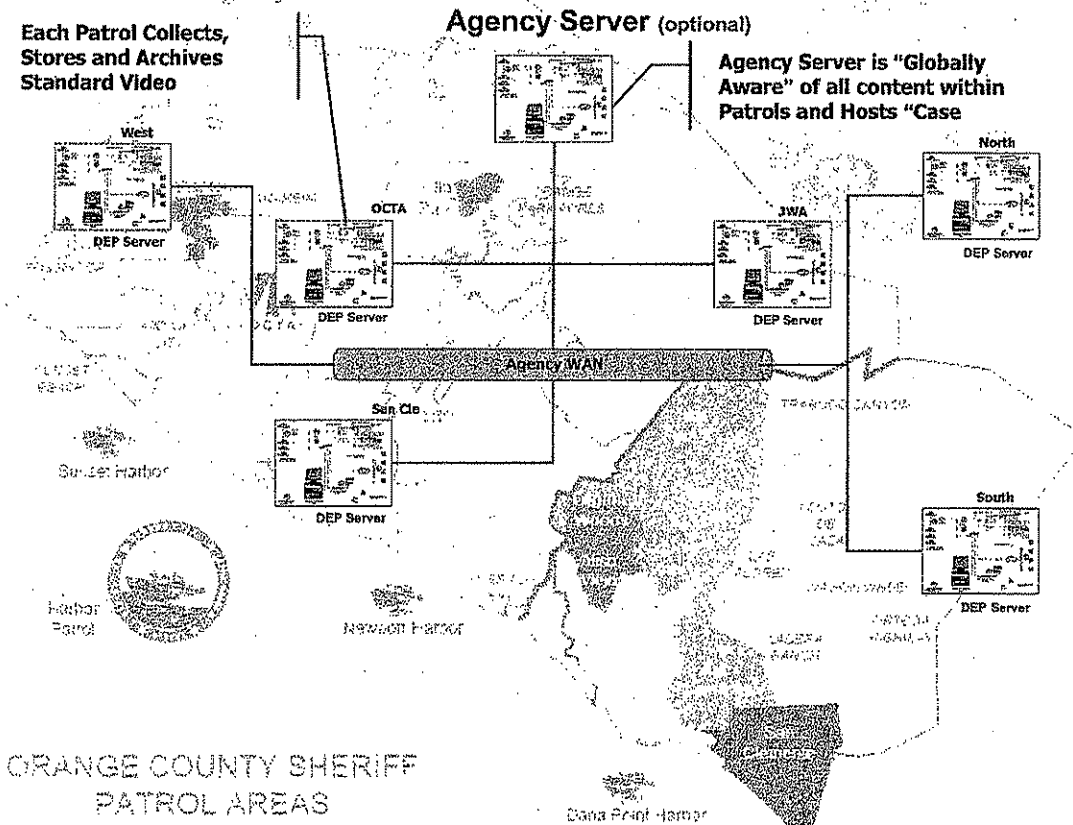
L-3 Communications Mobile-Vision, Inc. provides a complete "turnkey" solution.



## SOLUTIONS ARCHITECTURE

For this class of solution, L-3 Communication Mobile-Vision, Inc. proposes the use of its Flashback MVD-FBDVS flashback in-car solution. These will operate out of the respective offices where they will wirelessly transfer video to the Patrol servers. The server infrastructure is a distributed array of servers connected through the Agency WAN. These will be interconnected through the agencies WAN and potentially feed one (optional) Agency Server at Headquarters. An Agency Server could provide “global management” of the evidence across the network. All video would reside locally and live out its life on each Patrol server. DVD archiving could be performed either at the Patrol offices or all routed to headquarters. The only required traffic would be limited inter-office browsing (from headquarters to districts) and the occasional file transfer (of case relevant files).

See architecture diagram below:

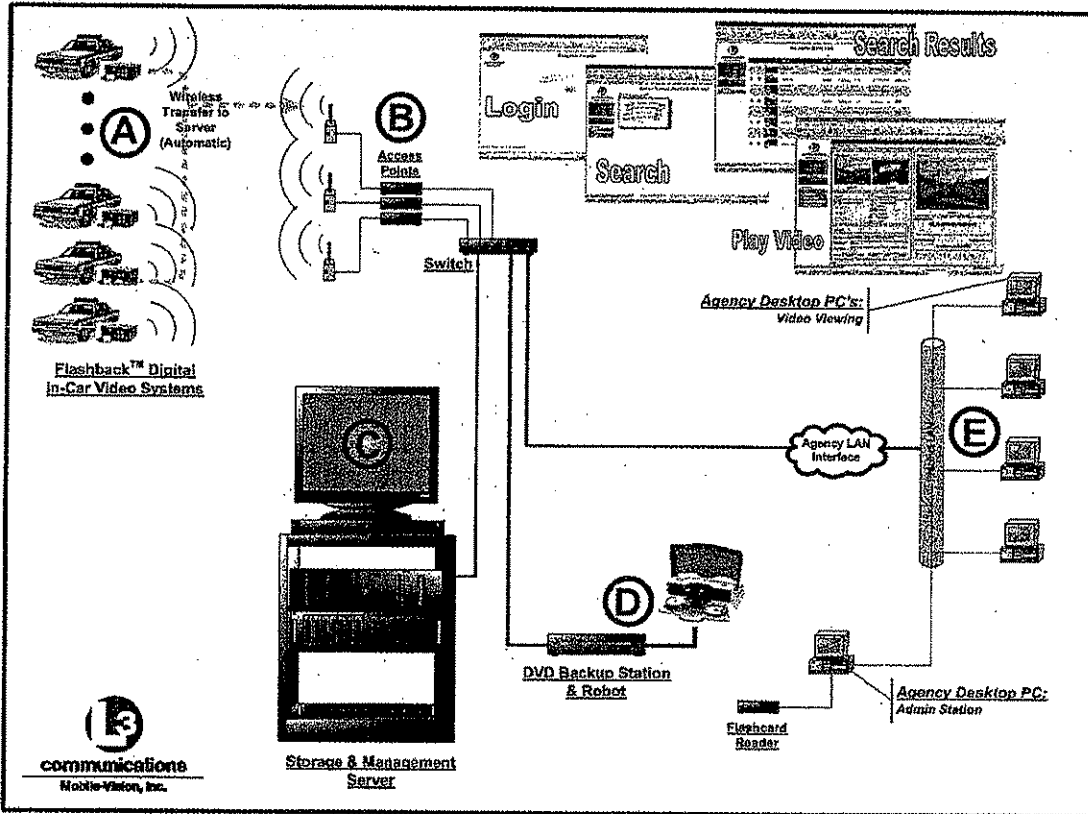


ORANGE COUNTY SHERIFF  
PATROL AREAS

The Flashback Digital Evidence Pro solution will streamline your agency's digital video evidence collection program. Video is efficiently collected, simply transferred, easily retrieved, viewed and managed, while maintaining chain-of-custody.

Storage, management and archiving of the video will be accommodated through a server within each Patrol office. Access to the video would be through any standard windows PC attached to the existing OCSD LAN. The search and retrieval of video will be based on agency key data (officer, date, location, incident class, etc.).

### Patrol Server Overview



The Digital Evidence Pro solution consists of five primary elements:

- A. Flashback In-Car Digital Video Recording System
- B. File Transfer Systems
- C. Storage & Management Server with Application Software
- D. DVD Backup Station with Robot
- E. Agency LAN Connected PCs (Viewing Stations)

**Upload (car to server):** Video is collected on a daily basis by the patrol cars. This evidence is automatically uploaded to the Patrol servers via secure wireless (802.11a) "hot spots" located in the parking areas. This is a completely "labor free" process that consumes approximately 15-20 minutes per car per day. (The multiple access points per Patrol combined with an intelligent upload manager allows for multi-vehicle concurrency and allows the Patrol fleet to be uploaded seamlessly and quickly.)

**Viewing & Interaction:** Once evidence has been uploaded to the server it is available via any of the LAN connected PC's in the Patrol. The access is secure with all activity restricted, verified and recorded. Searches are performed through simple "browser based" web interface and incident relevant "Key Data". The solution also provides the ability to simply create cases that contain any number of evidence elements including multiple videos, digital photos; digital documents, etc. (See attachment for access overview).

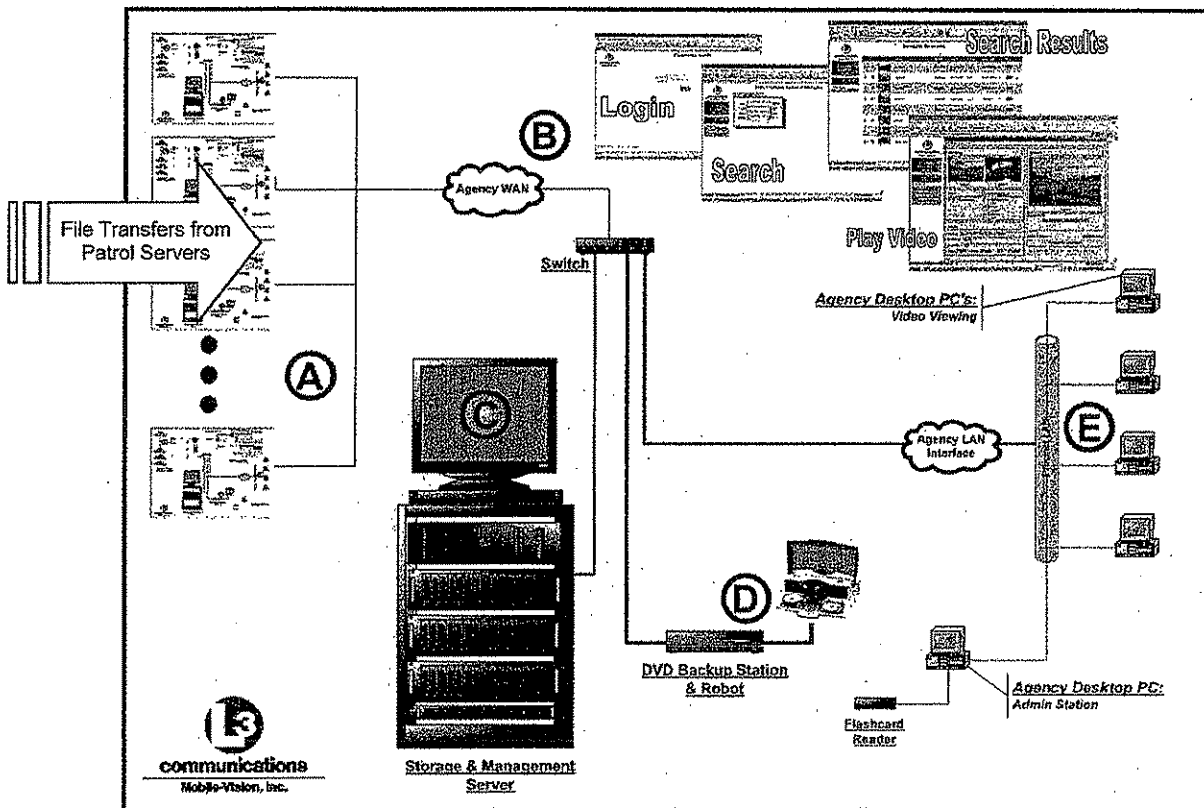
**Management, Storage & Archiving:** The L-3 Mobile-Vision Digital Evidence Pro System automatically manages, stores, archives and purges the video with the use of a Patent Pending technology referred to as queue based evidence management. In this process the evidence is automatically managed throughout its lifecycle based on a series of evidence queues (including type of incident, date, usage, etc.). This ensures that no evidence is ever lost (in fact it is redundantly stored).

yet no labor is consumed in the process. All standard video is retained for a definable period. However, any evidence that is perceived as having evidence value has its lifetime automatically extended. And any evidence that is associated with a “case” is automatically forwarded to the Headquarters Server for long term utilization.

**Output to Court:** The system provides a simple means of validating video evidence and outputting to a self contained DVD for presentation in court. In addition, a secure Chain of Custody report is embedded onto the DVD. This report documents all activities that have been performed in order to manage any digital evidence (video, photos, audio and documents) that have been stored in the Digital Evidence Pro system and exported to the DVD.

**Transfer to the Headquarters Server (optional):** All transitory video evidence is retained at the Patrol offices, yet all case related evidence can be automatically electronically forwarded Headquarters Server to provide long term access / redundant storage. The metadata from all evidence regardless of type or priority level is passed to the Headquarters Server so as to provide “global awareness” of all content on the distributed server array.

### Optional Headquarters Server Functional Summary



The Digital Evidence Pro solution consists of five primary elements:

- A. Patrol Servers
- B. Agency WAN
- C. Storage & Management Server with Application Software
- D. DVD Backup Station with Robot
- E. Agency LAN Connected PCs (Viewing Stations)

**Transfer (Patrol to Headquarters Server):** Evidence that is deemed to have case related value is automatically transferred to the Headquarters Server with use of the Agencies WAN. Typical industry metrics project this to be less than 1% of the total collected video load.

**Global Awareness:** When any video (regardless of type or priority level) is uploaded into any of the distributed servers the metadata associated with said video is passed to the Headquarters Server. This metadata enables the Headquarters Server to be “globally aware” of all content and facilitates the system level management and access.

**Viewing & Interaction:** Once evidence has been uploaded to the Headquarters Server it is available via any of the LAN connected PC’s in the Agency. The access is secure with all activity restricted, verified and recorded. Digital evidence can be added to the cases. Searches are performed through simple “browser based” web interface and case relevant “Key Data”.

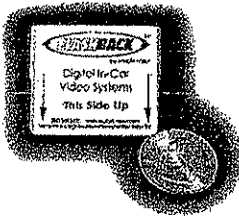
**Management, Storage & Archiving:** The L-3 Mobile-Vision Digital Evidence Pro System automatically manages, stores, archives and purges the video with the use of a Patent Pending technology referred to as queue based evidence management. In this process the evidence is automatically managed throughout its lifecycle based on a series of evidence queues (including type of incident, date, usage, etc.). This ensures that no evidence is ever lost (in fact it is redundantly stored) yet no labor is consumed in the process.

**Output to Court:** The system provides a simple means of validating video evidence and outputting to a self contained DVD for presentation in court. In addition, a secure Chain of Custody report is embedded onto the DVD. This report documents all activities that have been performed in order to manage any digital evidence (video, photos, audio and documents) that have been stored in the Digital Evidence Pro system and exported to the DVD.

## SOLUTION COMPONENTS

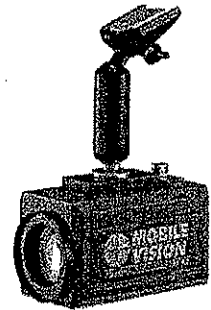
### A. The In-Car Digital Video Recording System

The L-3 Communications Mobile-Vision Flashback in-car Digital Video Recorder (DVR) automatically records each incident (video, audio and metadata) with superior quality and accuracy. The RECORD mode can be activated manually or automatically by the wireless microphone, light bar, siren, vehicle speed or from two auxiliary inputs. For maximum reliability, the DVR records to solid-state compact flash memory instead of hard drives or DVDs. With no moving parts, the Flashback DVR is able to sustain shock, vibration, and temperature extremes well beyond the capabilities of other in-car digital systems. The compact flash memory also contributes to Flashback's compact size and extremely low power requirements. Small enough to mount with your radio control heads, the Flashback DVR puts all operating controls conveniently at your finger tips.

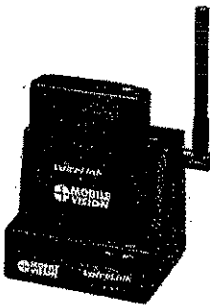


The Flashback DVR provides the features that are important to your agency: programmable pre-event recording, the ability to simultaneously record two video and three audio inputs as well as automatic power-on, power-off and file transfer. The DVR consumes up to 80% less power than other in-car systems.

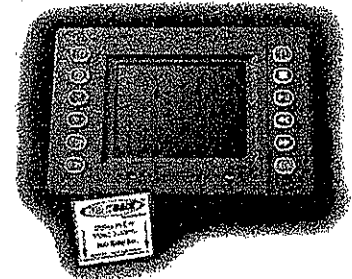
The Flashback in-car system uses a forward facing color camera with 12x optical zoom and 12x digital zoom for a total zoom capability of 144x. This camera has a <1-lux sensitivity rating, which can be increased to 0.03 lux with the Nite-Watch feature, making it optimal for nighttime surveillance.



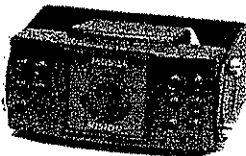
Each system is equipped with L-3 Mobile-Vision's patented VoiceLink Plus, 900 MHz digital spread spectrum, wireless microphone. This is a fully automatic device that will turn itself on whenever the DVR is recording and turn off when the DVR stops recording. An in-car microphone is also provided. The Flashback DVR can accommodate one additional VoiceLink Plus wireless microphone for vehicles that carry two officers.



