



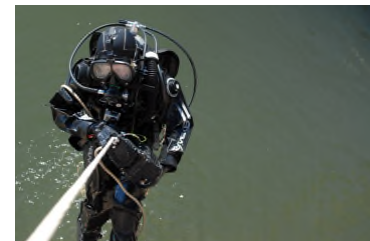
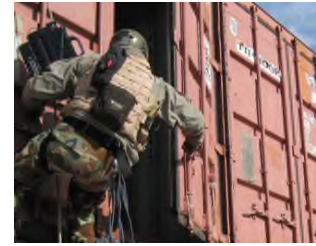
**ATLAS DEVICES**

*HIGHER, FASTER, SAFER*

# Alternate & Dismountable Hoist Capabilities for Human External Cargo

Product Series:  
APA-5 Ascenders

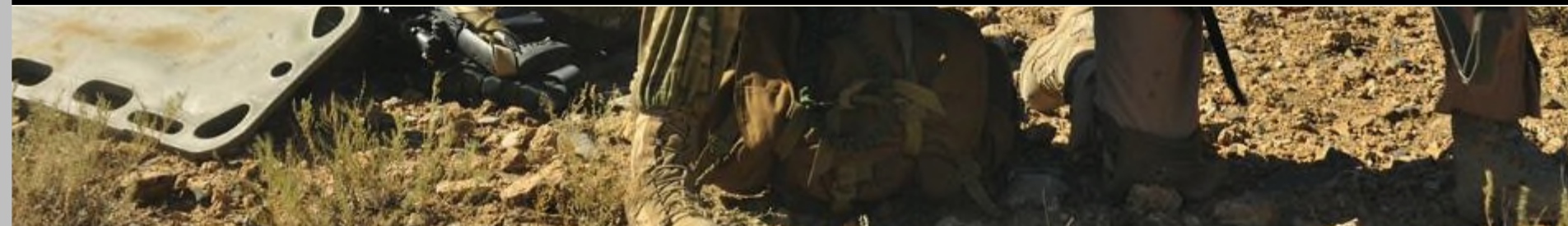
Confidential - Do Not  
Distribute







## Company Overview





Nate Ball  
*Co-Founder & CEO*

*MIT Mechanical  
Engineer, Innovator,  
Author*



Dan Walker  
*Co-Founder & COO*

*MIT Mechanical  
Engineer, Innovator,  
Mountaineer*



Gino  
Kahaunaele  
*Director of  
Sales*

*USAF Pararescue  
Jumper (Ret.),  
Paramedic, Athlete*



*Maritime & VBSS*



*Urban  
Tactical  
Climbing*



*Casualty Evacuation  
& Rescue*



*Airborne  
Extraction &  
Recovery*





