

ROCK TOWNSHIP FIRE DEPARTMENT TARGETS HOT-SPOTS AND AVOIDS HAZARDOUS TERRAIN USING HYPERSIGHT

The Rock Township Fire Department fights fire in rural Noble County, Oklahoma. About 60 times a year, members of the department are called out to fight grass fires. They often find themselves driving across uneven terrain that is obscured by smoke. Using HyperSight, the vehicle-mounted TIC, Rock Township firefighters can quickly access the fire line, fight fires that were previously masked by smoke, and navigate safely over smoke-concealed environments.

In 2018, Fire Chief Wade Warren was attending a county Fire Chief meeting when he heard about HyperSight, a vehicle-mounted thermal imaging camera that can see through smoke, fog, and



Spotlight Mounted HyperSight Thermal Imaging Camera

darkness. Warren immediately recognized the application for the camera in fighting wildfires and obtained one, mounting it on the spotlight of one of his brush trucks. "There's a lot of times you could

be in a brush truck and you can hear the fire but not be able to see it because the smoke's so thick," said Warren. "This allows us to actually be able to tell where the fire is and maybe keep us out of danger."

"...and you can hear the fire but not be able to see it because the smoke's so thick."

Within two weeks of mounting the HyperSight camera and monitor on one of its brush trucks, the department got a call providing the first chance to use its new thermal imaging technology.

"With the HyperSight, you could really see the fire well, and you could see the terrain really well."

We were fighting a fire that was in a lot of green grass, so it was really smoky," Warren related. "But my assistant chief said that with the HyperSight, you could really see the fire well, and you could see the terrain really well. It just really

worked better than expectations on being able to see where you were going with that monitor.”

“We can look behind us and see hot spots...”

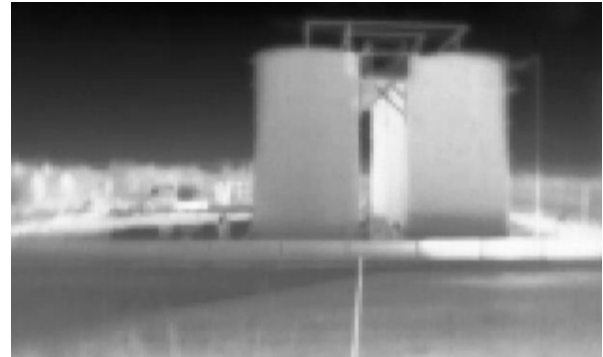
Warren expects the thermal imaging technology to see frequent use. “I think we’ll probably use it every time we go out on that truck. Where I see the benefits of it, is when you’re going down a fire line. Whether you’re the lead truck or the one in back mopping up, it’s hard to see behind you.



HyperSight Vehicle Mounted Thermal Imaging System

We can turn this camera to look behind us and see hot spots, making sure we got all the fire out and stop the rekindles. This is one of the reasons I wanted the camera mounted on the light.” The department has discovered other benefits of using HyperSight to help fight fire. “We found we can tell how full oil field tanks are with the thermal imaging camera,” said Warren. “We can see the fluid levels in the tanks. If we get called for a tank battery on fire, we can pull up and hit it with that camera and know that we’ve got two tanks full and three empty,

or they’re all full, or how full they are. We know more about the risk we’re taking without having to get too close.” Despite the advanced technology that HyperSight represents, the camera is not an expensive addition.



Low Fuel Levels Indicated By HyperSight Thermal Camera

The department had previously bought a handheld thermal imaging camera, but HyperSight was about one-fourth the price of the handheld.

“...if we could save one life out there, how do you put a price on that?...”

The value of HyperSight far exceeds the cost. “As far as the value, if we could save one life out there how do you put a price on that? That’s a big deal,” Warren concludes.

SPECIFICATIONS

Sensor:	Long Wave Infrared Sensor
Wavelength:	8-14 μ m
Frame Rate:	<9 Hz (Export Compliant)
Field of View:	56 deg – Horizontal
Power:	12-36V
Output:	NTSC Video
Body Material:	Stainless Steel
Weather:	Sealed
Dimensions:	H: 1.9" W: 2.5" D: 1.8"