A universal monitor console is provided with flexible mounting options. The console includes a 3.5-inch color LCD monitor, a speaker with adjustable volume and backlit operational controls that duplicate the front panel controls of the Flashback DVR. This integrated design allows the DVR to be mounted in remote locations.



Flashback uses solid-state compact flash recording media, which is virtually indestructible. The DVR has an internal 802.11g/a wireless LAN interface as well as a wired Ethernet port so that recorded digital video data files can be automatically uploaded to a secure server. Also included is an internal GPS receiver, which provides location, speed and sets all DVR clocks to the worldwide GPS system.



An *optional* rear camera is available for recording the backseat area. It has a wide-angle lens and its own infrared illumination source to allow it to record in total darkness, and an internal microphone for recording conversations within the vehicle. The rear camera records in color during the day and in black and white at night.

The in-car system allows for the ability to "designate an incident classification" immediately after the incident is concluded. This classification (or priority level) is passed to the server where definable

operational rules allow for the automated processing and categorization of specific classes of incidents (e.g. DUI, Domestic, Accident, etc.).

## B. File Upload

**Wireless Upload (from car):** Video is collected on a daily basis by the patrol cars. This evidence is automatically uploaded to the Patrol servers via wireless multiple overlapping (802.11a) "hot spots" located in the parking area. This is a completely "labor free" process that consumes approximately 15-20 minutes per car per day which can be made up of multiple short visits to the office. Through this method, video is automatically collected, transferred and stored while maintaining chain-of-custody.

L-3 Communications Mobile-Vision has created a wireless solution for large digital in-car video implementations. It effectively increases the aggregate throughput capacity by 3 to 4 times that of conventional wireless solutions, thereby making large fleet wireless transfer viable. It leverages the increased channel capabilities of 802.11a (vs. "g"), uses advanced antenna technology and manages the assignment of vehicle to access point through complex algorithms that provide load balancing across the entire access point array based on transmission performance and predetermined rules that determine video file priority.

*In a nutshell, using up to nine 802.11a wireless access points the server "sees" the data files residing in all equipped vehicles that are within range. It "knows" how well each car can "see" each access point. It "knows" how many cars have files to upload. It "knows" the evidentiary priority of each file to be uploaded and uses this global knowledge to most effectively manage the transfer process.*

For your convenience, Flashback-II provides two other methods to upload files:

**Ethernet Upload:** The Flashback-II DVR incorporates an Ethernet connector through which files can be transferred. This process requires a wired Ethernet connection, which provides fast, secure transfer.

**Manual Upload:** Video evidence files can also be directly transferred manually by inserting the DVR's compact flash memory card into a flash card reader on any LAN connected agency PC.

## C. Storage & Management Server

**Management, Storage & Archiving:** The L-3 Communications Mobile-Vision Digital Evidence Pro System automatically manages, stores, archives and purges the video with the use of a Patent Pending technology referred to as queue based evidence management. In this process the evidence is automatically managed throughout its lifecycle based on a series of evidence queues (including type of incident, date, usage, etc.). This ensures that no evidence is ever lost (in fact it is redundantly stored) yet no labor is consumed in the process.

The storage & management server stores the video and metadata files as well as controls the process by which the digital video data files are administered, managed and distributed. It receives the uploaded files and stores them on a redundant RAID 6 (redundant array of independent disks) storage for a predetermined length of time and concurrently creates a backup on DVD/Tape.

L-3 Mobile-Vision employs an intelligent multi-tiered, storage architecture. All key data (search parameters) persist indefinitely on the server; but video files reside on the system's RAID for a period of time based on their evidence value. The lifetime of video files is automatically extended if they have the "indicators" of a potential longer term need, yet standard "un-eventful" roll off the RAID more quickly. In addition to the RAID lifetime management, the system also manages longer term archiving through the use of RAID/DVD/Tape. (All ingested video, regardless of perceived evidence value, is backed up immediately to DVD). If an "after the fact" determination requires video already rolled off RAID to be reviewed, it can be reloaded from the DVD back to the server for renewed access. This leverages the immediate accessibility of RAID as well as the cost effectiveness of DVDs for long-term storage by



integrating a simple automated "re-activation" process with an intelligent evidence volume manager that keeps all "potential" evidence "on-line" for extended periods.

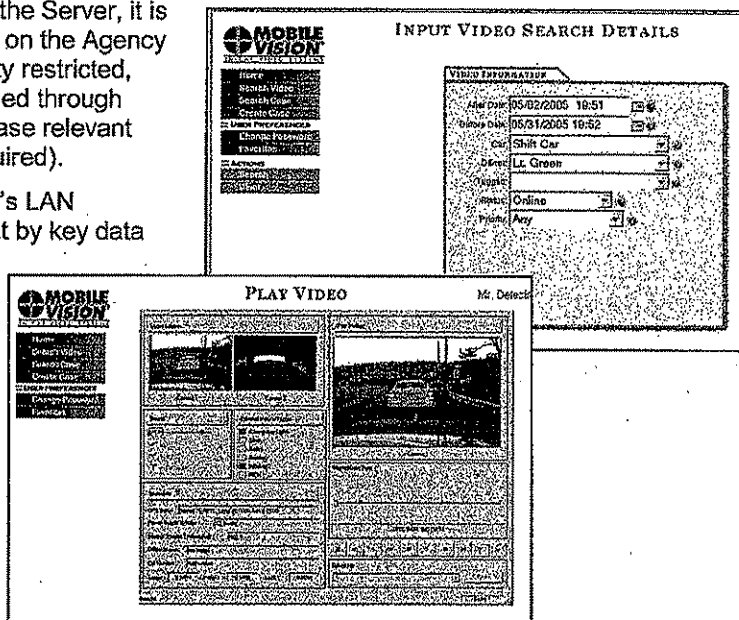
If you need to access the video it is more than likely "on-line" or it can be simply re-activated and made to be "on-line" within short order.

### Search and Access of Video

Once video evidence has been uploaded to the Server, it is available via any of the LAN connected PCs on the Agency network. The access is secure with all activity restricted, verified and recorded. Searches are performed through simple "browser based" web interface and case relevant "Key Data" (no special software or skills required).

The user simply logs onto any of the agency's LAN connected PCs, and searches for an incident by key data (officer's name, date, time or other relevant data).

An equally simple, embedded play application provides video playback controls that operate like a VCR.



### Case File Management

Most video collected will not be used in court, however, that which is used needs to support the judicial process. The D-E PRO has a unique case management module that allows for the creation and management of case files. As with all aspects of this system this is a simple point and click operation. Multiple videos (and other rich media) can be added to a case file (e.g. the "in-car" chase, the subsequent interviews, crime scene digital photos, the digital 911 call, reports, etc.) This entire case build process can be tracked and output.

### Distribution of Video and Fulfillment of Disclosure Requests

**Output to Court:** The system provides a simple means of validating video evidence and outputting to a self contained DVD for presentation in court. From the LAN connected Agency PCs [E], the user requests a certified duplicate of a file for output. The system is generally configured to route all such requests to the DVD robot for output rather than local burn on the client PC. This provides output control and security. This is a simple desktop PC request for the Officer and the system automatically labels and outputs the DVD.

### Security

The security utilized within Flashback is unmatched in the industry. The D-E PRO solution contains multiple levels of security designed to protect against unauthorized access or editing and to ensure file authenticity and chain-of-custody. Network and access security is addressed through: encryption, address specific communication, firewall implementation, user name/password and hierarchical privilege levels to prevent unauthorized server access. File integrity includes the use of frame-level (MD5 hash) digital fingerprinting, which is a security measure that other in-car systems apply at the

global file-level. Additionally, the creation of unalterable copies to non-rewritable media ensures the ultimate in file integrity. Physical, lockable security is enabled for both the in-car DVR and the server. And finally, the entire lifecycle of the video evidence is completely documented with all activity recorded, logged and documented.

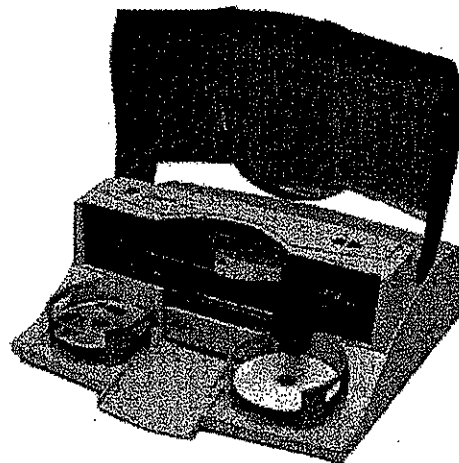
#### **D. DVD/Tape Backup Station with Robot**

For security and long-term retention purposes, the Flashback solution archives video to DVD (or Tape depending on volume in a given Patrol office). Upon receiving the video from the storage & management server [C], the backup station automatically consolidates a group of recorded incidents and copies them to the archiving media.

The backup station consists of a management server [C] (with application control software) and a DVD robot with integrated printer (and/or Tape Robot). The archiving solution is completely automatic; with the only manual intervention being the process of loading a "stack of DVD's" (or cassette of Tapes). The DVD's are automatically labeled and the Tapes are bar-coded prior to insertion. Therefore all the logging and management of the media is automatic through the DEP application.

The DVDs are read only discs to ensure the integrity of the recorded digital video data files and are exact duplicates of the files recorded by the Flashback DVR systems. This redundant (dual-media) architecture assures that unalterable copies exist for secure "disaster recovery". They also provide an unquestionable chain-of-custody compliance as well as a cost-effective, long-term archiving solution.

Videos that were not tagged as potential evidence roll from the RAID system (but are retained on the archive). Accessing videos after their RAID life has expired is simple and automated. The Officers (from their desktop PC) search for files as usual. However, when the search results are returned (with file metadata and thumbnail images), the video will not play and an Officer is asked if this video should be restored. A single click, yes automatically identifies the appropriate DVD number and notifies the administrator that DVD# should be restored. The administrator need only insert the identified DVD# and the video is reloaded and accessible thereafter through the online system.



#### **E. LAN Connected Agency PCs (Viewing Stations)**

To access video, an authorized user logs into the system through any LAN connected PC and simply browses for an incident by date, car identifier and time. The user's access is limited by user name and password. All operations are simple "point & click" — if the user can use a web browser, they can use the Flashback digital video management solution!

**DOCUMENT 10.a – Hardware Requirements**

**REQUIREMENTS: CRITICAL METRICS AND DESIGN IMPLICATIONS**

Driving the solutions architecture is the need to collect and manage the large volume of video that is anticipated to be collected over the distributed OCSD territory.

**OPERATIONAL ASSUMPTIONS (per RFP):** Within the Districts the cars will operate per protocol. That is, record all incidents at 30 frames per second (fps). The cars are anticipated to return twice per day with each visit being 15 to 20 minutes.

**COLLECTION VOLUME ASSUMPTIONS (per Industry Norms):** Historical data assumes that during a 12 hour shift a typical patrol unit will perform nine 15 minute “stops” for a total of 2.25 Hours of video per shift (this is assumed in the sizing).

**EVIDENCE RETENTION (per RFP):** Non-evidence is to be retained for 12 months and Evidence will be retained in perpetuity.

**ONGOING EVIDENCE INTERACTION (per Industry Norms):** The actual operational policies and procedure will have a tremendous impact on the way the evidence is interacted with and this, in turn, significantly effects the required “on-line” volume assumed. It is assumed that the Officers will utilize the “incident classification” capabilities specified in the RFP with some degree of consistency. Consequently, critical “potential evidence” classifications can be utilized to dynamically assign “on-line” lifetimes to assure maximum speed of access to potential evidence. The conservative assumptions of a minimum “on-line” lifetime of 9 months (for higher class videos: 15% of total per Industry Norms) and uneventful video (standard traffic stops: 85% of total per Industry Norms) are retained “on-line” for 3 months awaiting some upgrade. In any case the video is available for the required 12 months (non-evidence) and in perpetuity (evidence: Sized at 2% of total – Industry Norms). Historical data has shown that these are rather conservative assumptions and with the proper operational usage/training can be reduced with little or no negative impact on the operation, i.e. The assumed required storage volumes could quite possibly be reduced when more is known/understood about OCSD’s operation.

The RFP references a 235 car fleet operating out of 6 distributed Patrol locations. The following details the storage requirement metrics as defined by the requirements as stated in the RFP. When some item was undefined a conservative assumption was made. Consequently, it is suggested that detailed discussions with OCSD could result in a 50% reduction in the requisite server sizes.

	<u>North Patrol</u>	<u>South Patrol</u>	<u>West Patrol</u>	<u>San Clemente</u>	<u>JWA</u>	<u>OCTA</u>
Operating Cars per Shift	40	40	16	21	9	6
GB Collected per Shift <sup>(1)</sup>	86	86	35	45	19	13
GB Collected per Month <sup>(1)</sup>	5,184	5,184	2,022	2,722	1,166	778
Server RAID Storage (GB) <sup>(2)</sup>	21,773	21,773	8,709	11,431	4,899	3,265
Backup/Archive Technology <sup>(4)</sup>	Automated Tape Robot	Automated Tape Robot	Automated DVD Robot	Automated DVD Robot	Automated DVD Robot	Automated DVD Robot

(1) Assumes: 2.25 Hrs of video collected per car per shift (Industry Norm), 0.96 GB per hour of video collected (measured value), 2 shifts per day (per RFP), 30 Day per Month.

(2) Assumes: Standard uneventful Traffic stops are 85% of the total (stored “on-line” for 3 months, “Interesting” traffic stops (Vehicle Searches, DUI’s, Use-of-Force, Arrests, etc.) are 15% of the total (stored “on-line” for 9 months) and no more than 2% of the total becomes Case Evidence (stored “on-line” until disposed). Regardless of the “on-line” lifetime all videos are accessible as

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defined by the RFP (some are merely “on-line” vs. “near-line”). As noted previously, the Evidence Interaction Assumptions are driving the RAID size. A better understanding of the OCSD operation will likely result in a significant reduction in this value.

- (3) Each Patrol Location will operate independently with its own server/storage and backup archive. Similarly the backup technology selected will be matched to be optimized for the specific loading as the Patrol in question.

**Wireless uploading is viable:** As with all aspects of the architecture the wireless solution is specific to each Patrol Location. The RFP assumption that there are two returns per shift allows for the possibility to complete the wireless uploading with a maximum of 9 wireless access point in the larger Patrol Locations and have the file transfer completed within the available timeframe. The random return is assumed to occur at a time when no more than 25% of the active cars are in the lot concurrently, under these conditions even the largest of the Patrols will be cleared within 15 to 20 minutes. In order to clear the cars during the “end of shift” return (on the two largest patrols), will necessitate approximately 18 access points. This is likely possible, however it will require a site survey to confirm the parking layout allows physical segmentation. - *Uploading the data can be performed wirelessly within the allotted time, but it will require all 9 available channels in 802.11a, load balancing and the right implementation.*

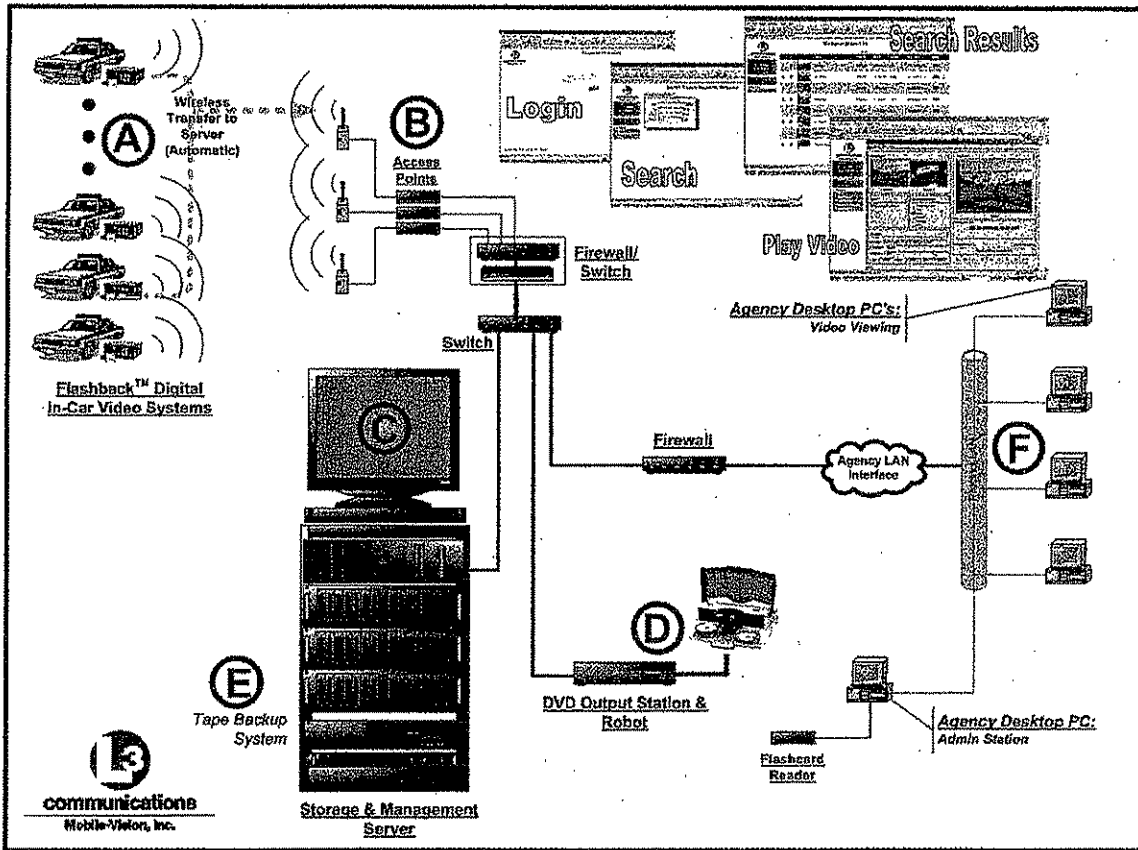
	<u>North Patrol</u>	<u>South Patrol</u>	<u>West Patrol</u>	<u>San Clemente</u>	<u>JWA</u>	<u>OCTA</u>
Wireless Access Points per Patrol Location	18 <sup>(4)</sup> or 9	18 <sup>(4)</sup> or 9	8	9	5	3

- (4) 9 Access Points are bid in this proposal. A site survey will be required to confirm the viability of physically segmenting the parking area to get the preferred 18.