*Maritime & VBSS*



*Urban  
Tactical  
Climbing*

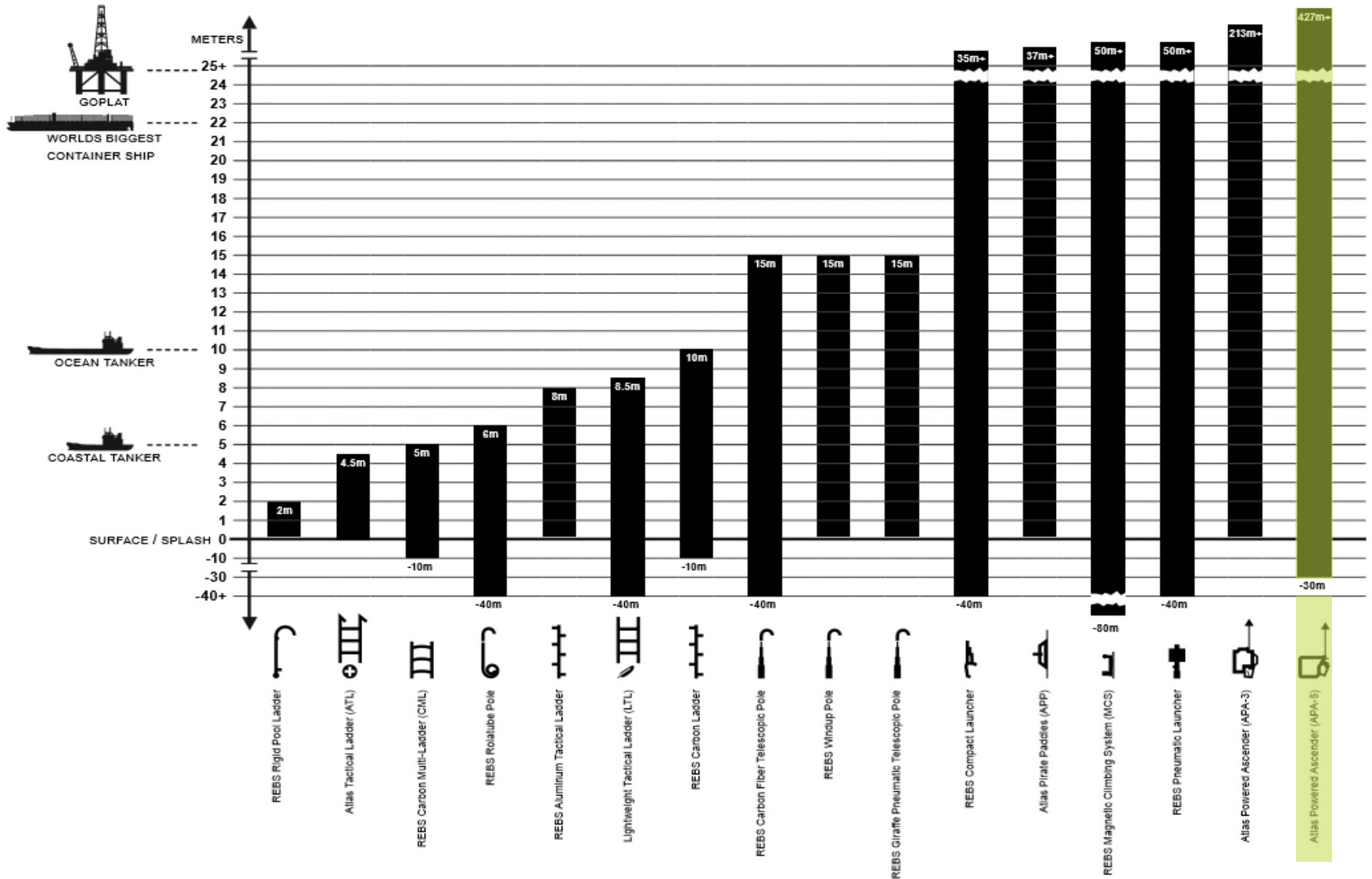


*Casualty Evacuation  
& Rescue*



*Airborne  
Extraction &  
Recovery*

# Reach Height Chart





## 1. Aircraft not equipped with hoist

- CSAR teams may be tasked with mission that requires hoist capability, but hoist-equipped aircraft are not always available



## 2. Existing hoist can't reach

- Some environments restrict hoist-borne mobility for rescuers
- Rescuer may be able to get onto roof top but not be able to get casualty to roof for extraction



## 3. Existing hoist has failed

- Issues with hoists and cables present immediate challenges
- Past incidents have resulted in rescuers being left far offshore for hours waiting for replacement aircraft

