Customer Need

Minutes matter when it comes to an emergency rescue.

Flare guns only last 7-8 seconds.
Standard Emergency Rescue Beacons, EPIRBS, only locate a search area.
A life raft or individual person is difficult to spot in the ocean.

Thank You

David Wallace
Rich Wiesman
Sangbae Kim
Tony Hu
Linda Sutliff
Andy Hamilton
Arni Lehto
Eric Statz
James Penn
Dick Fenner
Bill Cormier
Joe Cronin
Jim Dudley
Steve Haberek

Chevalley Duhart
Lauren Hernley
Paul Piraino
Eric Longus
Henry Marx
Melanie Hood
Gene Day
Paul Ansolabehere
Anagram Balloon
Philadelphia Ship Preservation Guild
NASAR
Landfall Navigation
Boston Paintball

Team Purple

Members
Alejandro Aguirre
Kuljot Anand
Cecilia Cantu
Jeremy deGuzman
Nifer Fasman
Angela Hojnaki
Elina Hu
Laura Matloff

Lab Instructors
Sangbae Kim

Lab Mentors
Andy Hamilton
Arni Lehto
James Penn

Frederick Moore
Jill Oliveira
Chase Olle
Jason Pier
Nathan Porter
Madeline Salazar
Sarah Southerland
Nick Torgerson

SkyBeacon Features

- Daytime visibility of 7 miles
- Nighttime visibility of 2.5 miles
- Standard boating flag and light distress signals
- Radar detectable
- Flotation capability equivalent of a Type 1 life jacket
- Lifetime of 3 days

SkyBeacon 2009purple@mit.edu
**Deployment Steps**

1. **Pull handle and lift lid**

2. **Twist knob and wait to fill**

3. **Pull up and remove balloon**

**Market**

- **Target market includes boats between 16 and 65 feet**
- **Large market potential:** 11 million US target market boats
- **Price is $130**

**Three-piece balloon:** Made of aluminized mylar and displays the international boating distress flag.

**Helium canister:** Made of carbon fiber and contains 90 cubic inches of helium at 4500 psi.

**Tether spool:** Stores the 50 foot tether

**Waterproof housing:** Protects the internal mechanisms from seawater and contains foam to provide flotation.

**Electronics:** Waterproof capsule houses a microcontroller and flashes two LEDs in a standard distress signal.

**Pressure regulators:**
- First pressure regulator drops pressure from 4500 psi to 40 psi.
- A second custom-made regulator drops the pressure to below 15 psi.