**Optional Agency Server:** The RFP does not require any Inter-Patrol networking. However the L-3 solution does support such a networked architecture wherein the Headquarters would contain an Agency server that would host all the case files and be globally aware of all files across all the Patrols. Such a server for the OCSD implementation would require 5.2 TB and would require minimal network bandwidth.

## NORTH PATROL – SYSTEM DESCRIPTION

Requires 22 TB and a minimum of 9 Wireless 802.11a load balanced access points.



- A) In-car Camera and DVR
- B) Access Points with Firewall/Switch
- C) Server, Storage, Digital Evidence Pro Software and Network Switch (optional Firewall)
- D) DVD Output Robot & PC (for Court Output)
- E) Tape Backup/Archive System
- F) Agency supplied Client (standard Windows PC) connected through the LAN

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RFP NUMBER SXZ00000142  
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**SYSTEM DESCRIPTION**

Item #	Name	Technical Description	Specifications
A	DVRs and In-Car Cameras, Backseat Cameras	Flashback™ in-car digital video recording system - robust camera and recording system.	<b><u>Mobile-Vision In-Car Digital Video Recording (DVR) solution</u></b> <ul style="list-style-type: none"> <li>• Nite-Watch™ Color camera with a 12X Optical – 144X Digital zoom</li> <li>• Standalone Active Matrix Color 3.5" LCD Monitor</li> <li>• VoiceLink Plus™ 900MHz DSS Wireless Microphone</li> <li>• Overwrite Protection feature</li> <li>• Wireless 802.11(a/g) LAN Card and Antenna</li> <li>• 16GB Flash Memory Card</li> <li>• GPS Receiver and Antenna</li> <li>• All mounts, cables and hardware</li> <li>• 1-Year Factory Parts and Labor Warranty</li> </ul>
B	File Transfer System (car to server)	Wireless access points and 802.11a/g wireless network with antennas and physical flash card reader.	<b><u>Wireless Access Point w/External Mounted Antenna</u></b> <b>B<sub>1</sub>:</b> 802.11(a/g) Wireless Access point, Antenna and Cabling <b>B<sub>2</sub>:</b> Enhanced Security Module (optional) <ul style="list-style-type: none"> <li>• Network Switch (Access Point Connection)</li> <li>• Firewall and Interconnecting Ethernet Cable</li> </ul>
C	Storage & Management Server	Application software, server, storage and switch (Attached RAID 6 mass storage with hot spares) DEP2700-3XRD1616-750	<b><u>Storage &amp; Management Solution:</u></b> <b>C<sub>1</sub>:</b> <b>DVM Application &amp; Control Server:</b> Dell PowerEdge 1950 with <ul style="list-style-type: none"> <li>• Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 configuration</li> <li>• 2 x 10/100/1000 Network Interface Cards</li> <li>• Redhat Linux ES4 Op Syst</li> <li>• CD-Rom, Floppy, LCD Monitor, Keyboard, Mouse</li> </ul> <b>C<sub>2</sub>:</b> <b>Digital Evidence Pro: Software Server Solution</b> <ul style="list-style-type: none"> <li>• DVR WIFI Download and Secure Communications Module</li> <li>• Interface and Usability Module (WEB application - Unlimited Seats)</li> <li>• Case Build and Rich Media Management Module</li> <li>• Intelligent Load Balancer Module (Optimizes Wireless Transfer)</li> <li>• Intelligent Volume Management Module (Archiving and Export)</li> <li>• Chain of Custody Module</li> <li>• Postgresql Database</li> </ul> <b>C<sub>3</sub>:</b> <b>Software Load and Server Build out on Certified Equipment</b> <ul style="list-style-type: none"> <li>• DEP Software loading and build out</li> </ul> <b>C<sub>4</sub>:</b> <b>3 x 16 TB DASS Mass Storage:</b> <ul style="list-style-type: none"> <li>• U320 SCSI, 48 x 750GB HDD SATA RAID 6</li> <li>• RAID Controller(s)</li> <li>• Hot Swappable Drives and Power Supply</li> <li>• Rack configuration</li> </ul> <b>C<sub>5</sub>:</b> <b>Power Connect 10/100/1000 Switch</b> <b>C<sub>6</sub>:</b> <b>System Support and Maintenance</b> <ul style="list-style-type: none"> <li>• 1 Year System Updates</li> <li>• 1 Year of System Support and Maintenance</li> </ul>
D	DVD Output Station & Robot	DVD Robot and Control server	<b><u>DVM Backup/Archiving Station</u></b> <b>D<sub>1</sub>:</b> DVD Robot: Primera Bravo II DVD writer /printer w/25 DVD capacity <b>D<sub>2</sub>:</b> DVD Control Server: Dell 512MB RAM and 80GB hard disk, CD-Rom <ul style="list-style-type: none"> <li>• Windows XP Pro Op System/DVD+R/RW</li> <li>• L-3 Mobile-Vision DVD Archiving Software</li> </ul> <b>D<sub>3</sub>:</b> DVD Media: 100 pack: white printable DVD-R media <b>D<sub>4</sub>:</b> System Support and Maintenance <ul style="list-style-type: none"> <li>• 1 Year System Updates</li> <li>• 1 Year of System Support and Maintenance</li> </ul>
E	Tape Backup System	Tape Deck and Control software	<b><u>Tape Backup/Archiving Station</u></b> <b>E<sub>1</sub>:</b> PowerVault 128T (or equivalent) LTO-3 <b>E<sub>2</sub>:</b> Archiving and Control Software Application <b>E<sub>3</sub>:</b> System Support and Maintenance
F	Video Access PCs	Standard PCs with network access. AGENCY SUPPLIED	NA

## SOUTH PATROL – SYSTEM DESCRIPTION

Requires 22 TB and a minimum of 9 Wireless 802.11a load balanced access points.

Item #	Name	Technical Description	Specifications
A	DVRs and In-Car Cameras, Backseat Cameras	Flashback™ in-car digital video recording system - robust camera and recording system.	<b><u>Mobile-Vision In-Car Digital Video Recording (DVR) solution</u></b> <ul style="list-style-type: none"> <li>• Nite-Watch™ Color camera with a 12X Optical – 144X Digital zoom</li> <li>• Standalone Active Matrix Color 3.5" LCD Monitor</li> <li>• VoiceLink Plus™ 900MHz DSS Wireless Microphone</li> <li>• Overwrite Protection feature</li> <li>• Wireless 802.11(a/g) LAN Card and Antenna</li> <li>• 16GB Flash Memory Card</li> <li>• GPS Receiver and Antenna</li> <li>• All mounts, cables and hardware</li> <li>• 1-Year Factory Parts and Labor Warranty</li> </ul>
B	File Transfer System (car to server)	Wireless access points and 802.11a/g wireless network with antennas and physical flash card reader.	<b><u>Wireless Access Point w/External Mounted Antenna</u></b> <b>B<sub>1</sub>:</b> 802.11(a/g) Wireless Access point, Antenna and Cabling <b>B<sub>2</sub>:</b> Enhanced Security Module (optional) <ul style="list-style-type: none"> <li>• Network Switch (Access Point Connection)</li> <li>• Firewall and Interconnecting Ethernet Cable</li> </ul>
C	Storage & Management Server	Application software, server, storage and switch (Attached RAID 6 mass storage with hot spares) DEP2700-3XRD1616-750	<b><u>Storage &amp; Management Solution:</u></b> <b>C<sub>1</sub>:</b> DVM Application & Control Server: Dell PowerEdge 1950 with <ul style="list-style-type: none"> <li>• Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 configuration</li> <li>• 2 x 10/100/1000 Network Interface Cards</li> <li>• Redhat Linux ES4 Op Syst</li> <li>• CD-Rom, Floppy, LCD Monitor, Keyboard, Mouse</li> </ul> <b>C<sub>2</sub>:</b> Digital Evidence Pro: Software Server Solution <ul style="list-style-type: none"> <li>• DVR WIFI Download and Secure Communications Module</li> <li>• Interface and Usability Module (WEB application - Unlimited Seats)</li> <li>• Case Build and Rich Media Management Module</li> <li>• Intelligent Load Balancer Module (Optimizes Wireless Transfer)</li> <li>• Intelligent Volume Management Module (Archiving and Export)</li> <li>• Chain of Custody Module</li> <li>• Postgresql Database</li> </ul> <b>C<sub>3</sub>:</b> Software Load and Server Build out on Certified Equipment <ul style="list-style-type: none"> <li>• DEP Software loading and build out</li> </ul> <b>C<sub>4</sub>:</b> 3 x 16 TB DASS Mass Storage: <ul style="list-style-type: none"> <li>• U320 SCSI, 48 x 750GB HDD SATA RAID 6</li> <li>• RAID Controller(s)</li> <li>• Hot Swappable Drives and Power Supply</li> <li>• Rack configuration</li> </ul> <b>C<sub>5</sub>:</b> Power Connect 10/100/1000 Switch <b>C<sub>6</sub>:</b> System Support and Maintenance <ul style="list-style-type: none"> <li>• 1 Year System Updates</li> <li>• 1 Year of System Support and Maintenance</li> </ul>
D	DVD Output Station & Robot	DVD Robot and Control server	<b><u>DVM Backup/Archiving Station</u></b> <b>D<sub>1</sub>:</b> DVD Robot: Primera Bravo II DVD writer /printer w/25 DVD capacity <b>D<sub>2</sub>:</b> DVD Control Server: Dell 512MB RAM and 80GB hard disk, CD-Rom <ul style="list-style-type: none"> <li>• Windows XP Pro Op System/DVD+R/RW</li> <li>• L-3 Mobile-Vision DVD Archiving Software</li> </ul> <b>D<sub>3</sub>:</b> DVD Media: 100 pack: white printable DVD-R media <b>D<sub>4</sub>:</b> System Support and Maintenance <ul style="list-style-type: none"> <li>• 1 Year System Updates</li> <li>• 1 Year of System Support and Maintenance</li> </ul>
E	Tape Backup System	Tape Deck and Control software	<b><u>Tape Backup/Archiving Station</u></b> <b>E<sub>1</sub>:</b> PowerVault 128T (or equivalent) LTO-3 <b>E<sub>2</sub>:</b> Archiving and Control Software Application <b>E<sub>3</sub>:</b> System Support and Maintenance

## WEST PATROL – SYSTEM DESCRIPTION

Requires 8.7 TB and a minimum of 8 Wireless 802.11a load balanced access points.

Item #	Name	Technical Description	Specifications
A	DVRs and In-Car Cameras, Backseat Cameras	Flashback™ in-car digital video recording system - robust camera and recording system.	<p><b><u>Mobile-Vision In-Car Digital Video Recording (DVR) solution</u></b></p> <ul style="list-style-type: none"> <li>• Nite-Watch™ Color camera with a 12X Optical – 144X Digital zoom</li> <li>• Standalone Active Matrix Color 3.5" LCD Monitor</li> <li>• VoiceLink Plus™ 900MHz DSS Wireless Microphone</li> <li>• Overwrite Protection feature</li> <li>• Wireless 802.11(a/g) LAN Card and Antenna</li> <li>• 16GB Flash Memory Card</li> <li>• GPS Receiver and Antenna</li> <li>• All mounts, cables and hardware</li> <li>• 1-Year Factory Parts and Labor Warranty</li> </ul>
B	File Transfer System (car to server)	Wireless access points and 802.11a/g wireless network with antennas and physical flash card reader.	<p><b><u>Wireless Access Point w/External Mounted Antenna</u></b></p> <p><b>B<sub>1</sub>:</b> 802.11(a/g) Wireless Access point, Antenna and Cabling  <b>B<sub>2</sub>:</b> Enhanced Security Module (optional)</p> <ul style="list-style-type: none"> <li>• Network Switch (Access Point Connection)</li> <li>• Firewall and Interconnecting Ethernet Cable</li> </ul>
C	Storage & Management Server	Application software, server, storage and switch (Attached RAID 6 mass storage with hot spares) DEP2730 Model	<p><b><u>Storage &amp; Management Solution:</u></b></p> <p><b>C<sub>1</sub>:</b> <b>DVM Application Server: Dell PowerEdge 1950 with</b></p> <ul style="list-style-type: none"> <li>• Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 configuration</li> <li>• 2 x 10/100/1000 Network Interface Cards</li> <li>• Redhat Linux ES4 Op Syst / Postgresql Database</li> <li>• CD-Rom, Floppy, LCD Monitor, Keyboard, Mouse</li> </ul> <p><b>C<sub>2</sub>:</b> <b>Digital Evidence Pro: Software Server Solution</b></p> <ul style="list-style-type: none"> <li>• DVR WIFI Download and Secure Communications Module</li> <li>• Interface and Usability Module (WEB application - Unlimited Seats)</li> <li>• Case Build and Rich Media Management Module</li> <li>• Intelligent Load Balancer Module (Optimizes Wireless Transfer)</li> <li>• Intelligent Volume Management Module (Archiving and Export)</li> <li>• Chain of Custody Module</li> <li>• Redhat Linux Op Syst / Postgresql Database</li> </ul> <p><b>C<sub>3</sub>:</b> <b>Software Load and Server Build out on Certified Equipment</b></p> <ul style="list-style-type: none"> <li>• DEP Software loading and build out</li> </ul> <p><b>C<sub>4</sub>:</b> <b>2 x DASS Mass Storage:</b></p> <ul style="list-style-type: none"> <li>• U320 SCSI, 32 x 500GB HDD SATA RAID 6</li> <li>• RAID Controller(s)</li> <li>• Hot Swappable Drives and Power Supply</li> <li>• 2 x 4 U Rack configuration</li> </ul> <p><b>C<sub>5</sub>:</b> <b>Power Connect 10/100/1000 Switch</b></p> <p><b>C<sub>6</sub>:</b> <b>System Support and Maintenance</b></p> <ul style="list-style-type: none"> <li>• 1 Year System Updates</li> <li>• 1 Year of System Support and Maintenance</li> </ul>
D	DVD Output Station & Robot	DVD Robot and Control server (plus Media)	<p><b><u>DVM Backup/Archiving Station</u></b></p> <p><b>D<sub>1</sub>:</b> <b>DVD Robot: Primera Bravo II DVD writer /printer w/25 DVD capacity</b>  <b>D<sub>2</sub>:</b> <b>DVD Control Server: Dell 512MB RAM and 80GB hard disk, CD-Rom</b></p> <ul style="list-style-type: none"> <li>• Windows XP Pro Op System/DVD+R/RW</li> <li>• L-3 Mobile-Vision DVD Archiving Software</li> </ul> <p><b>D<sub>3</sub>:</b> <b>DVD Media: 100 pack: white printable DVD-R media</b>  <b>D<sub>4</sub>:</b> <b>System Support and Maintenance</b></p> <ul style="list-style-type: none"> <li>• 1 Year System Updates</li> <li>• 1 Year of System Support and Maintenance</li> </ul>
E	Video Access PCs	Standard PCs with network access. AGENCY SUPPLIED	NA



## SAN CLEMENTE – SYSTEM DESCRIPTION

Requires 11.4 TB and a minimum of 9 Wireless 802.11a load balanced access points.

