



**Figure 1.** Brimtek Motorsports Racecar with Antennas Mounted to the Roof

### Background

The Charge of the Headlights Brigade is a 13-hour Endurance race hosted at the Virginia International Raceway in Alton, Virginia. A variety of sports cars and sedans compete at speeds of over 125MPH.

### The Challenge

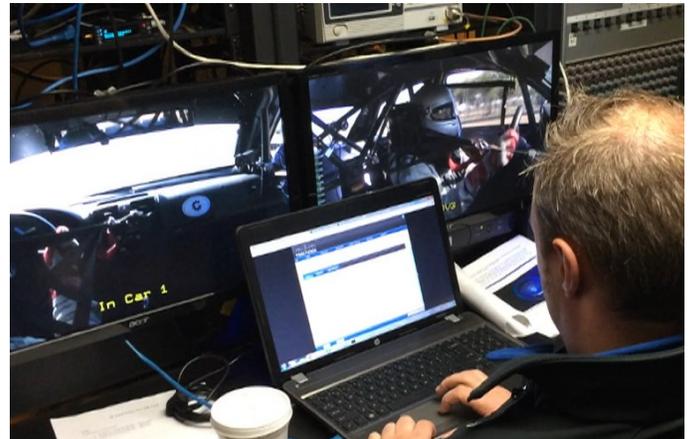
providing live HD video and audio from inside of a racecar travelling at over 125MPH has many potential pitfalls. On a large track such as VIR, a single radio link cannot cover the entire track. Several radios need to be placed around the track to receive the video feed and relay back to the central viewing station. These handoffs need to occur seamlessly and without any user intervention. Today's systems require a wired network of receive stations around the track. This means that a broadcast team has to arrive at the track days in advance to run fiber around the entire track.

### Silvus Solution

In conjunction with Brimtek and 3G Wireless, Silvus was able to place several Silvus SC3500 radios around the track for closed circuit wireless coverage. Because the Silvus network does not rely on a fiber network to operate, the setup took just a couple of hours. Figure 1 above shows a picture of the Brimtek Motorsports racecar with antennas mounted on the roof.

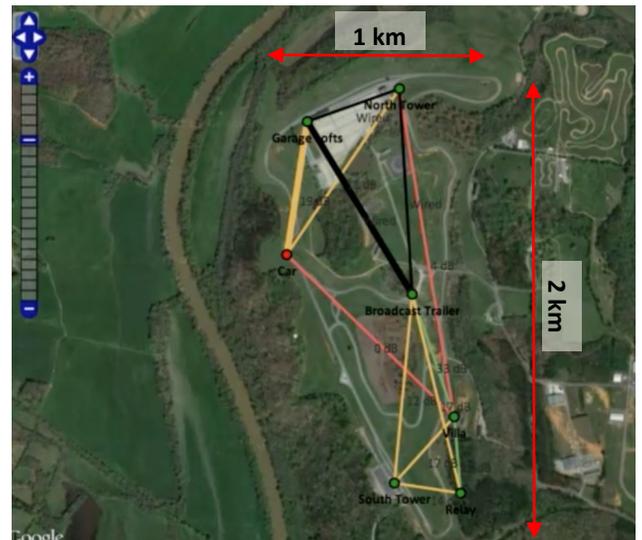
The vehicle had two video cameras inside connected to a Silvus SC3500 radio transmitting 8Mbps HD video from each camera. The two video streams were transmitted back to a central broadcast trailer where the live video stream was

put onto the internet allowing for fans at home to watch the race from the driver's perspective. In addition, the pit crew was able to keep an eye on their driver during the entire race. Figure 2 below shows the dual HD video streams being monitored from within the broadcast trailer.



**Figure 2.** Live HD Video Streams Viewed Inside of Broadcast Trailer

Using Silvus' StreamScape Network Manager the mesh network was monitored in real-time. The Silvus Map Overlay functionality with the SC3500 GPS capability allowed for real-time location mapping of the vehicle during the race.



**Figure 3.** Silvus StreamScape Network Manager Map Overlay

### Summary

With the support of several industry partners, Silvus was able to provide live HD video from inside of the Brimtek Motorsports racecar during the 13-hour Charge of the Headlights Brigade endurance race.