

### THREE SECONDS BEFORE LIFTOFF

Three seconds before liftoff the igniters are fired to ignite the engines. There is a loud bang when the engines are fired. One of the tasks when we are preparing to launch is to test the lines to the igniters to ensure they are clear to install the igniters. There is a tunnel from the blockhouse to the pad where all the cables are installed that has all the wiring to control and monitor the vehicle. These wires are fed through a relay box which is located in a room just a few feet beneath the vehicle. The lines to the igniters are tested after the vehicle is fully loaded and just minutes before launch. Just at the very instance John Avery I touched the meter leads to the igniter lines, there was a loud bang and needless to say we thought our days were numbered since we had only three seconds to reach safety and there was no way that could happen. We soon learned there was another technician in the tunnel and he had fired a ramset which makes a noise very similar to a 22 rifle ----- what a real scary moment.