Item #	Name	Technical Description	Specifications
A	DVRs and In-Car Cameras, Backseat Cameras	Flashback™ In-car digital video recording system - robust camera and recording system.	<b><u>Mobile-Vision In-Car Digital Video Recording (DVR) solution</u></b> <ul style="list-style-type: none"> <li>• Nite-Watch™ Color camera with a 12X Optical – 144X Digital zoom</li> <li>• Standalone Active Matrix Color 3.5" LCD Monitor</li> <li>• VoiceLink Plus™ 900MHz DSS Wireless Microphone</li> <li>• Overwrite Protection feature</li> <li>• Wireless 802.11(a/g) LAN Card and Antenna</li> <li>• 16GB Flash Memory Card</li> <li>• GPS Receiver and Antenna</li> <li>• All mounts, cables and hardware</li> <li>• 1-Year Factory Parts and Labor Warranty</li> </ul>
B	File Transfer System (car to server)	Wireless access points and 802.11a/g wireless network with antennas and physical flash card reader.	<b><u>Wireless Access Point w/External Mounted Antenna</u></b> <b>B<sub>1</sub>:</b> 802.11(a/g) Wireless Access point, Antenna and Cabling <b>B<sub>2</sub>:</b> Enhanced Security Module (optional) <ul style="list-style-type: none"> <li>• Network Switch (Access Point Connection)</li> <li>• Firewall and Interconnecting Ethernet Cable</li> </ul>
C	Storage & Management Server	Application software, server, storage and switch (Attached RAID 6 mass storage with hot spares)  DEP2730-750 Model	<b><u>Storage &amp; Management Solution:</u></b> <b>C<sub>1</sub>:</b> DVM Application Server: Dell PowerEdge 1950 with <ul style="list-style-type: none"> <li>• Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 configuration</li> <li>• 2 x 10/100/1000 Network Interface Cards</li> <li>• Redhat Linux ES4 Op Syst / Postgresql Database</li> <li>• CD-Rom, Floppy, LCD Monitor, Keyboard, Mouse</li> </ul> <b>C<sub>2</sub>:</b> Digital Evidence Pro: Software Server Solution <ul style="list-style-type: none"> <li>• DVR WIFI Download and Secure Communications Module</li> <li>• Interface and Usability Module (WEB application - Unlimited Seats)</li> <li>• Case Build and Rich Media Management Module</li> <li>• Intelligent Load Balancer Module (Optimizes Wireless Transfer)</li> <li>• Intelligent Volume Management Module (Archiving and Export)</li> <li>• Chain of Custody Module</li> <li>• Redhat Linux Op Syst / Postgresql Database</li> </ul> <b>C<sub>3</sub>:</b> Software Load and Server Build out on Certified Equipment <ul style="list-style-type: none"> <li>• DEP Software loading and build out</li> </ul> <b>C<sub>4</sub>:</b> 2 x DASS Mass Storage: <ul style="list-style-type: none"> <li>• U320 SCSI, 32 x 750GB HDD SATA RAID 6</li> <li>• RAID Controller(s)</li> <li>• Hot Swappable Drives and Power Supply</li> <li>• 2 x 4 U Rack configuration</li> </ul> <b>C<sub>5</sub>:</b> Power Connect 10/100/1000 Switch <b>C<sub>6</sub>:</b> System Support and Maintenance <ul style="list-style-type: none"> <li>• 1 Year System Updates</li> <li>• 1 Year of System Support and Maintenance</li> </ul>
D	DVD Output Station & Robot	DVD Robot and Control server (plus Media)	<b><u>DVM Backup/Archiving Station</u></b> <b>D<sub>1</sub>:</b> DVD Robot: Primera Bravo II DVD writer /printer w/25 DVD capacity <b>D<sub>2</sub>:</b> DVD Control Server: Dell 512MB RAM and 80GB hard disk, CD-Rom <ul style="list-style-type: none"> <li>• Windows XP Pro Op System/DVD+R/RW</li> <li>• L-3 Mobile-Vision DVD Archiving Software</li> </ul> <b>D<sub>3</sub>:</b> DVD Media: 100 pack: white printable DVD-R media <b>D<sub>4</sub>:</b> System Support and Maintenance <ul style="list-style-type: none"> <li>• 1 Year System Updates</li> <li>• 1 Year of System Support and Maintenance</li> </ul>
E	Video Access PCs	Standard PCs with network access. AGENCY SUPPLIED	NA

## JWA – SYSTEM DESCRIPTION

Requires 4.9 TB and a minimum of 5 Wireless 802.11a load balanced access points.

Item #	Name	Technical Description	Specifications
A	DVRs and In-Car Cameras, Backseat Cameras	Flashback™ in-car digital video recording system - robust camera and recording system.	<p><b><u>Mobile-Vision In-Car Digital Video Recording (DVR) solution</u></b></p> <ul style="list-style-type: none"> <li>• Nite-Watch™ Color camera with a 12X Optical – 144X Digital zoom</li> <li>• Standalone Active Matrix Color 3.5" LCD Monitor</li> <li>• VoiceLink Plus™ 900MHz DSS Wireless Microphone</li> <li>• Overwrite Protection feature</li> <li>• Wireless 802.11(a/g) LAN Card and Antenna</li> <li>• 16GB Flash Memory Card</li> <li>• GPS Receiver and Antenna</li> <li>• All mounts, cables and hardware</li> <li>• 1-Year Factory Parts and Labor Warranty</li> </ul>
B	File Transfer System (car to server)	Wireless access points and 802.11a/g wireless network with antennas and physical flash card reader.	<p><b><u>Wireless Access Point w/External Mounted Antenna</u></b></p> <p>B<sub>1</sub>: 802.11(a/g) Wireless Access point, Antenna and Cabling  B<sub>2</sub>: Enhanced Security Module (optional)</p> <ul style="list-style-type: none"> <li>• Network Switch (Access Point Connection)</li> <li>• Firewall and Interconnecting Ethernet Cable</li> </ul>
C	Storage & Management Server	Application software, server, storage and switch (Attached RAID 6 mass storage with hot spare.)  DEP2715 Model	<p><b><u>Storage &amp; Management Solution:</u></b></p> <p>C<sub>1</sub>: <b>DVM Application Server: Dell PowerEdge 1950 with</b></p> <ul style="list-style-type: none"> <li>• Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 configuration</li> <li>• 2 x 10/100/1000 Network Interface Cards</li> <li>• Redhat Linux ES4 Op Syst</li> <li>• CD-Rom, Floppy, LCD Monitor, Keyboard, Mouse</li> </ul> <p>C<sub>2</sub>: <b>Digital Evidence Pro: Software Server Solution</b></p> <ul style="list-style-type: none"> <li>• DVR WIFI Download and Secure Communications Module</li> <li>• Interface and Usability Module (WEB application - Unlimited Seats)</li> <li>• Case Build and Rich Media Management Module</li> <li>• Intelligent Load Balancer Module (Optimizes Wireless Transfer)</li> <li>• Intelligent Volume Management Module (Archiving and Export)</li> <li>• Chain of Custody Module</li> <li>• Postgresql Database</li> </ul> <p>C<sub>3</sub>: <b>Software Load and Server Build out on Certified Equipment</b></p> <ul style="list-style-type: none"> <li>• DEP Software loading and build out</li> </ul> <p>C<sub>4</sub>: <b>DASS Mass Storage:</b></p> <ul style="list-style-type: none"> <li>• U320 SCSI, 16 x 500GB HDD SATA RAID 6</li> <li>• RAID Controller</li> <li>• Hot Swappable Drives and Power Supply</li> <li>• Rack configuration</li> </ul> <p>C<sub>5</sub>: <b>Power Connect 10/100/1000 Switch</b></p> <p>C<sub>6</sub>: <b>System Support and Maintenance</b></p> <ul style="list-style-type: none"> <li>• 1 Year System Updates</li> <li>• 1 Year of System Support and Maintenance</li> </ul>
D	DVD Backup Station & Robot	DVD Robot and Control server (plus Media)	<p><b><u>DVM Backup/Archiving Station</u></b></p> <p>D<sub>1</sub>: DVD Robot: Primera Bravo II DVD writer /printer w/25 DVD capacity  D<sub>2</sub>: DVD Control Server: Dell 512MB RAM and 80GB hard disk, CD-Rom</p> <ul style="list-style-type: none"> <li>• Windows XP Pro Op System/DVD+R/RW</li> <li>• L-3 Mobile-Vision DVD Archiving Software</li> </ul> <p>D<sub>3</sub>: <b>DVD Media: 100 pack: white printable DVD-R media</b>  D<sub>4</sub>: <b>System Support and Maintenance</b></p> <ul style="list-style-type: none"> <li>• 1 Year System Updates</li> <li>• 1 Year of System Support and Maintenance</li> </ul>
E	Video Access PCs	Standard PCs with network access. <b>AGENCY SUPPLIED</b>	NA

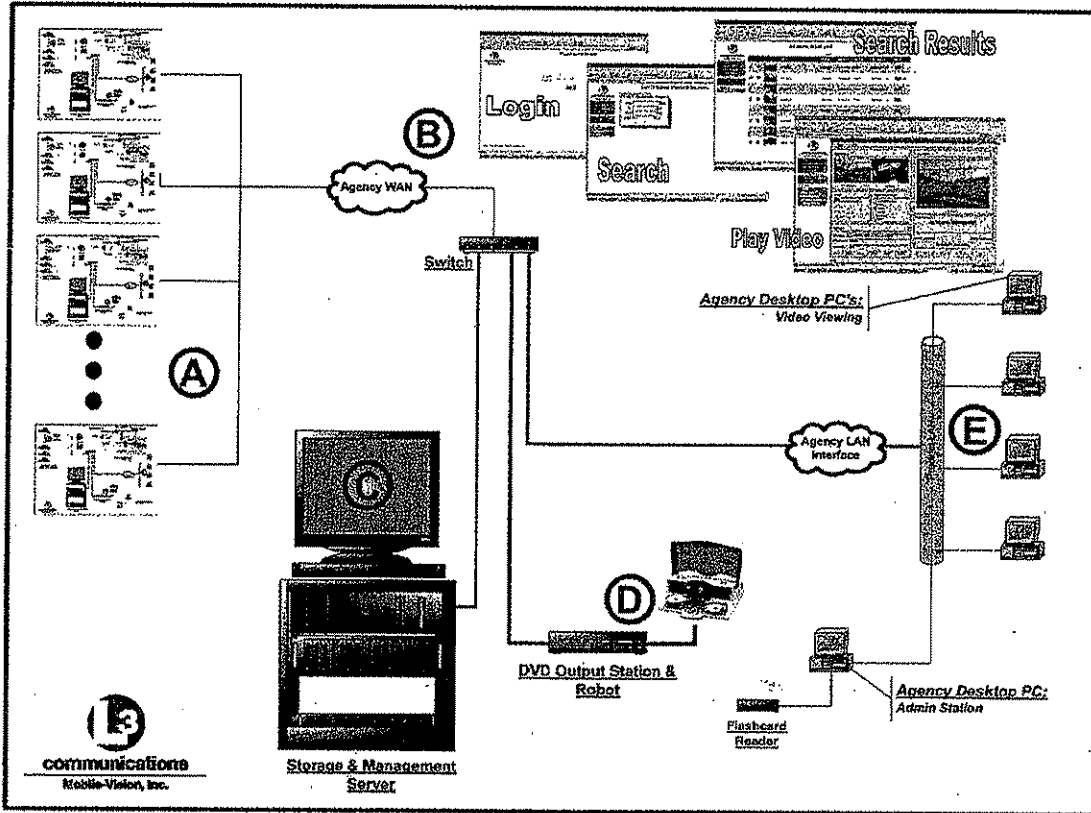
## OCTA – SYSTEM DESCRIPTION

Requires 3.3 TB and a minimum of 3 Wireless 802.11a load balanced access points.

Item #	Name	Technical Description	Specifications
A	DVRs and In-Car Cameras, Backseat Cameras	Flashback™ in-car digital video recording system - robust camera and recording system.	<p><b><u>Mobile-Vision In-Car Digital Video Recording (DVR) solution</u></b></p> <ul style="list-style-type: none"> <li>• Nite-Watch™ Color camera with a 12X Optical – 144X Digital zoom</li> <li>• Standalone Active Matrix Color 3.5" LCD Monitor</li> <li>• VoiceLink Plus™ 900MHz DSS Wireless Microphone</li> <li>• Overwrite Protection feature</li> <li>• Wireless 802.11(a/g) LAN Card and Antenna</li> <li>• 16GB Flash Memory Card</li> <li>• GPS Receiver and Antenna</li> <li>• All mounts, cables and hardware</li> <li>• 1-Year Factory Parts and Labor Warranty</li> </ul>
B	File Transfer System (car to server)	Wireless access points and 802.11a/g wireless network with antennas and physical flash card reader.	<p><b><u>Wireless Access Point w/External Mounted Antenna</u></b></p> <p><b>B<sub>1</sub>:</b> 802.11(a/g) Wireless Access point, Antenna and Cabling</p> <p><b>B<sub>2</sub>:</b> Enhanced Security Module (optional)</p> <ul style="list-style-type: none"> <li>• Network Switch (Access Point Connection)</li> <li>• Firewall and Interconnecting Ethernet Cable</li> </ul>
C	Storage & Management Server	Application software, server, storage and switch (Attached RAID 6 mass storage with hot spare.)  DEP2715 Model	<p><b><u>Storage &amp; Management Solution:</u></b></p> <p><b>C<sub>1</sub>:</b> <b>DVM Application Server: Dell PowerEdge 1950 with</b></p> <ul style="list-style-type: none"> <li>• Dual 3GHZ, 2 GB RAM, 2 x 73 GB RAID 1 configuration</li> <li>• 2 x 10/100/1000 Network Interface Cards</li> <li>• Redhat Linux ES4 Op Syst</li> <li>• CD-Rom, Floppy, LCD Monitor, Keyboard, Mouse</li> </ul> <p><b>C<sub>2</sub>:</b> <b>Digital Evidence Pro: Software Server Solution</b></p> <ul style="list-style-type: none"> <li>• DVR WIFI Download and Secure Communications Module</li> <li>• Interface and Usability Module (WEB application - Unlimited Seats)</li> <li>• Case Build and Rich Media Management Module</li> <li>• Intelligent Load Balancer Module (Optimizes Wireless Transfer)</li> <li>• Intelligent Volume Management Module (Archiving and Export)</li> <li>• Chain of Custody Module</li> <li>• Postgresql Database</li> </ul> <p><b>C<sub>3</sub>:</b> <b>Software Load and Server Build out on Certified Equipment</b></p> <ul style="list-style-type: none"> <li>• DEP Software loading and build out</li> </ul> <p><b>C<sub>4</sub>:</b> <b>DASS Mass Storage:</b></p> <ul style="list-style-type: none"> <li>• U320 SCSI, 16 x 500GB HDD SATA RAID 6</li> <li>• RAID Controller</li> <li>• Hot Swappable Drives and Power Supply</li> <li>• Rack configuration</li> </ul> <p><b>C<sub>5</sub>:</b> <b>Power Connect 10/100/1000 Switch</b></p> <p><b>C<sub>6</sub>:</b> <b>System Support and Maintenance</b></p> <ul style="list-style-type: none"> <li>• 1 Year System Updates</li> <li>• 1 Year of System Support and Maintenance</li> </ul>
D	DVD Backup Station & Robot	DVD Robot and Control server (plus Media)	<p><b><u>DVM Backup/Archiving Station</u></b></p> <p><b>D<sub>1</sub>:</b> DVD Robot: Primera Bravo II DVD writer /printer w/25 DVD capacity</p> <p><b>D<sub>2</sub>:</b> DVD Control Server: Dell 512MB RAM and 80GB hard disk, CD-Rom</p> <ul style="list-style-type: none"> <li>• Windows XP Pro Op System/DVD+R/RW</li> <li>• L-3 Mobile-Vision DVD Archiving Software</li> </ul> <p><b>D<sub>3</sub>:</b> DVD Media: 100 pack: white printable DVD-R media</p> <p><b>D<sub>4</sub>:</b> System Support and Maintenance</p> <ul style="list-style-type: none"> <li>• 1 Year System Updates</li> <li>• 1 Year of System Support and Maintenance</li> </ul>
E	Video Access PCs	Standard PCs with network access. <b>AGENCY SUPPLIED</b>	NA

## OPTIONAL AGENCY SERVER AT HEADQUARTERS

Requires 5.2 TB.



- A) Substation Servers
- B) Agency WAN
- C) Server, Storage, Digital Evidence Pro Software and Network Switch
- D) DVD Output Robot & PC
- E) Agency supplied Client (standard Windows PC) connected through the LAN

COUNTY OF ORANGE – SHERIFFS DEPARTMENT  
RFP NUMBER SXZ00000142  
L-3 COMMUNICATIONS – MOBILE-VISION, INC.

