



Parachute Reserve Automatic Opening Capability (AOC)

What It Is:

Protecting Parachutists... We're developing an "automatic opening" device for reserve parachutes that will dramatically reduce fatalities and injuries for static-line jumpers.

Why It's Needed:

The Army vision includes maintaining the airborne infantry as a strategic deterrent and as the early entry force. Jump-related casualties negatively impact combat effectiveness.

Recent static line related fatalities would most likely have been avoided if the incapacitated or disoriented jumpers had had an automatic opening capability (AOC), as is typical with higher altitude, freefall-type parachutists. In addition, for jumps at combat altitudes — 500 feet above ground level — jumpers have little time to react to a malfunction, even a correctable one. In an emergency, an AOC would be an exceptional additional parachute system component.

How It Works:

Thanks to recent advances in sensor technologies, we now have the potential to create a low cost mechanism with an "automatic opening capability" for low altitude parachuting. How will we identify the key features of a parachute's opening and descent? We're measuring variables such as the acceleration along three axes and barometric pressure. Results to date are very promising.

Benefits:

Saving Lives... Parachutist injuries and fatalities occur at an unacceptably high rate today. When static-line jumpers use the AOC device, we project training-related fatalities caused by broken static lines and total main canopy malfunction will be eliminated.

Cutting Costs... Current commercial devices cost as much as a complete parachute system. Our AOC device for reserve parachutes will be affordable and will operate at low combat altitudes.

Building Trust... With a back-up parachute that opens automatically and reliably, jumpers will be more confident and more effective in combat.

Point of Contact:

Airdrop/Aerial Delivery Liaison
COMM: (508) 233-4495



**NATICK
SOLDIER
CENTER**

Kansas St.
Natick, MA
01760
nsc.natick.army.mil