



station in Kansas, and now as the owner of Extreme Storm Chase Tours, has seen or filmed 267 tornadoes and 11 major hurricanes to date, and been Emmy nominated for his severe weather reporting. "Obviously, I am out there to get some great video for the local media, but in doing so, I have a responsibility to give as much early warning time as possible to fellow residents," he says.

Dean uses a Thrane & Thrane E-727 BGAN terminal with iPixCel's VideoMover software to capture dramatic footage as severe weather hits the region. On 4 May 2007, Dean was the first reporter on the scene in Greensburg, when a tornado flattened 95 per cent of the town, leaving 11 dead. Dean's BGAN kit and VideoMover software delivered the first footage from the scene to KAKE Ch10 viewers. Without BGAN, the coverage would not have been possible, since cellular coverage in the area is limited to major towns.

Dean likes the BGAN set up because it is so reliable and easy to use. "The last thing I want when I have a tornado on the ground is any sort of distractions that may hinder in the warning process and my safety," he says. "Although every technology has its down time, I have never had an issue with this product in critical moments. It seems like the Inmarsat network is available everywhere... I have used other products that just did not stand up to the demands. When you're talking about life and death, it puts it all in perspective."

Heart of the action

It's a similar story at rival station KFOR, where award-winning meteorologist and stormchaser David Payne has been reporting live from the eye of the storm since the early 1990s, and using BGAN for the past three years. He uses a Thrane & Thrane E-527 vehicular BGAN terminal mounted in an SUV, with VideoMover. For Payne, the beauty of the system is its ability to get him to the heart of the action.

"We cover 77 counties, three quarters of Oklahoma, and we have to find a way to get video back live, not taking it and then trying to find a satellite truck," he says. "We use a helicopter, but that can't get to the places I can get when I'm stormchasing and tracking tornadoes. It can get out, but it can't get that close because of the storm, but I'm 200 yards away from the tornado and I'm bringing it to the viewers live."



Payne says that the live coverage enabled by the BGAN terminal has been a huge ratings hit, adding that when KFOR first started using the system, competing stations went out and bought their own BGAN terminals almost immediately.

"Our outlet is all about video - not delayed video, but having it live, as nothing tells a more compelling story," says Payne. "If you're using a cellular connection and you are outside a 3G network, it starts getting slow, but I don't worry about that. I can stream video from any county, anywhere, as long as I have line of sight."

Like Dean, he emphasises the public service element to his work: "That's what it's all about. This is our job, warning people at home. 'Here is where it is, I am at the intersection of Highway X and Highway Y and here is the tornado I am stormchasing and if you are North or North-east of where I am, you had better take shelter quick.'"

Severe weather events

Payne's colleague at KFOR, photo journalist and professional stormchaser Marc Dillard uses a turnkey system comprising a Thrane & Thrane Explorer 527 BGAN terminal, VideoMover software, and a DV (Digital Video) camcorder connected via FireWire to an IBM Notebook computer, while attached to the BGAN terminal. Dillard's SIM card is activated via Evosat and maintained by SatellitePhoneStore, an airtime provider from Sarasota, Florida.

Dillard has been using this set up for three years and has covered many severe weather events, most memorably on 1 May 2008 in Tulsa, Oklahoma, when the stormchasing team intercepted a massive tornadic event and aired the entire episode live over BGAN. Dillard and his colleagues won an award from the Oklahoma Society of Professional Journalists in the Weather Reporting category for the coverage.