**OPTIONAL AGENCY SYSTEM DESCRIPTION**

Item #	Name	Technical Description	Specifications
A	District Servers	See Separate Description	See Separate Description
B	File Transfer System (District to Agency Server)	Agency WAN	Agency WAN
C	Storage & Management Server	Application software, server, storage and switch (Attached RAID 5 mass storage.) DEP2715AG Model	<p><b><u>Storage &amp; Management Solution:</u></b></p> <p><b>C<sub>1</sub>: DVM Application &amp; Control Server: Dell PowerEdge 1950 with</b></p> <ul style="list-style-type: none"> <li>• Dual 3GHZ; 2 GB RAM, 2 x 73 GB RAID 1</li> <li>• 2 x 10/100/1000 Network Interface Cards</li> <li>• Redhat Linux ES4 Op Syst</li> <li>• CD-Rom, Floppy, LCD Monitor, Keyboard, Mouse</li> </ul> <p><b>C<sub>2</sub>: Digital Evidence Pro: Agency Software Server Solution</b></p> <ul style="list-style-type: none"> <li>• District Office Upload and Secure Communications Module</li> <li>• Agency Content Management Module</li> <li>• Interface and Usability Module (WEB application - Unlimited Seats)</li> <li>• Case Build and Rich Media Management Module</li> <li>• Intelligent Volume Management Module (Archiving and Export)</li> <li>• Chain of Custody Module</li> <li>• Postgresql Database</li> </ul> <p><b>C<sub>3</sub>: Software Load and Server Build out on Certified Equipment</b></p> <ul style="list-style-type: none"> <li>• DEP Software loading and build out</li> </ul> <p><b>C<sub>4</sub>: 1 x 16 TB DASS Mass Storage:</b></p> <ul style="list-style-type: none"> <li>• U320 SCSI, 16 x 500GB HDD SATA RAID 6</li> <li>• RAID Controller(s)</li> <li>• Hot Swappable Drives and Power Supply</li> <li>• Rack configuration</li> </ul> <p><b>C<sub>5</sub>: Power Connect 10/100/1000 Switch</b></p> <p><b>C<sub>6</sub>: System Support and Maintenance</b></p> <ul style="list-style-type: none"> <li>• 1 Year System Updates</li> <li>• 1 Year of System Support and Maintenance</li> </ul>
D	DVD Backup Station & Robot	DVD Robot and Control server (plus Media)	<p><b><u>DVM Backup/Archiving Station</u></b></p> <p><b>D<sub>1</sub>: DVD Robot: Primera Bravo II DVD writer / printer w/25 DVD capacity</b></p> <p><b>D<sub>2</sub>: DVD Control Server: Dell 512MB RAM and 80GB hard disk, CD-Rom</b></p> <ul style="list-style-type: none"> <li>• Windows XP Pro Op System/DVD+R/RW</li> <li>• L-3 Mobile-Vision DVD Archiving Software</li> </ul> <p><b>D<sub>3</sub>: DVD Media: 100 pack: white printable DVD-R media</b></p> <p><b>D<sub>4</sub>: System Support and Maintenance</b></p> <ul style="list-style-type: none"> <li>• 1 Year System Updates</li> <li>• 1 Year of System Support and Maintenance</li> </ul>
E	Video Access PCs	Standard PCs with network access. <b>AGENCY SUPPLIED</b>	NA

## DOCUMENT 10E. DESCRIPTION OF USER INTERFACE

### INTRODUCTION

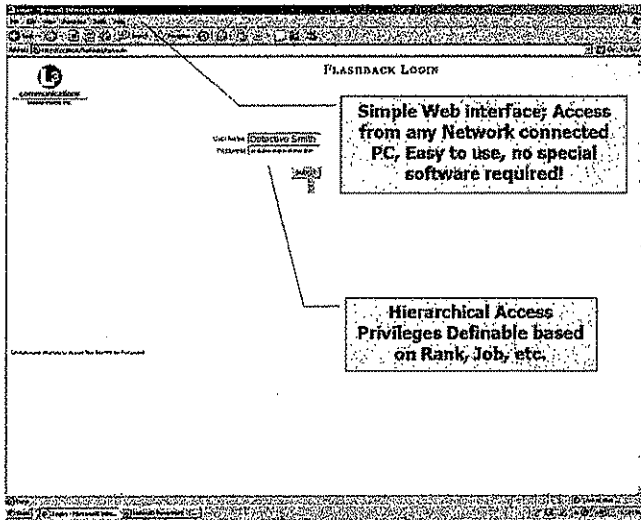
The Digital Evidence Series evidence management solution is a network based solution (rather than a restrictive stand alone workstation). This means that you will be able to securely access the evidence from any network connected PC through a simple web browser and no special client PC software. The functions are designed to be simple and intuitive. There are a plethora of embedded features and functions that make our new system unique and unmatched in the industry.

See following sections for an overview of the primary user interactions and functions.

## Using the Digital Evidence Series (the Application)

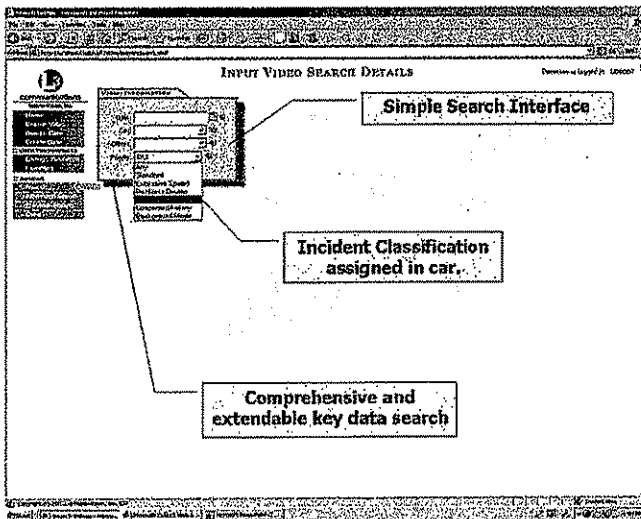
### A. Logging into the System

Launch a browser and log-in from any LAN connected PC in the Precinct. The system will recognize the users' privileges and allow certain functions and access rights.



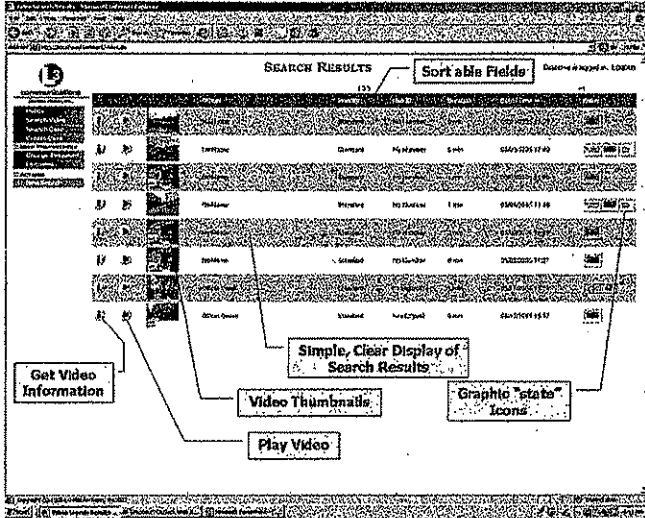
### B. Searching for a Video

Videos are searched through a simple interface using Key Data and Boolean logic. This is not a spreadsheet it is a simple usable tool to locate video via Date/Time, Officer Name, Incident Class, GPS Location and Video State.



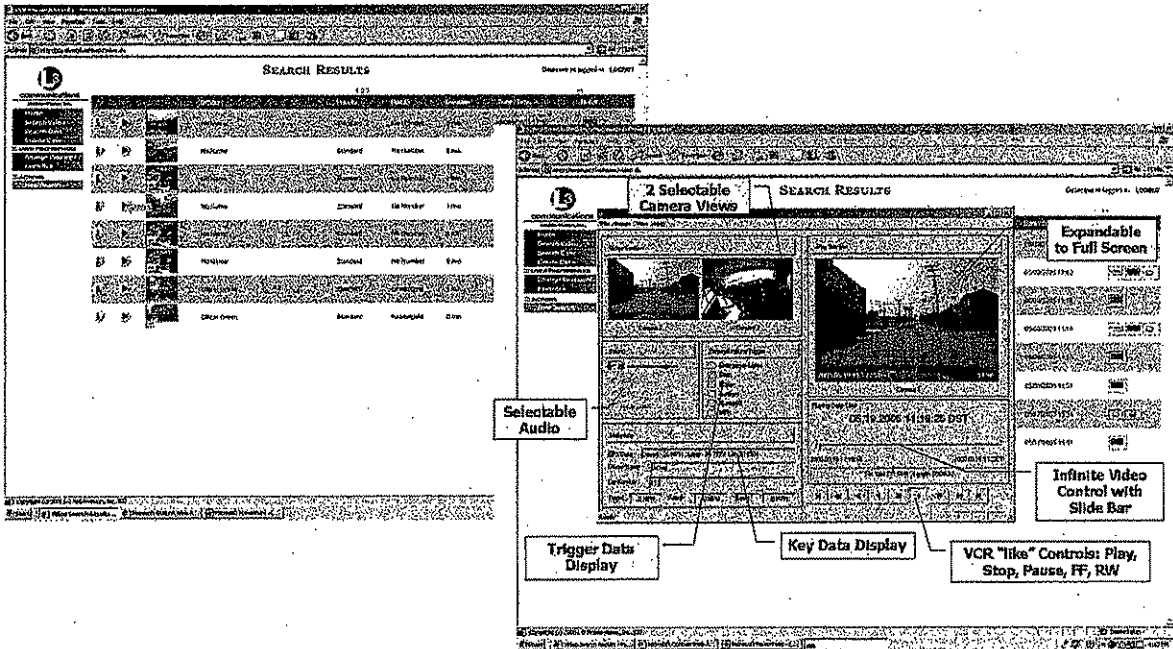
## Display of the Search Results

The videos are displayed in a simple and clear format (again this is not a spreadsheet). Based on the search criteria this may be one video or many. In either case, a visual reference is provided through a thumbnail image from the video and all relevant information is displayed in clear and sort able format.



## D. Playing a Video

All the controls are simple and intuitive. Press the play button and a play window opens and the video plays can be played just like a VCR (Play, FF, RW, Pause). All critical incident data (such as triggers, speed, GPS position, etc.) are displayed. Stills can be captured and saved from the video.





### E. Tagging a Video

The storage and management system utilizes cues from many sources to manage the video throughout its lifetime. One primary cue is whether or not a video is tagged as potential evidence. If at any time the users think that the video has the potential to have evidence value, it can be simply tagged by pressing the tag button. This effectively raises the priority of the video and extends the RAID lifetime.

**SEARCH RESULTS**

Video ID	Video Name	Status	Date
10000001	10000001	10000001	10000001
10000002	10000002	10000002	10000002
10000003	10000003	10000003	10000003
10000004	10000004	10000004	10000004

**VIDEO DETAILS**

Video Information

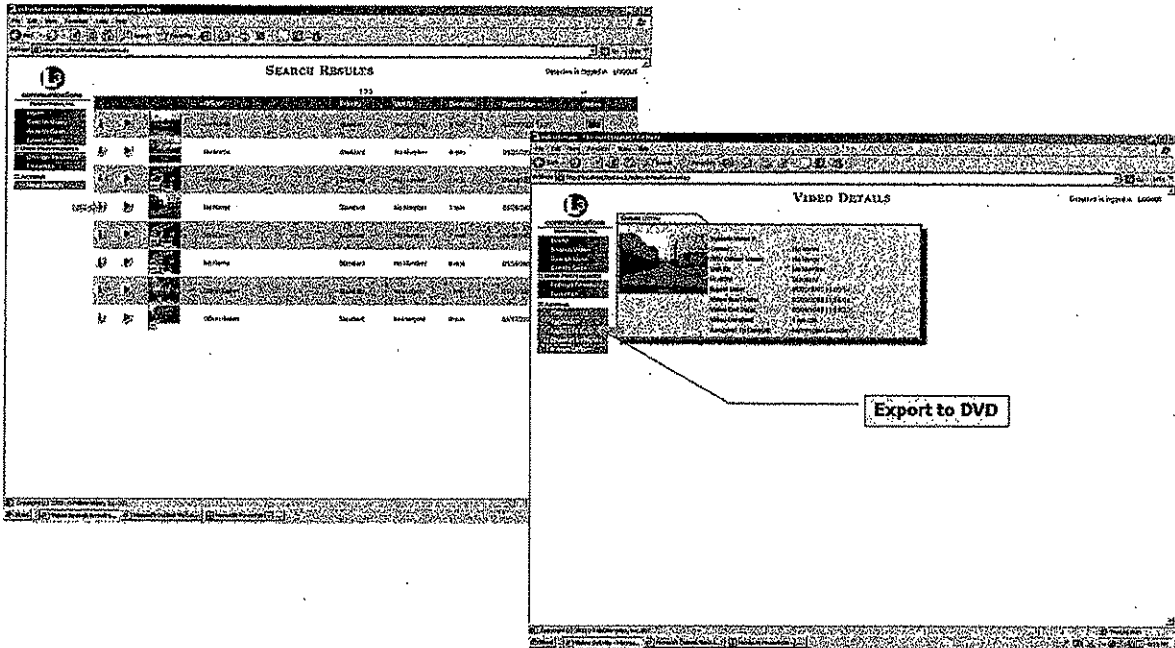
Tag a Video

Cases associated with the Video

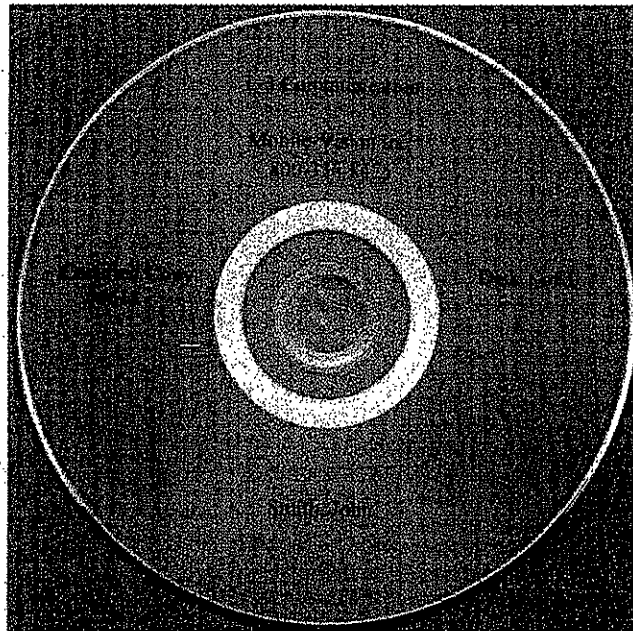
## Video "On-Line Lifetime" is Extended

## F. Outputting a Video for Distribution

It is very simple to output video on DVD/CD for distribution (court or other). The standard solution configuration contains a DVD robot that allows for a single button output initiation. Merely press the "Export to DVD" button and a DVD is automatically composed, written, and labeled without manual intervention. (For smaller applications, where a robot is not included, the writing can be performed at the desktop.)




The video output DVD is completely self-contained with all necessary play components included automatically.



## G. Documenting the Video “Chain of Custody”

The system automatically and completely documents all activity surrounding the video. From the time of capture, through upload and management all interactions are tracked and identified (who, what, when, where from). All these items are then automatically composed and written out in a standard pdf report format that is completely up to date with the last activity.

The screenshot shows a web application with two main panels: 'SEARCH RESULTS' on the left and 'VIDEO DETAILS' on the right. The 'SEARCH RESULTS' panel contains a table with columns for video ID, name, status, and other attributes. A callout box labeled 'Chain of Custody Report' points to a specific video entry in this table. The 'VIDEO DETAILS' panel shows a larger view of a video, including a thumbnail and various metadata fields.



