

April 3, 2001

Mr. Jeff Andrews
State Farm Insurance
314 1st Street East
Polson, Montana 59860

Dear Mr. Andrews,

This letter is to propose and submit the enclosed request for funding, for your consideration.

The purpose of this request is to secure funding for the purchase of a Thermal Imaging Camera by the Polson Volunteer Fire Department. This device is an important life safety tool used to quickly locate victims in emergencies regardless of environmental conditions of smoke, flames and hot gases. The methods presently at our disposal are largely personnel search, which can consume too much time and place additional lives at risk. The Thermal Imaging Camera would allow the Polson Volunteer Fire Department to take advantage of current technology in protecting the lives of the 12,000 residents inhabiting our 134 square mile area of jurisdiction. The Department in a neighboring community, Ronan, Montana, has actually saved lives with this tool.

It is our hope that your organization can assist the Polson Volunteer Fire Department in finding funding for this critical life saving tool. The current cost of the overall project is \$26,000.00, which includes the camera with remote projection capabilities for incident stabilization, training advancements, and incident critiques. We intend to be able to soak the full benefit of this tool and explore and use all of its capabilities in order to produce the best fire service possible.

The Polson Volunteer Fire Department is strongly committed to our community and we currently provide a wide range of public information programs, in addition to fire scene and life safety activities, combating at all levels emergencies that affect our community and those in the surrounding area. The Thermal Imaging Camera will allow us to better serve our community, reduce losses of lives and property, and increase the quality of life. It will also-and this is important- remove or ameliorate a significant current operations danger to the volunteer firefighters, who are the stakeholders in our town and serve without pay, and who always show up, every time, to make things right when people are having a really bad day.

As fire chief the responsibility for the safe and able conduct of fireground activities, including the saving of life and protecting my firefighters, falls to me. For this reason I am applying, on behalf of the Polson Fire Department, to State Farm Insurance with the request that the Polson Volunteer Fire Department be considered as a recipient of available grant monies to enhance and improve our ability to safeguard life and property. Your company assists many homes and persons in our community, and enhancing our ability to protect lives and property is some of the best “insurance” State Farm Insurance can buy. We hope you can help us.

If you have any questions, please contact me at 406-883-8220. Thank you for your time and consideration and I look forward to working with you on this project.

Sincerely,

Thomas J. Maloney
Fire Chief

Enclosure

2. NAMES AND CONTACT INFORMATION

Tom Maloney, Fire Chief
Polson Fire Department
P.O. Box 238
Polson, Montana 59860
(406) 883-8220

Tom Jones
Polson Fire Department
P.O. Box 238
Polson, Montana 59860
(406) 883-8220

Tax Information

To Whomever It May Concern:

Re: Polson Volunteer Fire Department

I am the City Attorney for the City of Polson, Montana. This letter is to advise the holder hereof that the above-referenced Department is a volunteer, not-for-profit entity organized and incorporated according to the laws of the State of Montana.

Federal Identification Number: 81-6001301

If you have any questions please feel free to contact me.

3. PROPOSED PROGRAM

Objectives:

- A) To purchase one Thermal Imaging Camera through private funding sources.
- B) To train 50 firefighters on the safe use and applications of Thermal imaging, through classroom and live fire training.
- C) To place the Thermal Imaging Camera on the First Response Vehicle.
- D) To implement and evaluate this program for continued success.

The Polson Fire Department has endorsed this project. They are committed to the concept that if Polson firefighters know more about the Thermal Imaging Camera, they will understand and appreciate the need for safety with the use of the Thermal Imaging Camera.

4. PROGRAM TIMELINE

- December 21, 2000 - Campaign Kick-Off Donation from local Wal-Mart and Wal-Mart Foundation, \$1000.00

- January 2, 2001 - Donation canisters placed in appropriate locations.
- January 18, 2001 - Contact Thermal Imaging Camera vendors for demonstrations and possible use of demo units. A six to eight week evaluation period will begin to determine exactly which camera will suit the needs of the Polson Fire Department.
- February 1, 2001 - Research available grants for consideration
- February 1, 2001 - Begin community education of Thermal Imaging Camera and seek financial help
- May 1, 2001 - Start the purchasing process with available monies
- June 15, 2001 - Start department wide Thermal Imaging Training
- September 1, 2001 - Have a Thermal Imaging Camera placed on the First Response Unit
- October 1, 2001 - Offer training to the Polson Police Department. This tool can aid in officer safety when searching for suspects. They would have access to the camera.

5. PROGRAM BUDGET

Item	Cost	Donations	FD Budget Total
Thermal Imaging Camera – Camera, Batteries, Transmitter, Receiver and Necessary Cables	\$26,950.00	\$1,100.00	
Training	\$1,000.00		\$1,000.00
Administrative Cost	\$500.00		\$500.00
Supplies for Live Fire Training	\$500.00		\$500.00
Totals	\$28,950.00	\$1,100.00	\$2,000.00
Remaining Cost	\$25,850.00		

Budget Details

1. Thermal Imaging Camera:

This includes the camera, rechargeable batteries, mounting brackets, battery chargers, miscellaneous items, and one transmitter unit. The transmitter unit allows the command post and safety officer to actually see what the firefighter sees through the camera. It sends a signal to an AC/DC remote screen that can be taped and reviewed for future training.

