A safer, more reliable way of perforating

Our new Fail-safe Addressable Switch Technology adds a new dimension to electrical wireline select-fire perforating. FAST™ Perforating Systems provide the ability to block all sources of inadvertent current from the electrical detonators in the tool string. This includes all sources of voltage: stray, RF signal or human error. The wireline operator can now communicate with and control each of the sections of the downhole assembly, and the new switches can be checked before and during the wireline run, thus improving reliability. Real-time shot detection gives the operator feedback on whether plugs have set or guns have fired, and with addressable switches, gun sections can be skipped in the event any section fails to detonate.

Greater Reliability – Lower Completion Cost
The adoption of this technology has had a dramatic impact on the reliability of wireline perforating at Allied-Horizontal Wireline Services. Prior to adopting addressable switch technology, the wireline runs/misrun ratio was very close to the industry average at approximately 50 (2% failure rate or 98% efficiency). As the new technology was implemented, improved, and became the standard for select-fire perforating, the wireline runs/misrun ratio more than quadrupled. At a ratio of 200, the failure rate dropped to 0.5% and efficiency improved to 99.5%. The impact on well-site efficiency was appreciable, with reduced stand-by for frac spreads, fewer misruns, and overall lower cost of operations for the E&P companies.

Safety and RF-Safe for Multi-well Completions
The FAST Perforating System is fully RF-Safe and allows for rigup and run in the hole without the need to interrupt simultaneous operations or the need to stop for radio silence. In addition, because the system requires a specific electronic code for firing, stray voltage, static electricity, and other unwanted energy sources cannot fire the detonator.

Eliminate Wireline Misruns:
Each switch/detonator, igniter, and gun can be electronically checked at surface to ensure the switch is functioning and that all wires and connections are proper before rigging up. Upon rigup, the system also electronically checks each switch, detonator, and igniter before running in the hole. In addition the gunstring can be checked at any time while running in the well. Our system has been proven to routinely provide over 100 continuous horizontal wireline runs per failed run in the well.
Real-Time Shot Detection:
The FAST Perforating system electronically senses the firing of each detonator and igniter, giving a positive electronic indication of the gun firing and the plug setting.

Skip Guns if a Misfire Occurs:
In the event that there is a downhole fault causing explosives not to fire, that particular gun can be skipped and perforation can continue with the next gun in the string. This saves time and is safer than returning to surface to troubleshoot a live explosive string.

Better reliability:
The FAST Perforating system has a proven reliability much greater than other perforating switch systems. Component failure is less than 1 per 2000 units, which is 10 times better than comparable systems.

Greater Compatibility:
The FAST Perforating System is designed to be run with any conventional or high performance guns, charges, and plugs.