### Video Chain of Evidence Report

L3 Communications  
Mobile-Vision Inc.  
2700 Westhall Ln., Maitland, FL  
888-316-8478

---

**Video Details**

System Video ID: 1  
Driver: No Name  
Driver Officer Number/No Name:  
Unit ID: No Number  
Ingest Date: 2005-05-02 11:09:14.275  
Video Start Date: 2005-05-02 11:08:00.0  
Video End Date: 2005-05-02 11:10:30.0

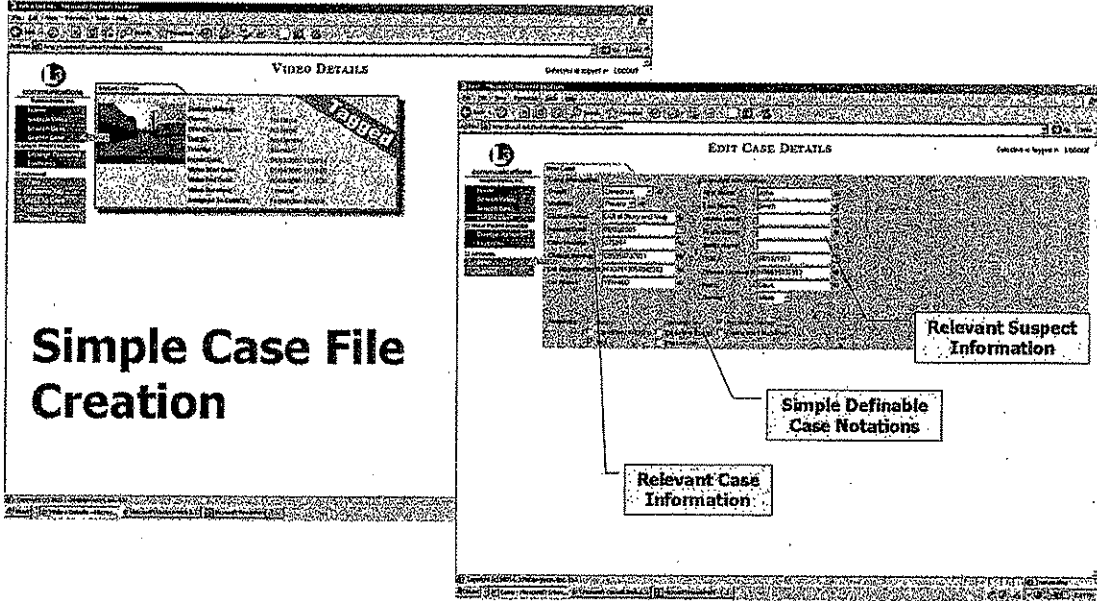
---

**Access Log**

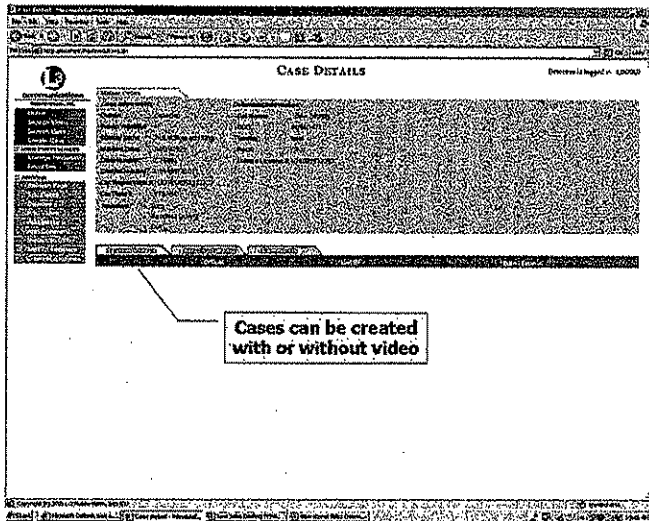
Date	User	Action	IP Address
09-07-2005 15:41	Detective	Remove Tag	127.0.0.1
09-07-2005 15:41	Detective	Tag	127.0.0.1
08-29-2005 06:52	Detective	Remove Tag	127.0.0.1
08-26-2005 07:49	Detective	Tag	127.0.0.1
08-26-2005 07:58	Detective	Remove Tag	127.0.0.1
08-25-2005 21:39	Detective	Tag	127.0.0.1
08-25-2005 21:35	Detective	Remove Tag	127.0.0.1
08-25-2005 21:31	Detective	Tag	127.0.0.1
08-25-2005 21:29	Detective	Remove Tag	127.0.0.1
08-25-2005 21:28	Detective	Tag	127.0.0.1
08-25-2005 21:27	Detective	Remove Tag	127.0.0.1
08-24-2005 18:44	Detective	Tag	127.0.0.1
08-24-2005 18:13	Detective	Remove Tag	127.0.0.1
08-17-2005 15:37	Detective	Tag	127.0.0.1
08-17-2005 15:21	Detective	Remove Tag	127.0.0.1
08-17-2005 12:25	Detective	Tag	127.0.0.1
08-16-2005 20:05	Detective	Remove Tag	127.0.0.1
08-15-2005 10:10	admin	Tag	127.0.0.1
08-08-2005 16:40	Detective	Remove Tag	127.0.0.1
08-03-2005 21:44	Detective	Tag	127.0.0.1
08-03-2005 21:31	Detective	Remove Tag	127.0.0.1
08-03-2005 21:11	Detective	Tag	127.0.0.1
08-02-2005 11:09		System Auto Upload	

## H. Creating a Case Folder (PRO Models only)

The Digital Evidence *Pro* has the ability to create and manage case files with all forms of rich media (video, digital photos, digital documents, etc.). To create a Case file the user merely hits the "create case" button and a case specific field input window is opened. The user completes the appropriate fields and hits save.

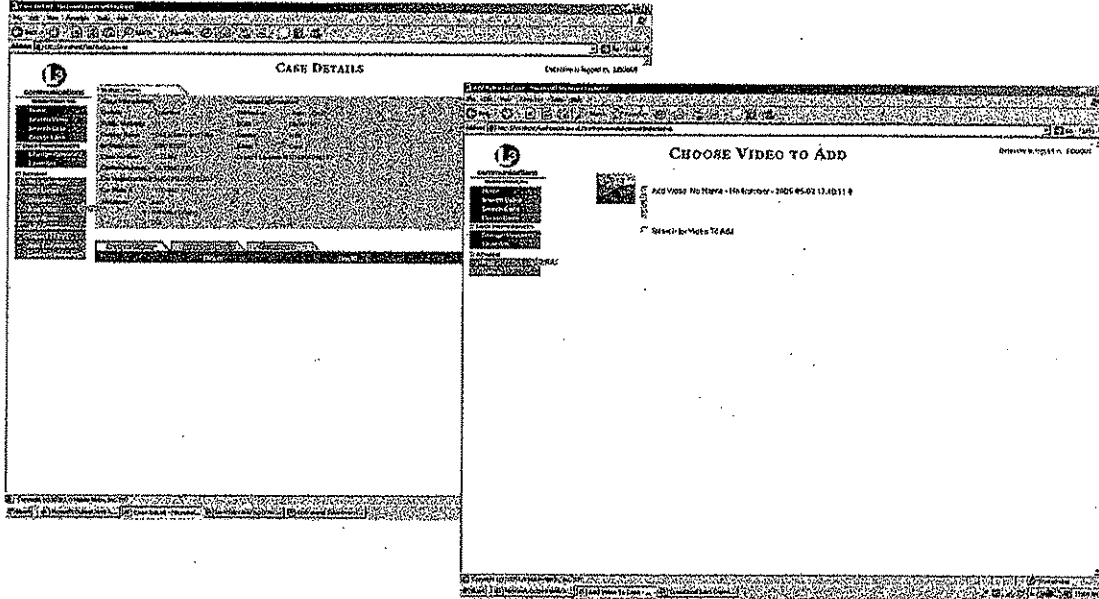


The "create case" page allows for the inclusion of as much or as little information as is desired (there are only two required fields). It also contains an unlimited number of definable case notation checkboxes to facilitate the simple and quick case folder creation. Once completed, the user clicks the save button.

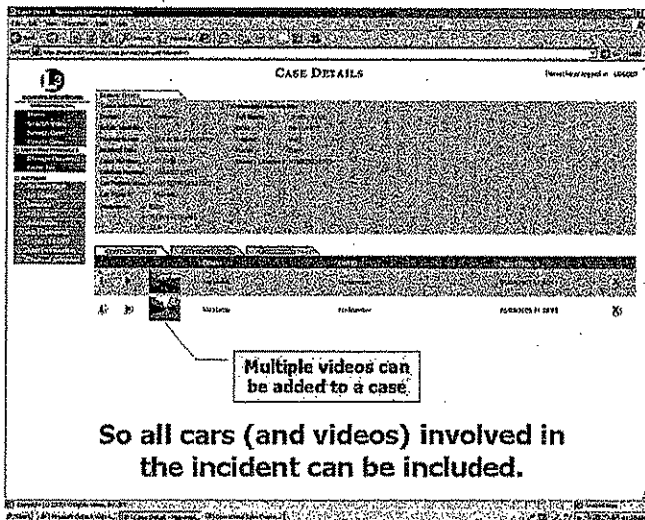


## 1) Adding Video to a Case Folder

The process of associating video to a case is as simple as hitting the “add video” button from the case folder. This opens up a window that allows you to add the last viewed video or search. It is that simple, not copy to, just point and click.

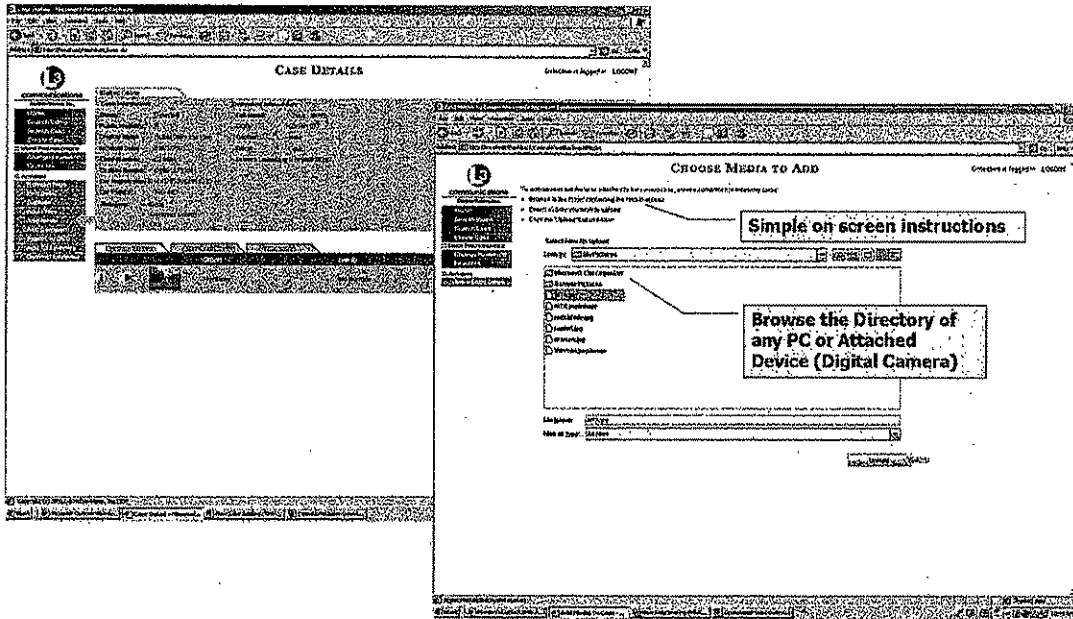


Just as the world is not limited to a single point of view, neither is the system. If multiple units respond to an incident, multiple videos may be associated with that case. Consequently the system supports this reality and any number of videos can be added to a case.

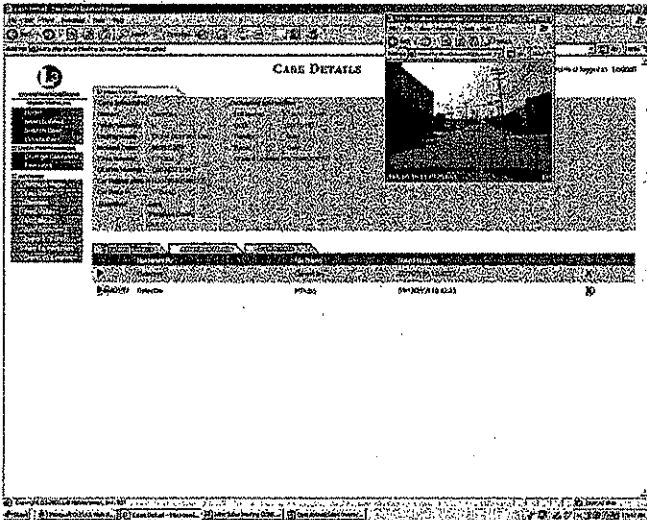


## 2) Adding Digital Photographs (and other media)

The Digital Evidence *Pro* system contains the ability to not only manage video it will also storage, manage and track Digital Photographs (as well as all forms of rich media). To add digital photos simply log onto the system from any network connected PC and hit the “add media” button from the case folder. This opens up a window that allows you to browse any directory (including an attached digital camera). Simply navigate to the files that you want to add and click on the upload button.

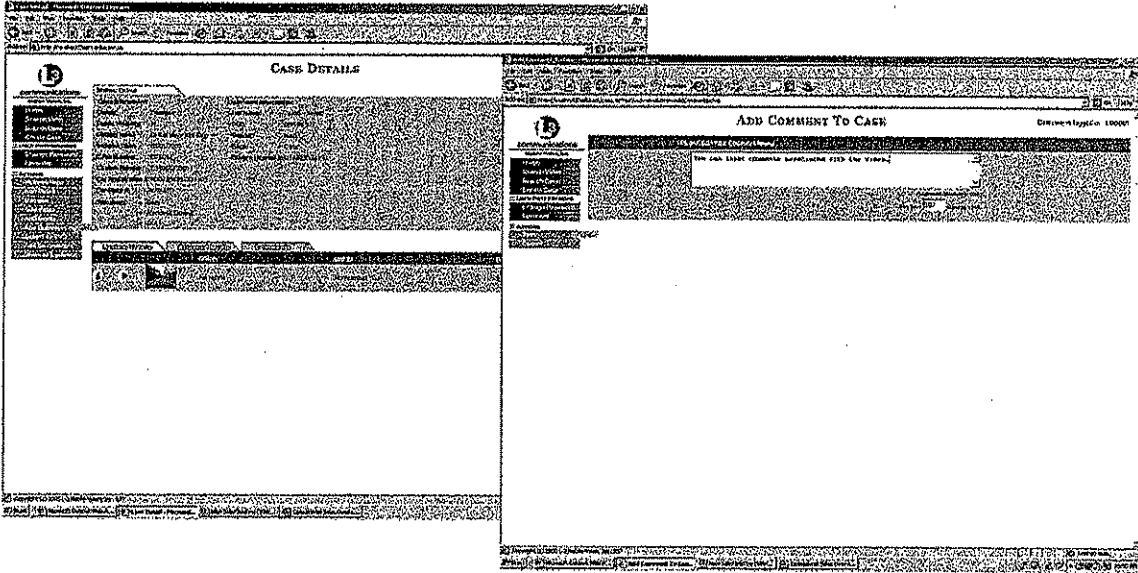


Once in the system the digital photos are contained in the case folder and are easily searchable, and retrievable. They are also stored redundantly and tracked as evidence, never to be lost. And, just as with videos multiple photos can be added.



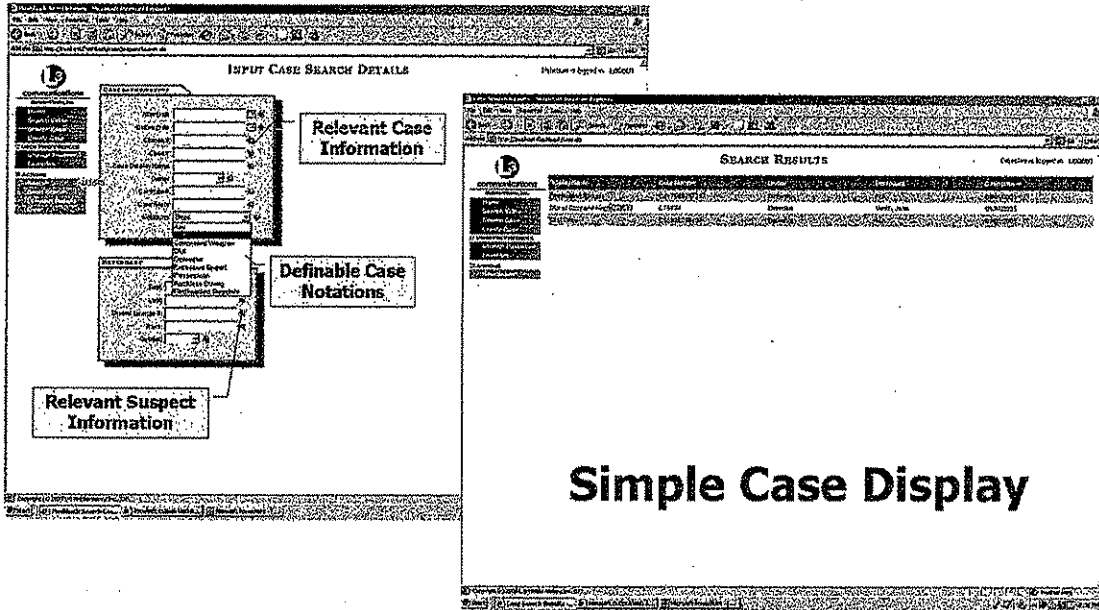
### 3) Adding Comments to a Case File

The Digital Evidence *Pro* system facilitates the case building process through the ability to comment on the video and case relevant information. To add a comment, simply go to the “Case Details” page and hit the “add comment” button from the case folder. This opens up a window that allows you to add comments. When completed, click on the save button. An unlimited number of comments can be added.

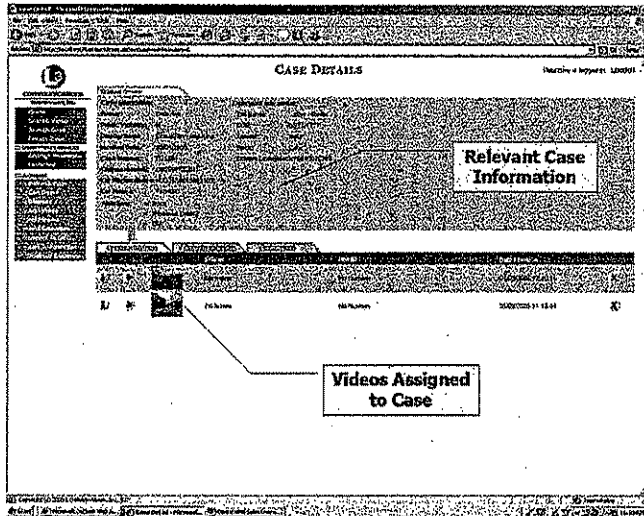


## I. Searching and Retrieving Case Files

The Digital Evidence *Pro* has the ability to create and manage case files with all forms of rich media (video, digital photos, digital documents, etc.). To retrieve a Case Folder simply hit the “Search Case” button and fill in the search fields. This enables the search to be performed using Boolean logic on all case information (date/time, citation/case number, suspect info, etc.).