*"We've lost the hoist, the hoist is gone."*





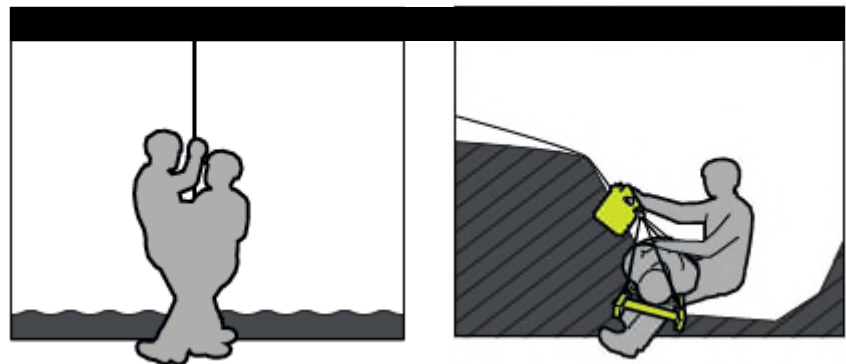
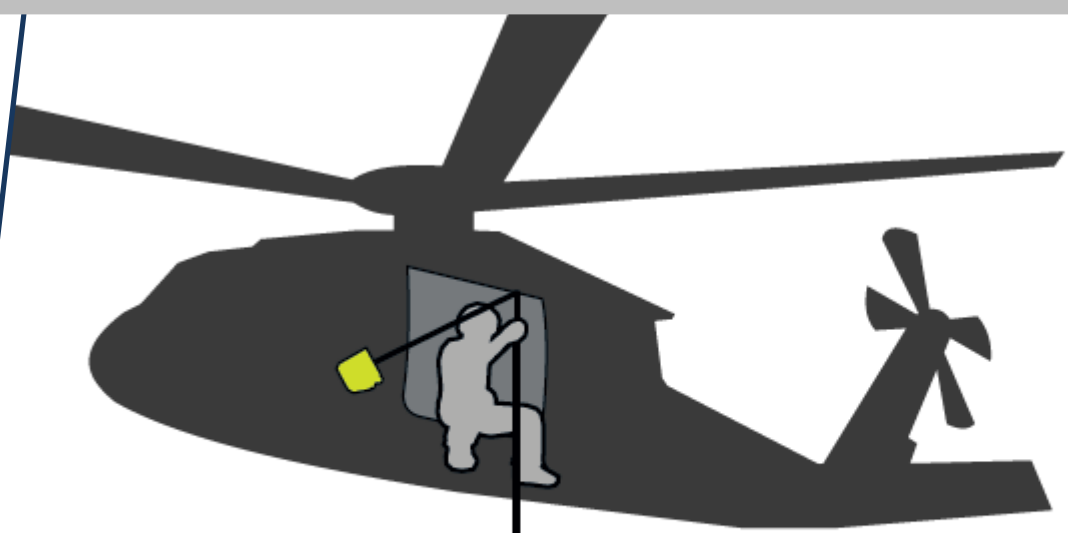


