



AIRCRAFT RECOVERY

INTERACTIVE COURSE DISCUSSING

- ◆ Accident Causation
- ◆ Witness & Wreckage Documentation
- ◆ Scene Hazards
- ◆ Reporting & Investigation Insights
- ◆ NTSB and FAA Roles
- ◆ Media Relations
- ◆ Bell 407 Recovery Information

WHO CAN ATTEND

- ◆ Firefighters
- ◆ EMS Professionals
- ◆ Search & Rescue Teams
- ◆ First Responders
- ◆ Law Enforcement

PREREQUISITES

- ◆ Landing Zone Class
It is not required to have an LZ Class prior to attending, but it may help the attendee have a better understanding of causation. LifeNet Air offers LZ Classes for free to first responder organizations.

LENGTH OF CLASS

4 Hours

WHY ATTEND?

This class is divided into four parts designed to teach you how to respond if an aircraft goes down in your area.

Part 1

Learn who to call and how to manage and secure an aircraft accident scene.

Part 2

Discuss scenarios that highlight what can go wrong if an LZ is not properly setup and secured. Then switch gears and discuss real world examples of obstacles you might face recovering an aircraft (crowds, rooftops, terrain, etc...).

Part 3

Learn specifically how to recover a Bell 407 helicopter through videos and instruction from a Bell 407 pilot.

Part 4

If the aircraft is available, the final part of the class focuses on hands-on application of the materials learned.

HEMS RECOVERY CLASS NOTES

Extrication Hazards

***Injuries can occur through:**

Lacerations
Crushing
Fire
Explosion
Asphyxiation

Notes: _____

***Extrication Hazards**

Know what you're cutting through
Access through windows not recommended
Designed to resist impact (bird strikes)

Onboard Hazards

***Batteries**

Remove from the wreckage
Don't merely disconnect them
Sparks from a battery can ignite spilled fuel/
flammable materials

Notes: _____

***Oxygen**

Can create explosion hazards if leaking from impact
Oxygen will cause combustible materials to burn
more intensely

***Bloodborne Pathogens**

***Sharps Containers**

Composites and Fiberglass

***Glass or carbon fibers held together with epoxy-resin**

Fibers can break into airborne dust/fibers inhaled into the lungs
Stay upwind when handling the materials
Burned composite structure may hold it's form but support no weight

Notes: _____

***Use care walking through wreckage**

Fracture can create shards capable of penetrating boots
Loose fibers can penetrate and irritate skin

HAZARDS OF SCENE LANDINGS

Approach Speed

Brownout or Whiteout

Wire Strike

Multiple Aircraft on Scene

Weather

****VFR vs. IFR Conditions***

Visual Flight Rules

Instrument Flight Rules

****Helicopter Shopping***

****Weather Related HEMS Accidents***

1998-2008 NTSB Study

19% of All Accidents - Weather

ACCIDENT SCENE LOCATIONS

Sporting Events

- *Crowd Control
- *MCI and Triage

Rooftops

- *Structural Integrity of Roof?
- *Is the Building on Fire?
- *Evacuate People?
- *How to Get the Survivors Out?
- *Means of egress / access to helipads

Water

- *Dive Team

Roadways

- *Traffic Control
- *Stabilize Hazmat
- *Prevent disturbance of accident scene

Airports

- *Scene Control
- *Other Flight Traffic
- *Access to Location

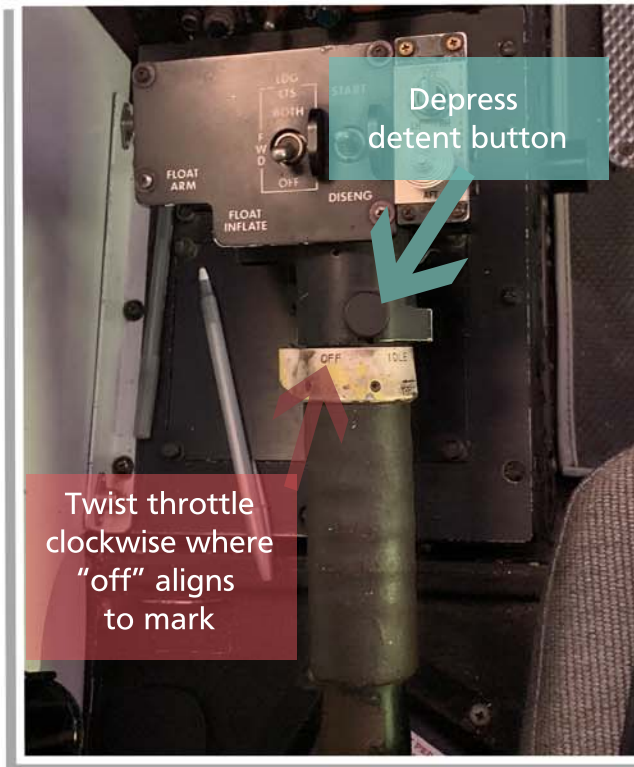
Rough Terrain

- *Snow or rain
- *Access to scene
- *Securing the wreckage

BELL 407 HELICOPTER EMERGENCY SHUTDOWN PROCEDURES

You should always refer to the pilot and crewmember instructions first. If occupants are unable to provide instructions, this guide can help you make the aircraft safer to perform rescue operations around.

Turning Off the Bell 407



If you can reach the collective, push down on the detent button. Then twist the throttle clockwise where "off" aligns to the mark.