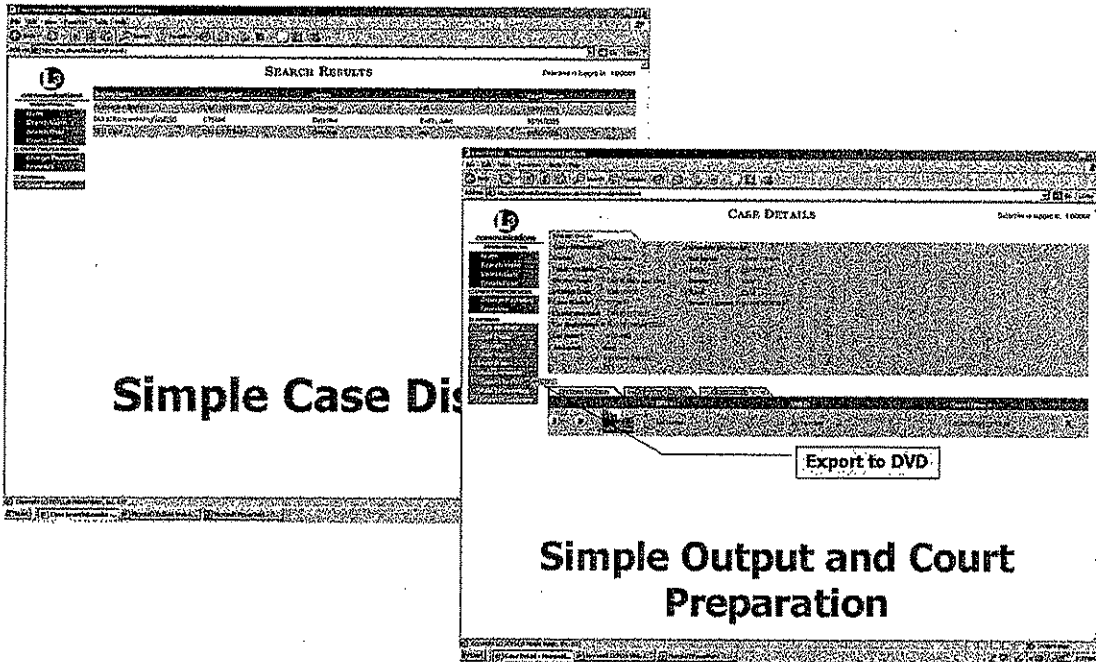
Search results are displayed in a simple and clear format (again this is not a spreadsheet). Based on the search criteria this may be one case or many. To “open” the desired case folder merely click on the name. Once open all case information is displayed clearly. This includes case data as well as associated videos, media and comments.



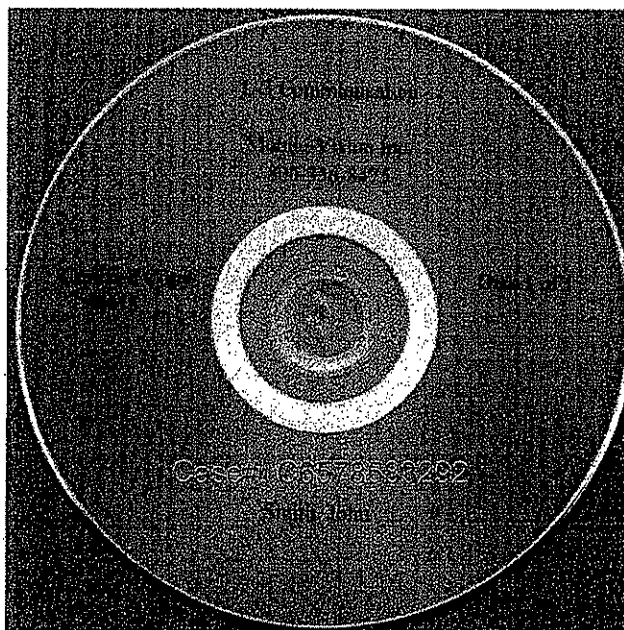


## J. Outputting a Case File for Distribution

Since the Digital Evidence *Pro* has the ability to create and manage case files with all forms of rich media, it is sometimes desirable to output the "Case File" in it's entirety for review or court purposes. Just as with video files this is simple, merely press the "Export to DVD" button within the "Case Details" page and a DVD is automatically composed, written, and labeled without manual intervention.



The Case Files output DVD is completely self-contained with all necessary play components included automatically.

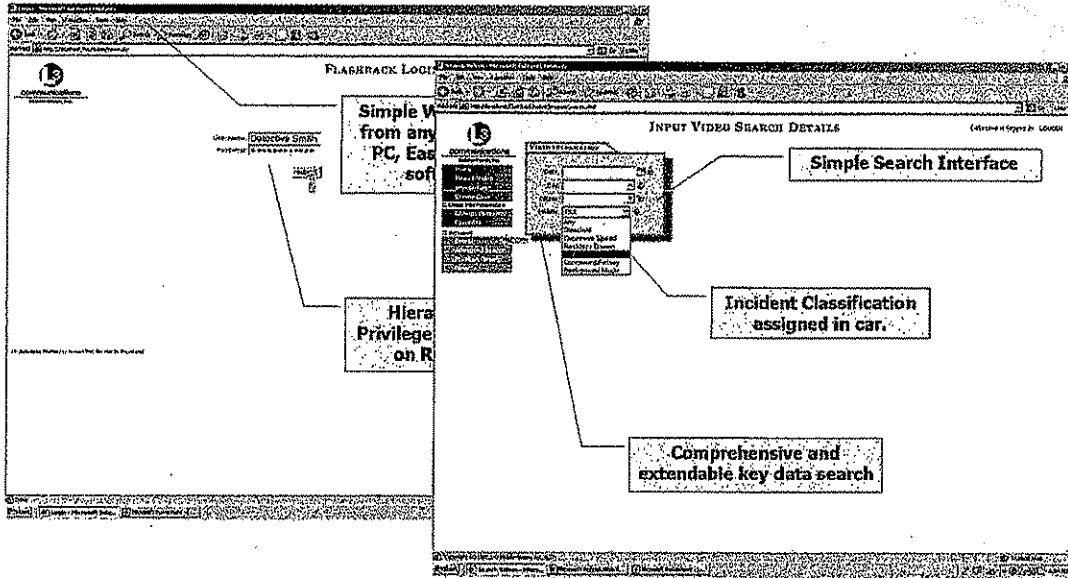




## L. Restoring a File to Active Status

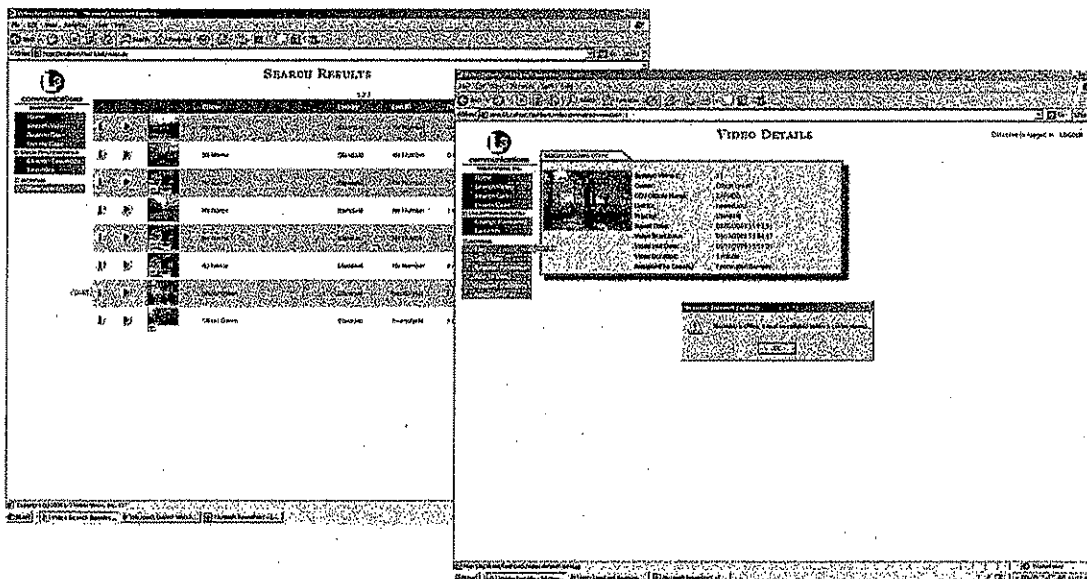
### 1) Officer / User Actions

Searching is performed just as if the data were live. Launch a browser and log-in from any LAN connected PC in the Precinct.

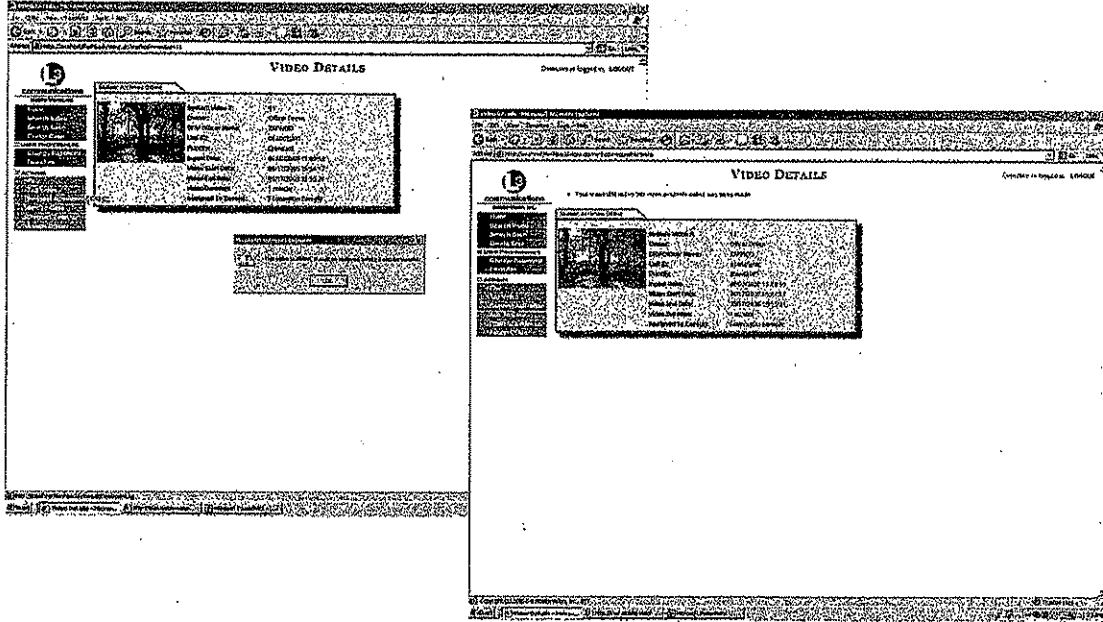


Videos are searched through a simple interface using Key Data and Boolean logic. Again this is not a spreadsheet it is a simple usable tool to locate video via Date/Time, Officer Name, Incident Class, GPS Location and Video State.

The videos are displayed in a simple and clear format (again this is not a spreadsheet). Based on the search criteria this may be one video or many. In either case, a visual reference is provided through a thumbnail image from the video and all relevant information is displayed in clear and sort able format. The system will notify the user that the video is not live.

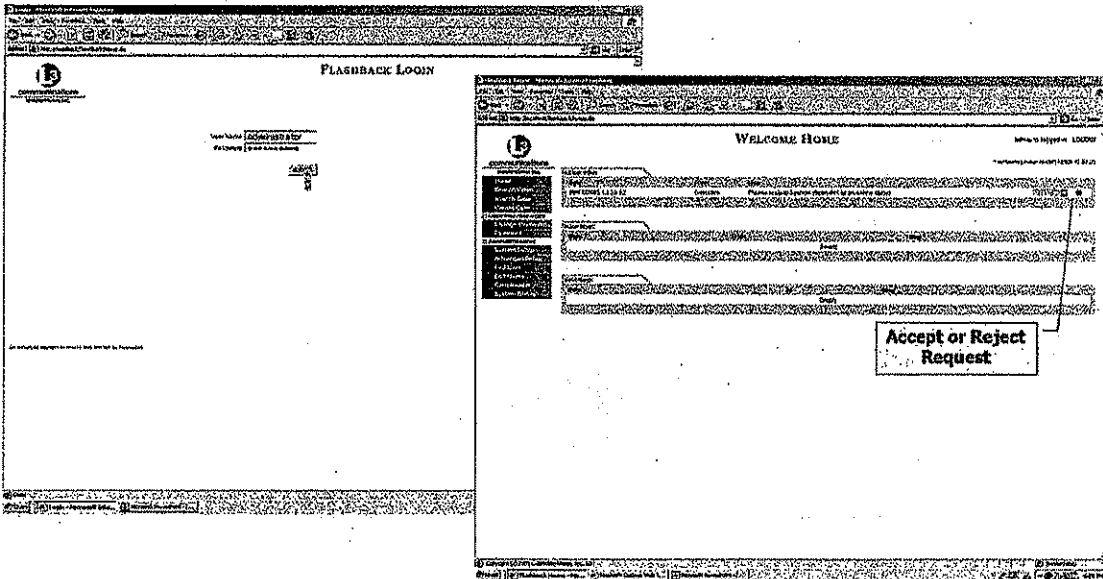


From the user standpoint reactivation is a simple “click” of the reactivation process. This initiates restore.



## 2) Administrator Actions

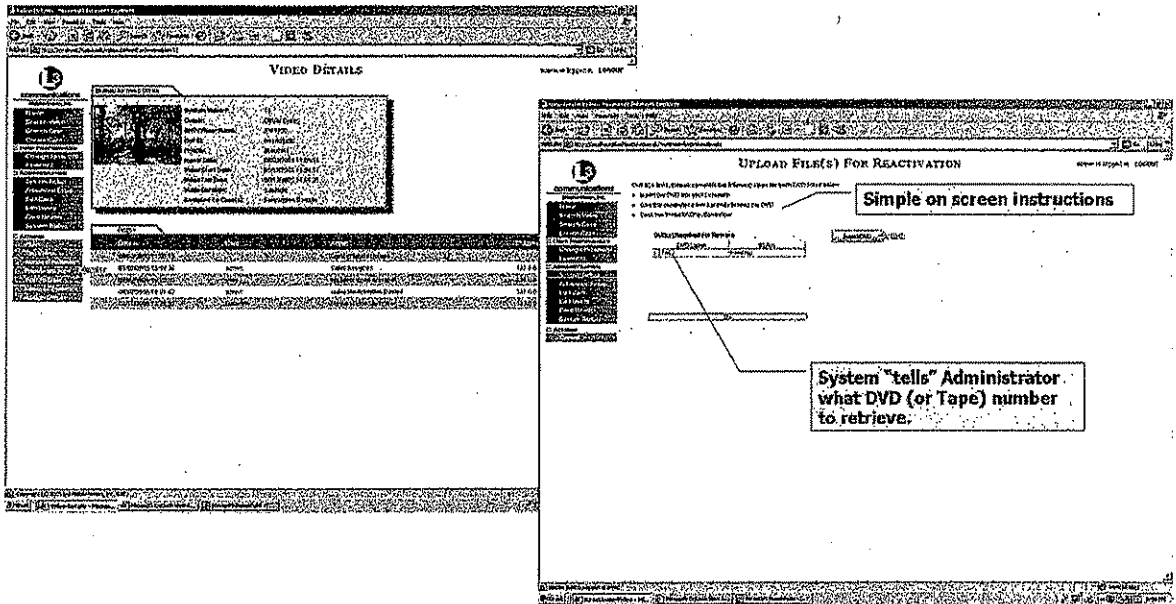
Administrator logs on and is notified about a re-activation request.



Administrator accepts (or rejects) the request for re-activation.