2. Thermal Imaging Training for Firefighters:

The Polson Fire Department will share the actual cost of firefighter man-hours needed for the classroom and live fire training.

3. Administrative Costs:

The Polson Fire Department will share all administrative cost occurring during the length of this project.

4. Supplies for Live Fire Training:

Supplies will include, but not limited to, hay bales and lumber for prop development to simulate a degree of realism in live fire training in a safe training environment.

5. Sources and Amounts being Solicited and/or Pledged:

The total budget for this project is approximately \$26,950.00. Of that, cash and in kind cost sharing have covered \$3,100.00. We are requesting \$25,850.00 in this proposal from community and corporate support. Proposals to the community are being submitted for the balance of the proposal.

6. Future Funding:

At this time, this project is not expected to require funding past September 2001. All repairs will be covered by warranty and miscellaneous expense will be budgeted in future years.

7. Plans For Evaluation of Progress and/or Results of the Program:

The Fire Chief will have sole authority in administration of this project from the Fire Department level. The Fire Chief for safety and quality control will review monthly status reports. The Training Officer will be the immediate supervisor during the live fire training, will be present at all training to ensure quality of training and safety. A review of actions taken and actions encountered during actual emergencies will be reviewed and shared. Standard Operating Guidelines will be developed and changes updated as lessons learned dictate. The Polson Fire Department will track fire losses and recommendations will be relayed through the chain of command.

8. Organization Information:

The Polson Fire Department is a proud group of 38 firefighters dedicated to saving lives and property, as well as serving our great community. These firefighters provide a wide range of community programs that serve an approximate population of over 12,000. The firefighters of Polson have consistently provided great service to its customers as well as provided assistance to neighboring jurisdictions. The Polson Fire Department was established in 1928 and continues to provide structural fire protection, wildland interface and rescue. The Polson Fire Department is committed to its community to reduce fire loss through a progressive public education program.

Thermal Imaging Attachment - Frequently Asked Questions

HOW DOES THERMAL IMAGING WORK?

- Thermal Imagers detect thermal energy similar to the way your eye detects light. All objects have a certain temperature and emit waves of thermal energy called infrared radiation. The hotter an object, the more energy waves are emitted.
- Thermal Imagers cannot see through walls, glass or other solid objects, but they can detect as little as a .05 C difference in surface temperature. That difference helps to identify hidden fire.
- Using this technology, firefighters can see heat signatures as small as that of footprints or handprints.

HISTORY OF THERMAL IMAGING

- Thermal imaging was first developed for U.S. military applications to enable soldiers to better visualize the battlefield.
- The current technology provides vastly improved performance over the first generation devices. Cameras that were \$25,000 dollars 3 years ago, now cost under \$20,000 dollars. Due to reduced size and lowered cost, these newer devices have become available for use in a range of applications, including police suspect searches, medical burn evaluations and a variety of applications with the fire industry.

WHAT DIFFERENCE DOES THERMAL IMAGING MAKE?

In the February 1999 issue of Fire-Rescue Magazine, Editor Larry Stevens summarized the results of a nation-wide study of the effectiveness of thermal imaging cameras. Firefighters in test burns around the country represented a cross-section of America and included seasoned veterans from Seattle, Chicago and Boston.

Without cameras:

- 60 percent of the time, firefighters were unable to rapidly locate the victim.
- Over 30 percent of the time, firefighters couldn't find their way out of the burning house.

With cameras:

- 99 percent of the time, firefighters were able to locate the victim.
- 100 percent of the time, firefighters found their way out of the burning house.
- The time required to satisfactorily completing a search, dropped by 75 percent.

These statistics demonstrate the usefulness of this technology in the fire industry for both locating victims and guiding firefighters through burning structures.

WHAT ARE SOME WAYS FIREFIGHTERS USE THERMAL IMAGING?

- **Size up** – Thermal Imagers allow firefighters to find the source of the fire quickly, helping them save lives and property damage.
- **Attack** – Thermal imagers help incident commanders intelligently allocate resources at a fire and to quickly get water on the fire, not just on the smoke. Proper use saves the lives of firefighters by warning them of potential ceiling collapses and other dangers.
- **Search and Rescue** – Firefighters used to crawl through burning buildings, groping in blinding smoke for unconscious victims. With thermal imaging, it takes firefighters seconds to scan a room.
- **Overhaul** – After the fire has been put out, firefighters can scan the fireground in seconds to locate hot spots that might re-ignite. Using a thermal imager, overhaul can be done in 75% less time. This frees up firefighters to make other calls. This also prevents heat stress injuries.
- **Training** – Using transmitter systems, incident commanders can observe in real-time and videotape at the scene. Videotapes can be used for review and teaching later.
- **Haz Mat** – Firefighters can identify sources of vapors and gases, and determine liquid levels in containers, helping to manage hazardous materials spills and other accidents more effectively.
- **Wildland Firefighting** – using thermal imagers, firefighters can quickly scan large areas for hot spots, aiding them in getting the fire under control quickly.