



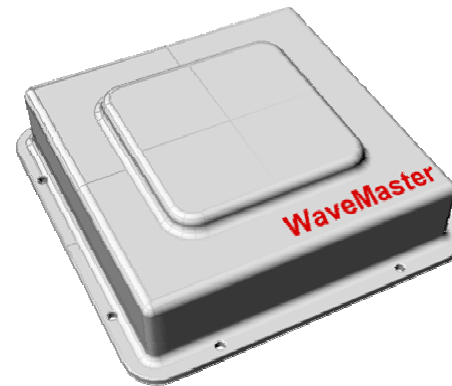
# Team WaveMaster

## Challenge 3 – Height and Velocity Sensor

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### DESIGN CONCEPT

- Altitude sensor for safe airdrop landing
- Detects distance to ground using pulsed radar and 3-axis accelerometer
- Microprocessor constantly monitors and filters data
- Functions during temporary failure of one *or both* sensors



### DESIGN HIGHLIGHTS

- Lightweight, low cost design
- Works in snow, fog, dust, and other severe conditions
- Produces data even above trees, water, rocks, and sand
- Calculates range 50 times per second
- High G tolerant (No moving parts)

### SOLDIER BENEFITS

- Safer, more accurate landings
- Fewer damaged airdrop cargos
- Insurance for expensive military equipment or supplies
- Reusable, but cheap enough to be disposable