

VILLAGE OF LOMBARD
REQUEST FOR BOARD OF TRUSTEES ACTION
For Inclusion on Board Agenda
BIDS AND PROPOSALS

TO: President and Village Board of Trustees
FROM: David A. Hulseberg, Village Manager
DATE: February 12, 2013 Agenda Date: February 21, 2013
TITLE: **PURCHASE THERMAL IMAGING CAMERAS**

SUBMITTED BY: Paul DiRienzo, Fire Chief

RESULTS:

Date Bids Were Published:.....Date Bidding Closed: N/A
Total Number of Bids ReceivedN/A
Total Number of Bidders Meeting Specifications Yes No
Bid Security Required Yes No
Performance Bond Required Yes No
Were Any Bids Withdrawn Yes No
Explanation..... Yes No
If yes, explain:
Waiver of Bids Requested? Yes No
If yes, explain:
Award Recommended to Lowest Responsible Bidder Yes No
If no, explain:

FISCAL IMPACT:

Amount of award \$25,000.00 to E. D. Bullard Company of Cynthiana, Kentucky.

BACKGROUND/RECOMMENDATION:

Has Recommended Bidder Worked for Village Previously Yes No
If yes, was quality of work acceptable Yes No
Was item bid in accordance with Public Act 85-1295? Yes No
Waiver of bids - Public Act 85-1295 does not apply Yes

REVIEW (as needed):

Finance Director XX _____ Date _____
Village Manager XX _____ Date _____

NOTE: All materials must be submitted to and approved by the Village Manager's Office by 12:00 Noon, Wednesday, prior to the Board Agenda distribution.



TO: David Hulseberg, Village Manager

FROM: Paul DiRienzo, Fire Chief 

DATE: February 12, 2013

RE: Thermal Imaging Camera Purchase

Approved within the FY 2013 Fire Department Budget is the purchase of two Thermal Imaging Cameras.

A committee was formed and an analysis completed (attached) on three vendors of thermal imaging cameras.

The Bullard T4Max Thermal Imaging Camera came highly recommended after a thorough testing conducted by the committee. In both cold and hot conditions the view on the camera exceeded the other cameras tested in both picture clarity as well the ability to detect thermal conditions in a room environment. These items were just a part of the reason the committee chose Bullard. The purchase would be within budget.

Additionally, we have purchased Bullard cameras in the past and have been very pleased with their operation and durability. To purchase like cameras will serve us well in regard to continuity when in stressful conditions.

Please place this Request for Waiver of Bid item on the February 21, 2013 Board of Trustees Agenda.

:lh

Attachments



To: Paul DiRienzo, Fire Chief

From: Art Peters, Battalion Chief

Date: January 30, 2013

SUBJECT: THERMAL IMAGING PURCHASE

Based on the recommendation from the Testing Committee, I am requesting approval to purchase two Bullard T4Max Thermal Imaging Cameras for Tower 52 and Engine 44. This purchase will be the same product purchased for Engine 45 last year due to a thermal imaging camera that was unable to be repaired.

During the testing, three vendors were invited for evaluation; ISG, Argus, and Bullard. Bullard's performance met all of our Department's needs and the committee's recommendation was unanimous.

Please let me know if you have any further questions and/or concerns regarding this matter.

AP/ptc

Thermal Imaging Analysis

This paper will summarize and recommend Thermal Imaging Cameras reviewed and tested by the Camera Committee on November 17th 2011 at the Addison Fire Protection District's burn tower. The first task the committee had to determine is the function, use, and purpose the camera is to be used for. With this in mind, it was determined two different types of cameras were needed for the Lombard Fire Department.

In general, all thermal cameras do the same thing, but each type of camera has slightly different capabilities. This committee reviewed different cameras to find out which would work best for Lombard. It is a given that training of all personnel will be needed for each type of camera to maximize the full benefit of the new tool (camera).

The Fire Officer camera

This tool is essential in leading a fire attack inside a structure with limited or no visibility. A few specific examples are listed below of the capabilities and uses of a camera suited for Fire Officer use, but are not limited to these examples:

- The best picture possible.
- To keep track of Firefighter crews while in non-visibility conditions.
- Simple in use.
- Large clear viewing screen.
- Ability to be hands free if needed; primary use to be used at all times in little or no visibility.
- Simple indication of thermal temperatures for rapid changing conditions.