**ATLAS DEVICES**

*HIGHER, FASTER, SAFER*

# Dismountable Hoist Concept

Product Series:  
APA-5 Ascenders

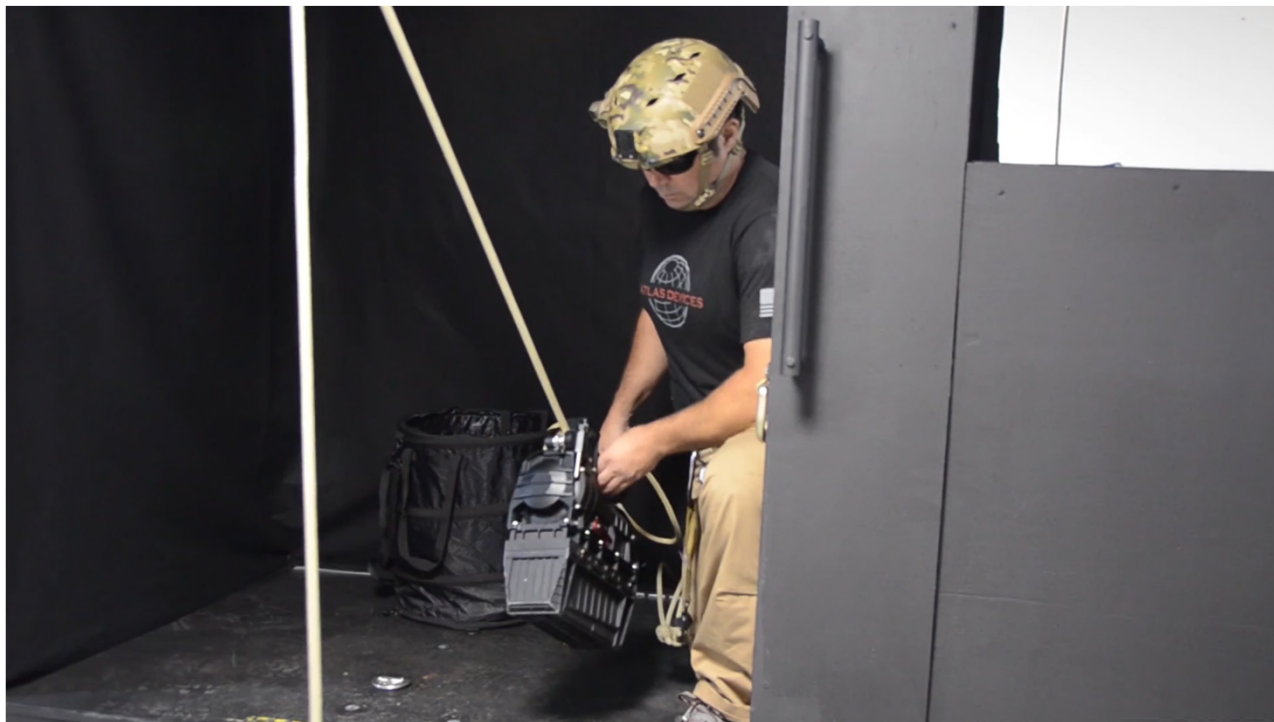


## “Emergency Recovery Device (ERD)”



- Long setup time
- Heavy
- Manual hand-crank method is slow and arduous
- Up to 200 cranks to get rescuer & casualty up

## Atlas APA-5 Powered Ascender



- Fast setup time
- 30 lbs incl. Ropes
- < 40 m/min speed
- 275 kg lift capacity
- Currently being flown by USCG in training missions on H-60 aircraft









## Atlas Powered Ascender Overview







APA-5 Series Powered Ascender Kit





APA-CHG-BC3.2

## APA-5 Charger

- Power Requirements: 110-240v AC  
Power IEC 320 type connector
- Quick Reference Card
- Anatomy and Inspection
- Operation and Use
- Charging Times (1 Hr) Rapid Charge /  
8Hr Balance Cycle



## APA-5 Battery

- Construction
- Anatomy and Inspection
- Operation and Use



APA-5 Standard Battery  
PN: APA-5-STD



APA-5 High Capacity Battery  
PN: APA-5-HC1



### APA-5 Powered Ascender

- Submersible Powered Ascender
- Lift Capacity: 272kg (S-Model)
- Variable Speed Trigger (0-0.7 m/sec)
- 2-Speed Intuitive Interface
- 6-11mm Diameter Rope (MRI Upgrade)
- Remote Capable (Wired/ Wireless)
- Emergency Descent







Atlas Toughline Rope

## Atlas Toughline Rope

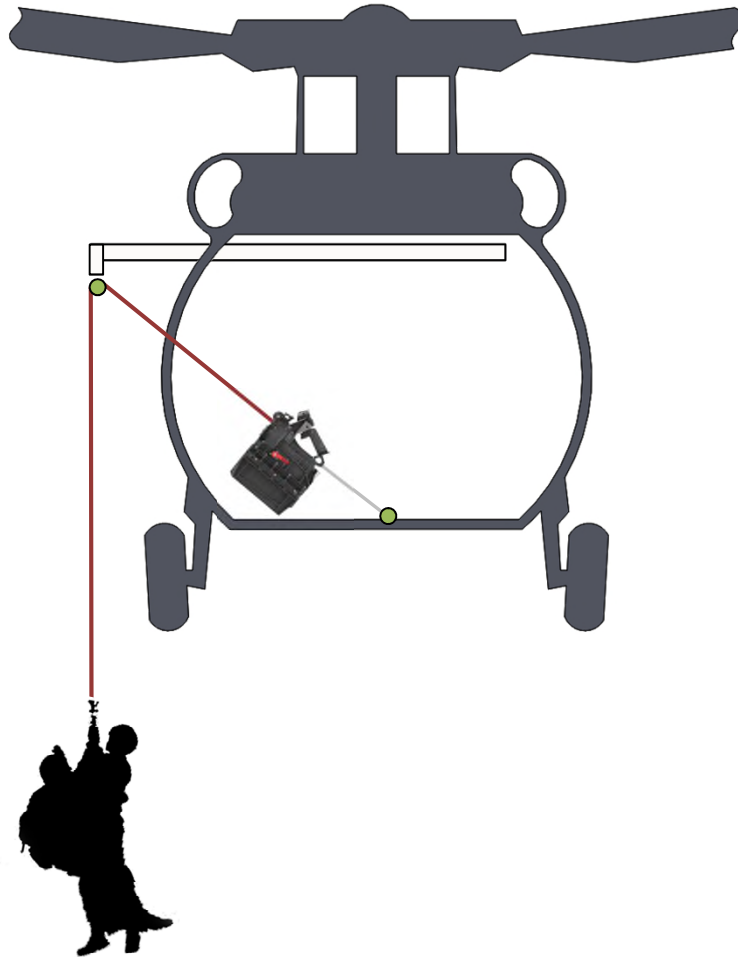
- Static
- Kernmantle
- 6-11mm
- MBL
- 10.5 Optimal Characteristics





