SAFE PRODUCTS FOR PERILOUS MISSIONS

At Safe, we develop products to protect people whose duties when serving our nation place them in harm's way

Spirit



- Energy Management
- **Ballistic Protection**
- Occupant Restraint
- Human Injury Protection
- Vibration Control
- Crash Protection
- Mechanisms

Engineering Disciplines

- Mechanical
- Manufacturing
- Test
- Quality
- Reliability & Maintainability
- Logistics
- Industrial

Life-Saving Products

- Spacecraft Energy Attenuating Struts
- Aircraft Crashworthy Seats
- Vibration Mitigating Seats
- Cargo Handling Seats
- Missile Launcher Armor
- Fall Arrestment Tether
- Spacecraft Seat Impact Attenuator

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Capabilities

- Mechanisms and mechanical design including CAD, linear and nonlinear structural analysis, kinematics, fracture analysis, vibration modes, fatigue, and controlled drawings
- Custom setups for in-house static (hydraulic ram) and dynamic (drop impact) strength and performance testing with full instrumentation and data acquisition
- Test management at external laboratories including vibration for space and military, crash acceleration, ballistic, and environmental exposure
- Reliability and Maintainability (R&M) engineering
- Human injury assessment
- Armor design and development
- Efficient design optimization through Design of Experiments
- Exploratory R&D from trade study through concept prototyping
- Full product development life cycle from system specification through design, development test, formal design review, qualification test, assembly, quality assurance, production, and support
- Build-to-print manufacturing and delivery for aerospace and defense

Products

Vibration attenuating, ergonomic aircraft crew seat improves health and mission endurance



• Crew Impact Attenuation System protects Project Orion astronauts from spinal injury in off-nominal landing; first flight hardware delivery completed



Energy-absorbing struts for commercial spacecraft protect passengers from whole body acceleration injury; flight hardware delivered



• Fall arrestment tether restrains aircrew while allowing mobility



Many others are in development

About Safe, Inc.

- Veteran-owned Small Business (VOSB) in Tempe, AZ founded in 2002 with a mission to support the warfighter and protect people on hazardous duty
- AS 9100D and ISO 9001:2015
 Quality Management System
- Successful record of commercializing SBIR technology and delivering flight hardware