Testing conditions

Two different conditions were tested on this day. The first condition was in the burn room. A small fire with a maximum temperature at ceiling of 400 degrees was generated to test the cameras under heat conditions. The second condition tested on this day was cold smoke generated by burning hay. Heat generated at ceiling was around 120 degrees. In each fire condition, Firefighters were viewed as well and room contents. All cameras were subject to same conditions and view side by side. After the field test was completed on cameras, the Camera Committee filled out evaluation forms for each individual camera. A one to ten ranking system was used on the evaluation forms to help the committee rank the cameras; with (10) being the best and (1) being the worst. This report will try to condense the information in the evaluations and give a brief summary on each camera tested.

Cameras tested

ISG Prototype camera

This camera is not in production yet and we noted some flaws that still need to be worked out. Battery security was one issue that came up during testing. While using the camera, the

battery fell out. Picture quality of this camera was not nearly as good and multiple buttons on the camera at times made it difficult to use. A numerical evaluation was not even given to this prototype due to immediate elimination from testing. It was far less superior compared to the other cameras.

ISG XR

Fantastic camera! This camera had one of the best picture qualities in normal conditions and in high heat conditions. This unit provides an immediate display of heat in numerical heat flashing on screen and additional bar graph. The changing of color to show high heat was done very well on this camera. The one flaw this camera had was when viewing at high heat, the rest of field went dark. When the camera was panning away, it lightened up. This defect only lasted a second, but was noted by every evaluator. Average picture quality for this unit was rated at a (10). Simplicity to use rated an average of (8.5). The weight and size of this camera was comparable to the other Officer Cameras that were reviewed and fell into the average range. With the lanyard attachment, this could let the Officer free up his hands and work if needed. In the final evaluation of the ISG XR, this was a very close second choice by all evaluators on the committee.

Bullard T320

This thermal imaging camera was in consideration for the Fire Officer camera. It had comparable weight and size to the other Officer cameras. Unfortunately, this camera had a low ranking in average image quality at room temperature and in high heat with an overall average of (4.3). For this reason, the camera was eliminated for consideration as a Fire Officer camera.

Bullard T4MAX

Another fantastic camera! The one thing that stood out about this camera is its wide viewing lens. The viewing graphics in cold and heat received high evaluation marks (8.5) and (9) respectively. Simplicity of use of the camera was comparable to other cameras rated at an average of a (9). The weight and size of this camera were also comparable to the other cameras tested. This camera comes with a lanyard system so the Officer can work with his hands free. The one aspect of this camera that might have edged out its competition was its ability not to blacken out when looking directly into high heat. The view screen of the camera is wide screen, which is the only one available with this feature. The picture clarity, as well as ability to detect thermal conditions in room environment, were all part of the reason the committee supported the selected this camera.

Summary

Bullard T4MAX

This camera was recommended by the committee for purchase for the Officer camera, out of the cameras it reviewed. It should be noted this camera was not looked at to be purchased until budget year 2013. This committee recommends a re-evaluation of fire officer cameras to include other manufactures in this time frame closer to purchasing.

Fire Camera committee

Battalion Chief Art Peters

Tim Hillesheim, FF/PM

Donald Volz, FF/PM

Report written by

Donald Volz



January 16th, 2013

To whom it may concern:

Bullard thermal imager products are offered to our customer through a distributor selection process that assures the highest levels of customer satisfaction and support. Toward that end, we have a few key distributors that have earned the rights to sell our products.

Essential Equipment Solution is the only authorized full line supplier of Bullard fire service thermal imagers, and the parts and service required for after-market customer support in Dupage County, IL.

If I can answer any further questions for you, please feel free to call me at 443-540-4398.

Sincerely;

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

Robert Healy
National Sales Manager
Emergency Responder Division

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E.D. Bullard Company
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Essential Equipment Solutions
 941 Enterprise Court
 St. Charles, IL 60174
 P: 630-464-7996
 F: 888-959-2850

Invoice

Date	Invoice #
1/2/2013	1456

Bill To
Village of Lombard 255 East Wilson Ave Lombard IL 60148 P: 9997-4401-05

Ship To
Lombard Fire Department 50 E. St. Charles Rd Lombard, IL 60148 Attn: Mike Fetzer

P.O. Number	Terms	Rep	Ship Date	Ship Via	Tax ID#
	Due on receipt	MF	1/2/2013		E9997-4401-05

Item	Description	Quantity	Price Each	Amount
T4MAXBUNDLE	BULLARD T4 CAMERA BUNDLE, TRUCKMOUNT CHARGER AND 1 YR EXTENDED WARRANTY - T4MAXBUNDLE S/N 56769 S/N 56770	2	12,450.00	24,900.00
T3RETRACT	THERMAL IMAGING RETRACTABLE LANYARD	2	50.00	100.00

- 2013 -

Thank you for your business	Total \$25,000.00
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