Current TTPs





1. Clip pulley with rope to overhead point
2. Clip APA-5 to floor rings and engage rope
3. Resume rescue operation







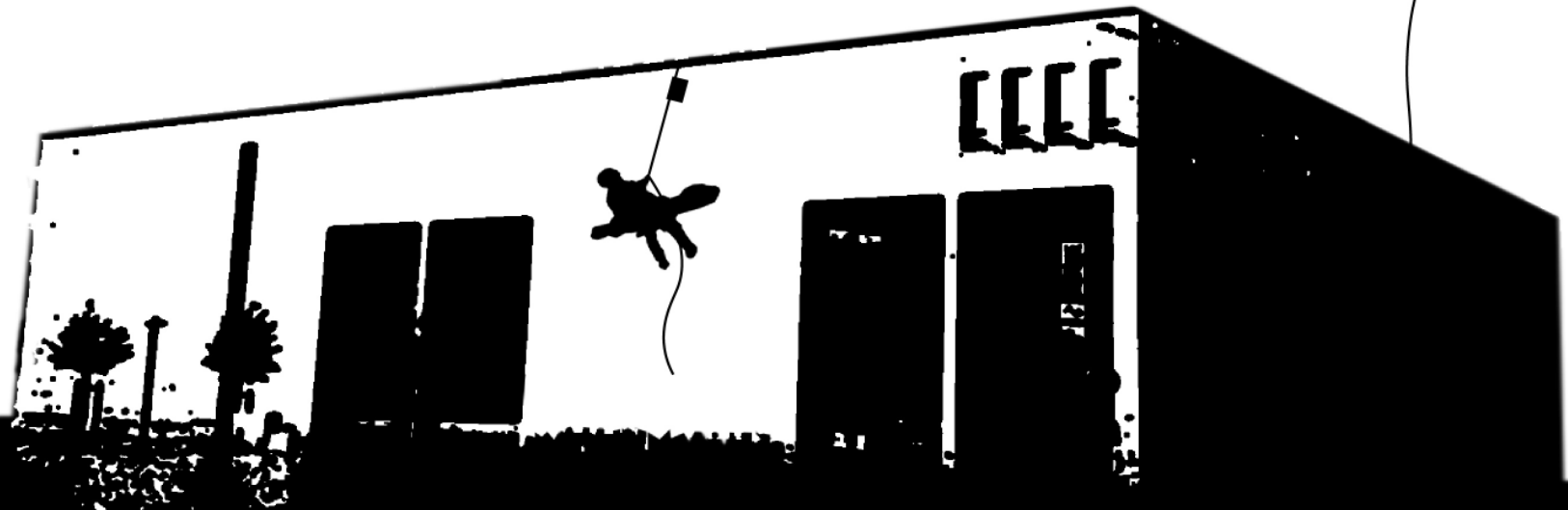


1. Rappel onto roof top on ascender carrying an extra rope

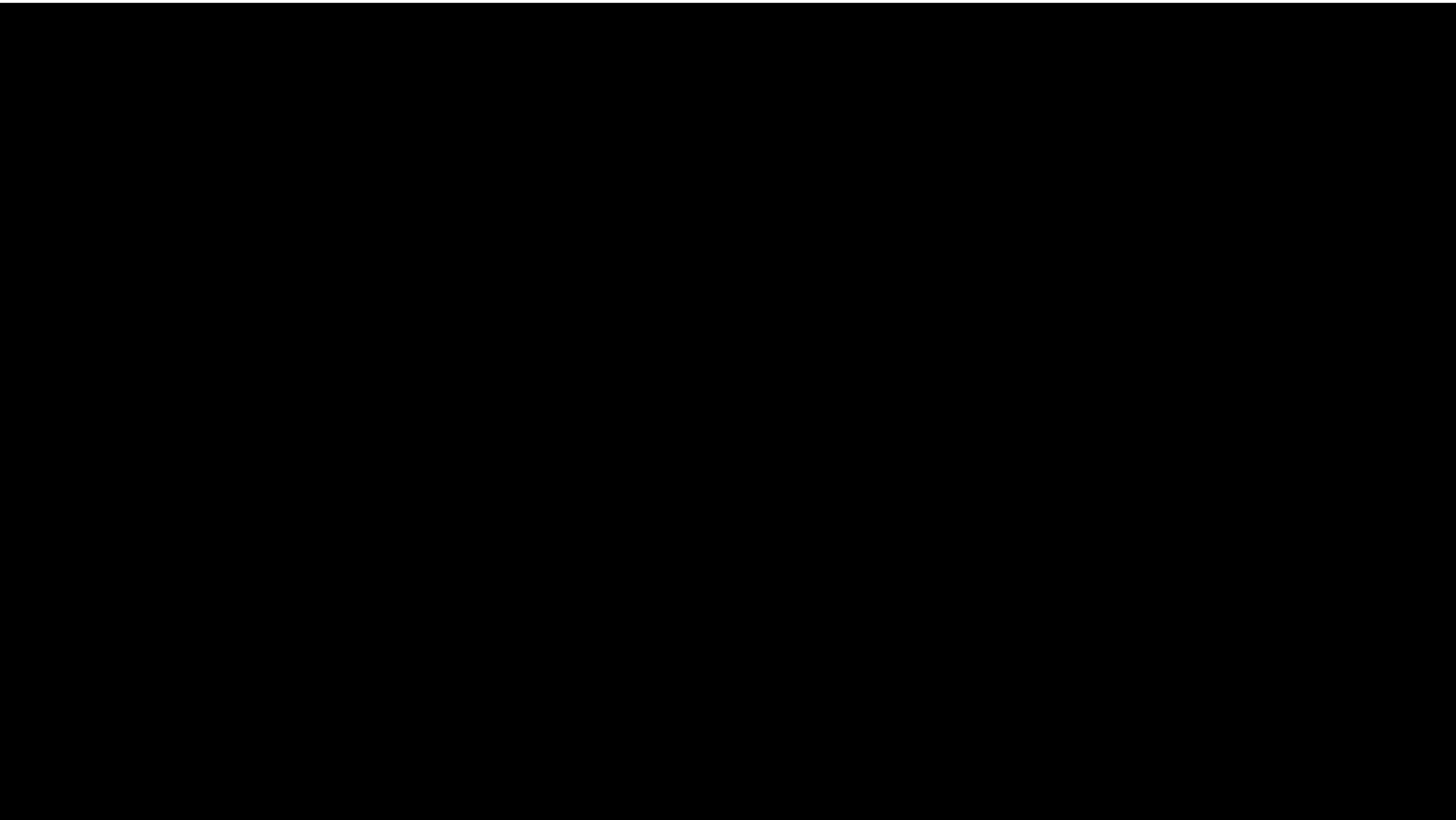


2. Rappel into building on remote control and haul casualty to roof for extraction

3. Re-attach ascender to fixed line and hoist back up







- Use in Training Operations – USCG MH-60
- NAVSEA 9310 Certified (US DoD)
- US DoD Test & Eval Cmd. Safety Confirmation
- MIL-STD 810F, MIL-STD 167
- IMCA Safe Use of Electricity Underwater
- US Navy Experimental Diving Unit –  
Safe Use of Energized System Underwater



- New countries & units using APA-5s as alternate and ad-hoc hoist
- Formalized TTPs as adoption grows
- Additional 1 and 2-person product options
- Establishing training procedures that mimic real operations without having to fly aircraft
- New testing & certifications as aircraft user base expands
- Work procedures for helicopter + tower operations
- User-specific adaptations







Questions?





 **ATLAS DEVICES**  
*HIGHER, FASTER, SAFER*

Please contact Atlas Devices for additional technical questions or inquiries. For all pricing questions or inquiries, please contact Atlas Devices LLC..

---

Atlas Devices LLC  
56 Roland St.  
Suite 114  
Boston, MA 02129

<b>Nate Ball</b> Co-Founder & CEO nate.ball@atlasdevi ces.com Phone: <b>+1.617.415.1657</b> x102	<b>Gino Kahaunaele</b> Director of Sales ginok@atlasdevices .com Phone: <b>+1.617.415.1657</b> x108
--	---

---