

 <p style="text-align: center;">Council Communication Office of the City Manager</p>	Date: September 27, 2010
	Agenda Item No. 37 Roll Call No. <u>10-1567</u> Communication No. <u>10-568</u> Submitted by: John Tekippe, Fire Chief

AGENDA HEADING:

Approving the purchase of nine (9) Bullard thermal imaging cameras.

SYNOPSIS:

Recommend Council approval to purchase nine (9) Bullard thermal imaging cameras from Heiman Fire Equipment (2320 Northwest Blvd., Ashton, IA 51232, Jim Heiman, Owner/President).

FISCAL IMPACT:

Amount: \$75,186

Funding Source: 2010 – 2011 CIP Page Fire Protection Improvements – 6, FIR013 CP041 FIR990000

ADDITIONAL INFORMATION:

The Bullard T320TT thermal imaging cameras (TIC) meet the needs of the Fire Department better than any other available TIC. They function similarly to the seven Bullard thermal imagers already in use on suppression apparatus. Their high resolution picture along with the thermal throttle feature and yellow-orange-red colorization scheme above 500 degrees Fahrenheit make it both easy to interpret and extremely useful in a number of applications. The durability of Bullard TIC’s is well-documented from a historical perspective, and a turnaround time of 48 hours is guaranteed for any repairs that may be necessary. Finally, the training opportunity offered along with the purchase of Bullard cameras is unmatched.

The Fire Department is requesting to purchase nine Bullard thermal imaging cameras. Thermal imaging cameras (TIC) are used for numerous applications including search and rescue, fire suppression, search of hidden fire, Hazardous Materials, and other operations. Following extensive research, Bullard does not provide the least expensive cameras; however, the higher price for these particular thermal imaging cameras can be justified in a number of ways.

HIGH RESOLUTION

The Bullard model is a high resolution camera; its high quality picture takes advantage of improved technology and directly and positively impacts operations. When tested under high heat conditions such as those found in structure fires, the Bullard camera provided a crisp, clear representation of scene details, other firefighters, and fire victims in the field of view. In the event someone, whether another firefighter or a citizen, is unable to exit the structure of a fire event, the ability to locate that victim

quickly and remove them from the hazardous atmosphere is critical. In this scenario time is of the essence, and we believe the Bullard TIC will allow us to locate and remove victims more quickly than any other camera currently available.

THERMAL THROTTLE

The T320TT Bullard TIC has a feature known as an Electronic Thermal Throttle (ETT). This option utilizes a gradient blue color and operates between 0-500 degrees Fahrenheit. The blue color is markedly different than any other color that will be presented on the screen and therefore cannot be confused with the logical color progression typically seen during a structure fire. The entire temperature spectrum has colorization capabilities, including gradient yellow, orange, and red at temperatures greater than 500 degrees Fahrenheit. The ETT will lock on to the hottest item in the field of view. None of the competitor's models have this unique ability. The ETT feature would be very helpful during overhaul when looking for hidden fires, or when looking for a malfunctioning light ballast, as examples. The ETT offered by Bullard is an extremely useful application because it allows firefighters to locate the hottest object relative to all others in any given area.

48-HR GUARANTEE

Bullard has been making thermal imaging cameras since 1998, and their entire line of thermal imagers is known for being the most durable on the market. Their TIC's come with a two-year warranty and Bullard guarantees a 48-hour turnaround for repairs. This is an important assurance for the fire department because this valuable piece of suppression equipment should not be out of service for long periods of time, also, it is cost prohibitive to keep one or more spare thermal imagers.

STANDARDIZATION

The Fire Department already has seven Bullard thermal imaging cameras, four purchased in late 2003 and three in 2010. These cameras have significantly outperformed the Scott TIC's that we have been concurrently using. The Scott cameras are over ten years old now and are relatively obsolete when compared to the technology used today. Repairs, if possible to make, are very expensive. The Bullard cameras are very simple to operate. There is only one switch to activate the unit, while other brands often have two or three switches that serve different purposes. Pressing the on/off button once is all that is necessary. There are no additional color palettes for the operator to scroll through that can create confusion.

The safety of our firefighters and the citizens we serve is an immediate and ongoing priority at *every* incident. From a safety standpoint, all Bullard TIC's function similarly, and all of our firefighters are already familiar with their use. By standardizing equipment, particularly in the use of TIC, we provide our members with an additional layer of safety. It is common for firefighters to be moved to different stations throughout the City on a day-to-day basis to cover staffing needs. If our cameras are all the same and function in the same manner, firefighters are not susceptible to becoming confused by any given TIC's operation while under stress in very dangerous environments.

VALUE ADDED TRAINING

With the purchase of these thermal imaging cameras, Bullard has offered to train all Des Moines Fire Department personnel on their proper use. This training will be offered free of charge utilizing Bullard's own trainer. It is difficult to place a dollar value on this specific training; however, similar training programs historically have minimally cost several thousand dollars. Bullard also offers online support and training programs for continuing education.

PREVIOUS COUNCIL ACTION(S):

Date: May 27, 2010

Roll Call Number: [10-828](#)

Action: Exception to procurement ordinance competitive bidding requirements for good cause and approving procurement of three (3) thermal imaging cameras from Heiman Fire Equipment (Ron Heiman, Owner) for use by the Fire Department, \$26,992. ([Council Communication No. 10-273](#)) Moved by Hensley to adopt. Motion Carried 7-0.

BOARD/COMMISSION ACTION(S): NONE

ANTICIPATED ACTIONS AND FUTURE COMMITMENTS: NONE

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