

Fort Greely hangar saved by thermal imaging

unit uses

by Tommy Oldham and Michele Garrett

ort Greely fire units responded to a reported hangar fire on 21 September 2004. They arrived at the scene to find heavy smoke, with flames coming from the first floor windows. Firefighters entered the building and found the first floor engulfed in smoke and black out conditions on the second floor.

Through the use of thermal imaging the firefighters were able to identify hot spots behind the exterior walls on both the first and second floors and directly address those areas. Less then five hours later the fire was under control and the building saved. Without this technology valuable time would have been wasted looking for the source of the fire while it continued to spread upward.

Additionally, a new product called F-500 was used to quickly suppress the fire. F-500 is a multi-purpose agent that, when mixed with water, can be 20 times more effective then water alone. It is environmentally safe, nontoxic, noncorrosive, 100% biodegradable, and requires no specialized equipment.

The most significant factors that hinder fire fighting are the inability to see in a smoke filled building and being able to identify hot spots behind walls. Thermal imaging allows firefighters to virtually see through the smoke and inside the walls. Looking like a hand held video camera, the advanced infrared detectors and electronic systems to reveal images in terms of heat. It displays an image by showing the differences in temperature through heat waves as opposed to light waves.

Thanks to the support of SMDC (Space and Missile Defense Command) in Huntsville, Fort Greely received funding to buy new fire equipment, including three (3) new thermal imaging cameras and F-500; technology that proved critical during this recent fire.

Fort Greely's \$23 million hangar sustained minimal damage due to the outstanding skills of the fire-



The exterior of the hangar showing the damage from the fire.



A firefighter using one of the thermal imaging cameras.



fighters and the presence of thermal imaging and F-500. With only \$450,000 in damages, this new technology has more then paid for itself.

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