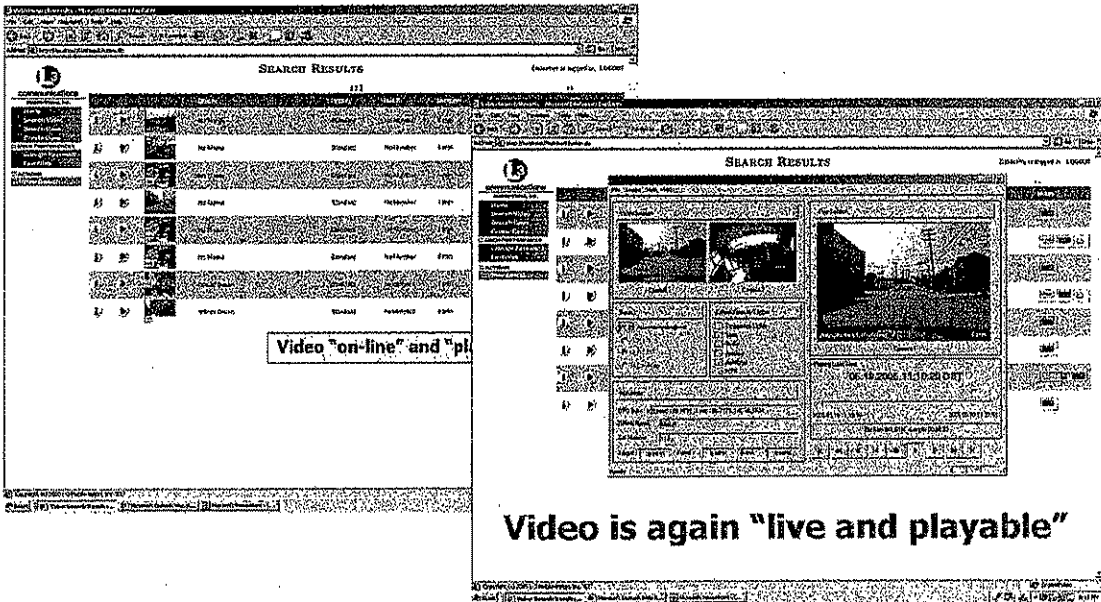
**COUNTY OF ORANGE – SHERIFFS DEPARTMENT**  
**RFP NUMBER SXZ00000142**  
**L-3 COMMUNICATIONS – MOBILE-VISION, INC.**

Administrator is walked through both the request process and reactivation without having to reference any other database.



Administrator retrieves the appropriate Tape and the system automatically identifies the designated file and uploads it back into RAID5.

**Officer/User Actions:** Upon reentry the video is now live on the system and viewable.



## DOCUMENT 10f. DESCRIPTION OF WIRELESS TECHNOLOGY

### TECHNOLOGY BRIEF: *Intelligent Wireless Transfer*

L-3 Communications Mobile-Vision has created a wireless solution for large digital in-car video implementations. It effectively increases the aggregate throughput capacity by 3 to 4 times that of conventional wireless solutions, thereby making large fleet wireless transfer viable. It leverages the increased channel capabilities of 802.11a (vs. "g"), uses advanced antenna technology and manages the assignment of vehicle to access point through complex algorithms that provide load balancing across the entire access point array based on transmission performance and predetermined rules that determine video file priority.

*In a nutshell, using up to nine 802.11a wireless access points the server "sees" the data files residing in all equipped vehicles that are within range. It "knows" how well each car can "see" each access point. It "knows" how many cars have files to upload. It "knows" the evidentiary priority of each file to be uploaded and uses this global knowledge to most effectively manage the transfer process.*

The industry standard for wireless downloading is 802.11g with (hopefully) some connection balancing to limit the number of cars that can concurrently connect to any given access point (too many cars on an access point results in data collision saturation that decreases transfer efficiency). This approach is fine for very small fleets with limited data transfer; however as the fleet size increases 802.11g can become overwhelmed.

**Why 802.11a?:** Quite simply, 802.11a provides up to nine non-overlapping channels vs. only three non-overlapping channels for 802.11g. With either 802.11a or "g" each channel has a theoretical download capacity of 27Mbps. While each 802.11a has the same 27Mbps per channel limit as 802.11g there are nine "non-overlapping" channels available in "a" vs. the only three channels for 802.11g. The result is that "a" has a basic throughput capacity three times that of "g". Further limiting the capacity of "g" is the prevalence of "noise" in the "g" spectrum primarily from other 802.11g or 802.11b networks operating in close proximity. 802.11a is generally a "cleaner" spectrum as most of these interfering wireless devices will operate in the more common 802.11g and b frequencies. Consequently, in real world applications 802.11g frequently cannot leverage all three non-overlapping channels due to interference from other networks in while 802.11a wireless networks generally can utilize all nine available non-overlapping channels. In many situations the real advantage of "a" over "g" is greater than the just the mathematical change of 3 to 9. It is closer 4X.

That said, 802.11a is attenuated much more readily in the atmosphere and is much more vulnerable to intervening obstructions (such as vegetation). Consequently, there is the need for superior antenna technology in order to properly leverage 802.11a.

**Advanced Antennas Technology:** In order to effectively mitigate the limitations associated with 802.11a (propagation), L-3 Communications employs advanced antenna technology that integrates multi-polarized signals at the antenna. This drastically increases range by counteracting the effects of atmosphere and obstructions and rendering it invulnerable to the polarization modification effects associated with moving vehicles and multi-bounce environments (such as parking garages). The net result is an implementation with superior signal connection properties (SNR, Speed and Bit Error Rate), across the nine available channels of 802.11a.

Even with nine highly sensitive channels available, if the system does not effectively manage the distribution of cars and access points there can be significant efficiency losses, consequently the need for System Level Load Balancing.

**System Load Balancing (maximizing the use of the 9 available channels):** Unlike conventional systems that might simply limit the number of vehicles connecting to a given access point, the L-3

solution performs system level load balancing that is controlled by the server and considers many diverse metrics including; signal strength (how well the cars 'see' the access points), the number of cars "seeing" any given access point, the number of cars in the entire zone, age of files to be uploaded and evidentiary priority files to be uploaded.

Furthermore, all cars do not always have the same time criticality, the L-3 system contains a set of prioritization rules that allow some cars (that may have more time critical turnaround times than others) to be given priority over cars that may be able to "hang around" longer. The net result is that no transfer bandwidth is wasted on cars that may not need to be offloaded immediately.

Effectively, the system has the ability to optimally utilize nine 27Mbps channels (243Mbps aggregate theoretically capacity) or nearly 4 times the throughput capacity of conventional "g" systems. It better utilizes this increased capacity with system level load balancing and does not waste critical cycles on non-critical transfers until the crunch is over. What this means is that the L-3 system has the ability to effectively transfer the content from large fleets where there is the need to rapidly transfer the content from dozens of vehicles concurrently.

**Physical segmentation to add channels beyond 9:** In large implementations it is frequently possible to physically segment the parking areas such that the layout of the parking area (wrap around, front/back areas, etc.) can be leveraged to enable physical channel isolation. This allows multiple "banks" of access points to be used and the aggregate capacity to be further increased by the number of "isolatable" areas.

*Note: While L-3 has the ability to support most major access point manufacturers, in order to fully leverage this technology to it's full potential. All the hardware/software and configuration settings must be in accordance with L-3 specifications (available upon request). The use of any other access point hardware/software precludes L-3 from being able to assure any performance capability.*

## DOCUMENT 10j. Security and Auditing Features

### TECHNOLOGY BRIEF: *Security and Wireless Transfer*

The L-3 Mobile-Vision Digital Evidence Series (DES) utilizes a layered approach to security wherein the compromising of no single element allows the system to be compromised. There are generally three concerns from a security: (1) File integrity – control of the file itself and assuring that what is recorded is identical to that which is presented later (i.e. the file has not been edited). (2) File Access Security – control such that the file does not make its way out of the agency for any unauthorized reason. And (3) System Security – assuring that the wireless system does not allow access to the existing agency network. Each of these concerns are addressed in the security implementation.

#### The DVR and the File Itself:

- The security starts in the car; the DVR is physically locked and requires a physical key to gain access to the evidence files (any communication through either the monitor or a MDT/Laptop, is restricted to “read only”). Furthermore, the DVR is a self contained appliance that does not rely on an off the shelf operating system with well known “holes” and “hacks” (such as a Windows OS) – i.e. the DVR is locked down.
- The file itself; when a file is recorded to the DVR an “MD4 hash” is laid down on each frame that persists throughout its lifetime (this documents any potential changes from the original). Furthermore, in addition to the later wireless transfer encryption, the file is encrypted by the application itself. It is encoded with a custom CODEC (that is required at playback) – no CODEC, no playback.

#### Wireless transfer

- Procedurally compliant; since the transfer process is completely automatic, there are no manual steps required (historically the single largest point of both human error and questions regarding compromises to the integrity); the single largest sources of file integrity concerns are completely eliminated.
- Application physical security; The Flashback system utilizes directional antennas (as apposed to omni-directional); both to enhance the transfer speed and restrict the wireless areas to the designated control zones (agency parking areas).
- The transfer is all initiated and controlled by the server; this allows the transfer to be intelligently load balanced (for optimal speed and operational effectiveness) and allows for a firewall (placed between the access points and the DES server) to be “locked down”, allowing only transfers that were initiated by the server and blocking all externally initiated sources. The Firewall is further secured by the fact that this is a very application specific transfer process (it is not like “Starbucks”), only certain unique types of data are allowed through certain ports and from certain clients. – Unlike the communications with the in-car laptops, the DES is a very restrictive single purpose, one way, transfer that is inherently secure by its uniqueness.
- DVR Application Authentication; there are several layers of authentication within the system separate from the standard wireless methods, including; application level authentication (encrypted DVR name/password), IP authentication, unique hardware MAC (Media Access Control address) authentication.
- Wireless Encryption; the Flashback system supports both WEP and WPA encryption (128 bit) with PSK/TKIP (Pre-Shared Key / Temporary Key Integrity Protocol). This further encrypts the file (on top of the application encryption mentioned previously).

#### Server security

- Outward Facing (DVR’s and the outside world): On top of being behind a Firewall, and allowing only certain types of data and clients, the server utilizes a Linux operating system rather than Windows.



Unlike Windows, Linux allows all non-essential services to be shut down virtually eliminating all security standard attack modes. Consequently, due to the application specifics, there is no place for external attacks (such as executables) to propagate, the files are placed into “video storage”.

- Inward Facing (the Agency network): Just as with the access points network, a Firewall can be placed between the DES server and the agency network meaning that any external “attacker” will have to get through two firewalls and a prohibitive amount of security before the agencies network is exposed.

#### Application Usage Security

- The DES supports HTTPS meaning that all user interaction can be encrypted.
- And the access is restricted by user name and password.
- The access rights and usage privileges are definable and restricted based on user, rank and job.
- Rather than allowing desktop DVD download and output, the output is can be restricted to a single networked DVD writing appliance that can be locked in a secure room. – Eliminating the opportunity of the output to be produced at the users PC eliminates the single largest potential “hole” in the security concerns relating to access control. (e.g. Video Evidence “walking” out the front door.)
- Whenever, a DVD is output the file integrity (through the hash that was laid down at the time of file creation) is automatically checked and validated.
- Further enhancing File Integrity is the two tier (on-line/off-line) storage architecture, where files are written to off-line media at the time of ingestion, thus creating an unalterable version for reference.
- All activities and accesses are logged and reported and a “Chain of Evidence” report is automatically generated and continually updated on each file.

*In other words the security is such that not only are both file integrity and access security maintained, but the system allows for network access without compromising the existing agencies network infrastructure.*

## **11: Failure/Refusals to Complete Contracts**

## **12: Financial Statements**

**11. State any failures or refusals to complete any contracts and a complete explanation.**

None.

**12. Financial Information**

a. Financial Statements –

Our latest Form 10-K is included.

b. Bankruptcy Information:

No action pending and No prior action.

**References**

**Government Agency:** Baton Rouge Police Department

**City:** Baton Rouge, Louisiana

**Contact Name, Title:** Sergeant Elgin Bilbo

**Phone Number, Alternate Number:** (225) 389 – 4693

**Project Description:** Provide installation and support of 400 Flashback in-car video systems with 4 Digital Evidence Pro video management systems networked between each of the Department's 4 Precincts. Provided project management throughout entire implementation including installation support, training and pre-implementation support.

**Government Agency:** Shreveport Police Department

**City:** Shreveport, Louisiana

**Contact Name, Title:** Sergeant Brian Wheeler

**Phone Number, Alternate Number:** (318) 673 – 7203

**Project Description:** Provide installation and support of 271 Flashback in-car video systems with 1 Digital Evidence Pro video management system located at the Department's Headquarters. Provided project management throughout entire implementation including installation support, training and pre-implementation support.

**Government Agency:** Indian River County Sheriff's Office

**City:** Indian River, Florida

**Contact Name, Title:** Mike Rozier

**Phone Number, Alternate Number:** (772) 978-6260

**Project Description:** Provide 118 Flashback in-car video systems with 1 Digital Evidence Pro video management system located at the Department's Headquarters. Provided project management throughout entire implementation including installation support, training and pre-implementation support.

**Government Agency:** Laguna Beach Police Department

**City:** Laguna Beach, California

**Contact Name, Title:** Larry Wohrman, Fleet Coordinator

**Phone Number, Alternate Number:** (949) 497 – 0394

**Project Description:** Provide installation and support of 12 Flashback in-car video systems with 1 Digital Evidence Pro video management system located at the Department's Headquarters. Provided project management throughout entire

Orange County Sheriff's Department  
RFP SXZ000142  
Digital In-Car Video Systems (PVS)

implementation including installation support, training and pre-implementation support.

**Government Agency:** Cypress Police Department

**City:** Cypress, California

**Contact Name, Title:** Sergeant Tom Bruce

**Phone Number, Alternate Number:** (714) 229 – 6706

**Project Description:** Provide installation and support of 16 Flashback in-car video systems with 1 Digital Evidence Pro video management system located at the Department's Headquarters. Provided project management throughout entire implementation including installation support, training and pre-implementation support.

**Government Agency:** Sunnyvale Police Department

**City:** Sunnyvale, California

**Contact Name, Title:** Lieutenant Walter Lee

**Phone Number, Alternate Number:** (408) 981 – 9005

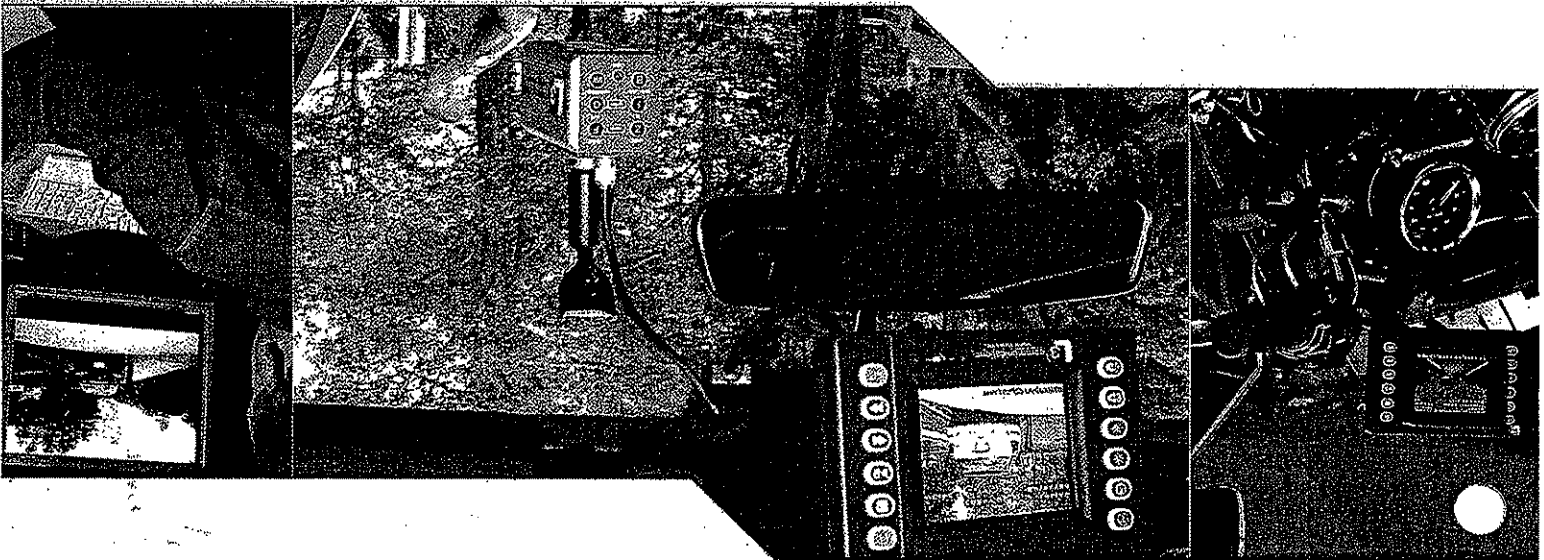
**Project Description:** Provide installation and support of 37 Flashback in-car video systems with 1 Digital Evidence Pro video management system located at the Department's Headquarters. Provided project management throughout entire implementation including installation support, training and pre-implementation support.

**L-3 MOBILE-VISION:**

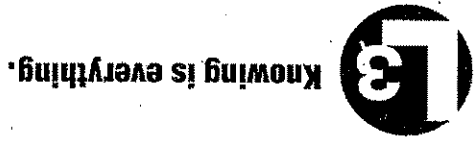
**Providing Total**

**Digital Evidence Solutions**

**For Law Enforcement**



**RECORDING IS KNOWING | MANAGING IS KNOWING**



**Knowing is everything.**

**communications**

**Mobile-Vision, Inc.**