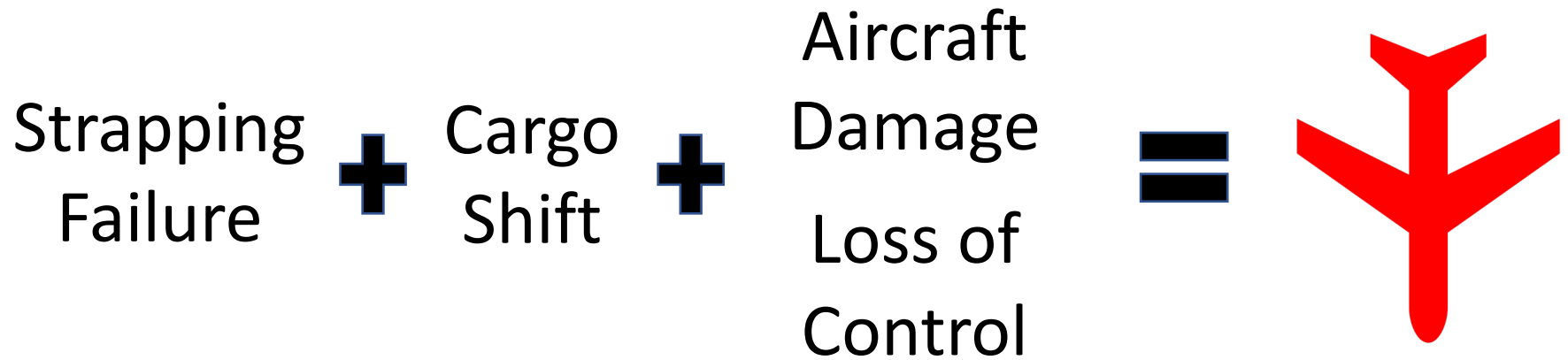


Straps and Strapping

New Solutions for Old Problems

Safety is the Old Problem



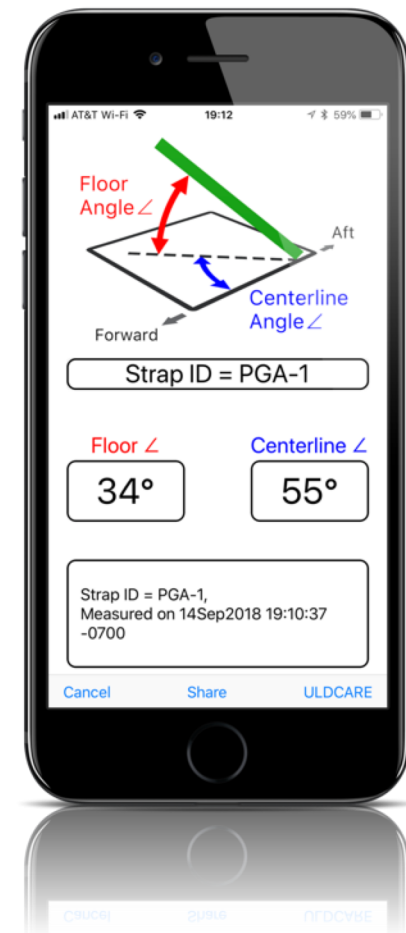
Old Solutions

- More procedures
- More rules
- More training
- More bulletins
- More complexity



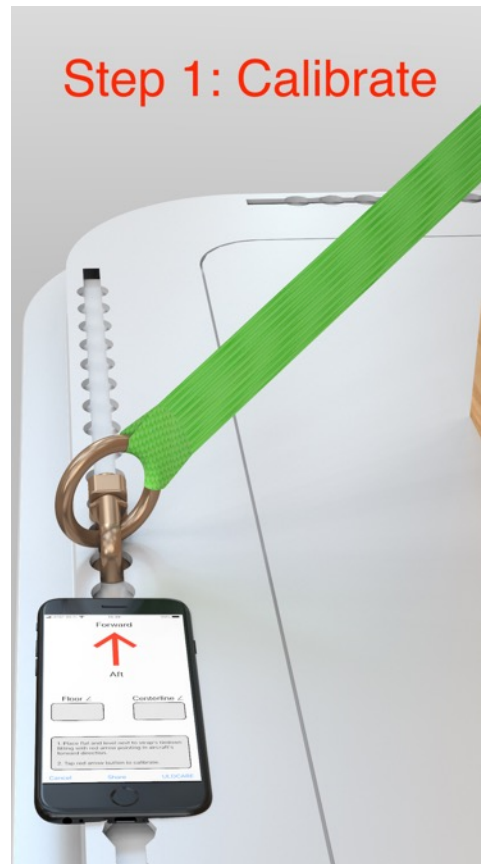
New Solutions = Smartphone Apps

- Simplify instructions
- Make information readily available
- Improve communication
- Reduce training



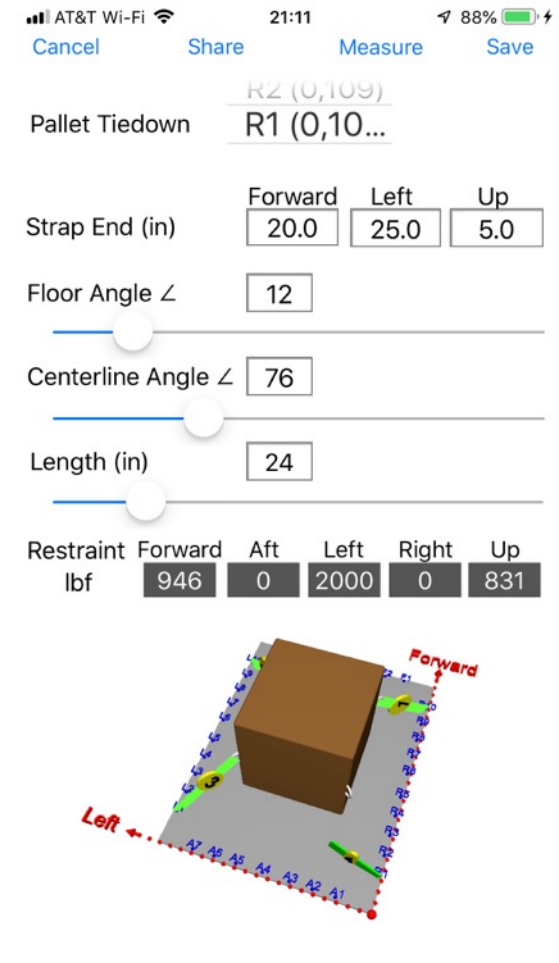
Strap Angle Measuring App

- Simplifies measurement
- Reduces training
- Improves accuracy
- Maintains compliance



3D Strapping Simulator App

- Install straps in 3D model
- Rotate, pan, and zoom
- Adjust tiedown, strap end, angles, and length
- Automatically calculates restraint capability
- Simplifies training
- Keeps skills current



Augmented Reality App

- Overlays 3D strapping plan in real life
- Verifies actual strapping plan using machine learning



New app solutions

- Thanks to ULD CARE for sponsoring the Strap Angles app
- Are there other partnerships and opportunities for new app solutions?
- Industry Standards?