If you cannot reach the collective, you can turn the fuel valve off by pushing the button (Bell 407) or switch (Bell 407 GX)



Stopping the Rotor Blades

Pull the rotor brake down.

IMPORTANT!!!! The rotor blades will not stop instantly. It can take up to 30 seconds for them to stop.

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Opening the Door: Medical Crew & Patient Area



Opening the Door: Cockpit Area



There are two door handles on the pilot side of the aircraft.

Lift up on the handle on either door to release the door to be opened.

BELL 407 HELICOPTER EMERGENCY SHUTDOWN PROCEDURES

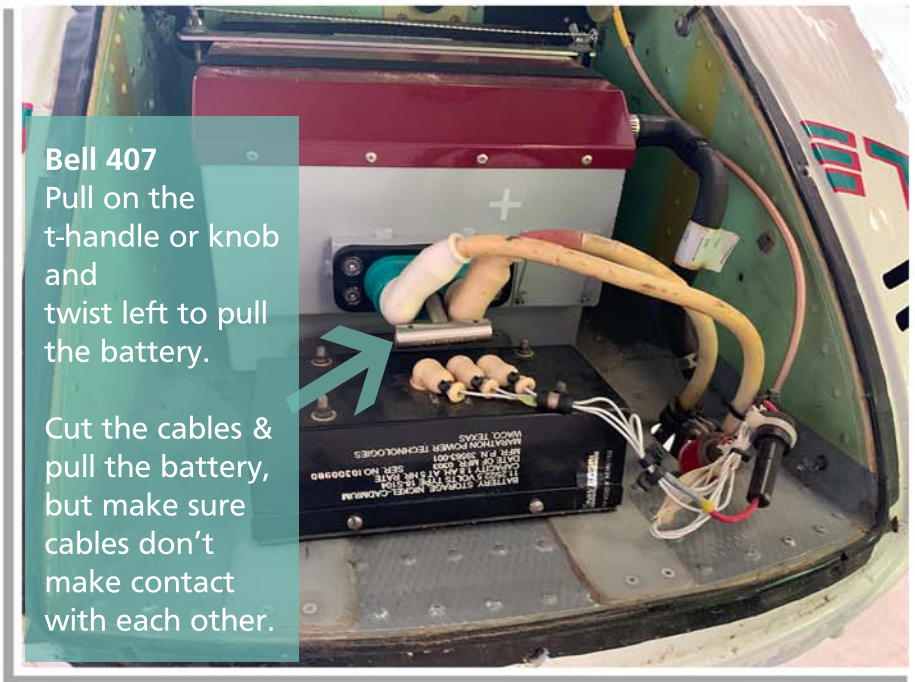
You should always refer to the pilot and crewmember instructions first. If occupants are unable to provide instructions, this guide can help you make the aircraft safer to perform rescue operations around.

Accessing & Removing the Battery



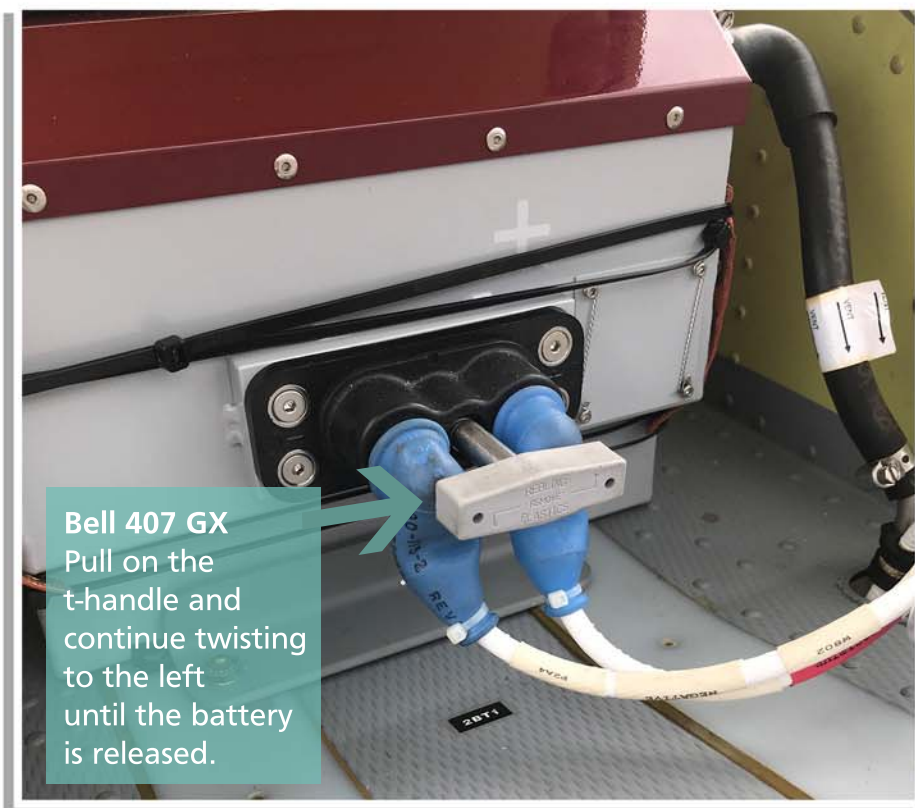
Use a screwdriver to open the five fasteners on the front of the battery compartment.

Once all are unlocked
Grab onto two fasteners and
lift the cover off of the
compartment.



Bell 407
Pull on the
t-handle or knob
and
twist left to pull
the battery.

Cut the cables &
pull the battery,
but make sure
cables don't
make contact
with each other.

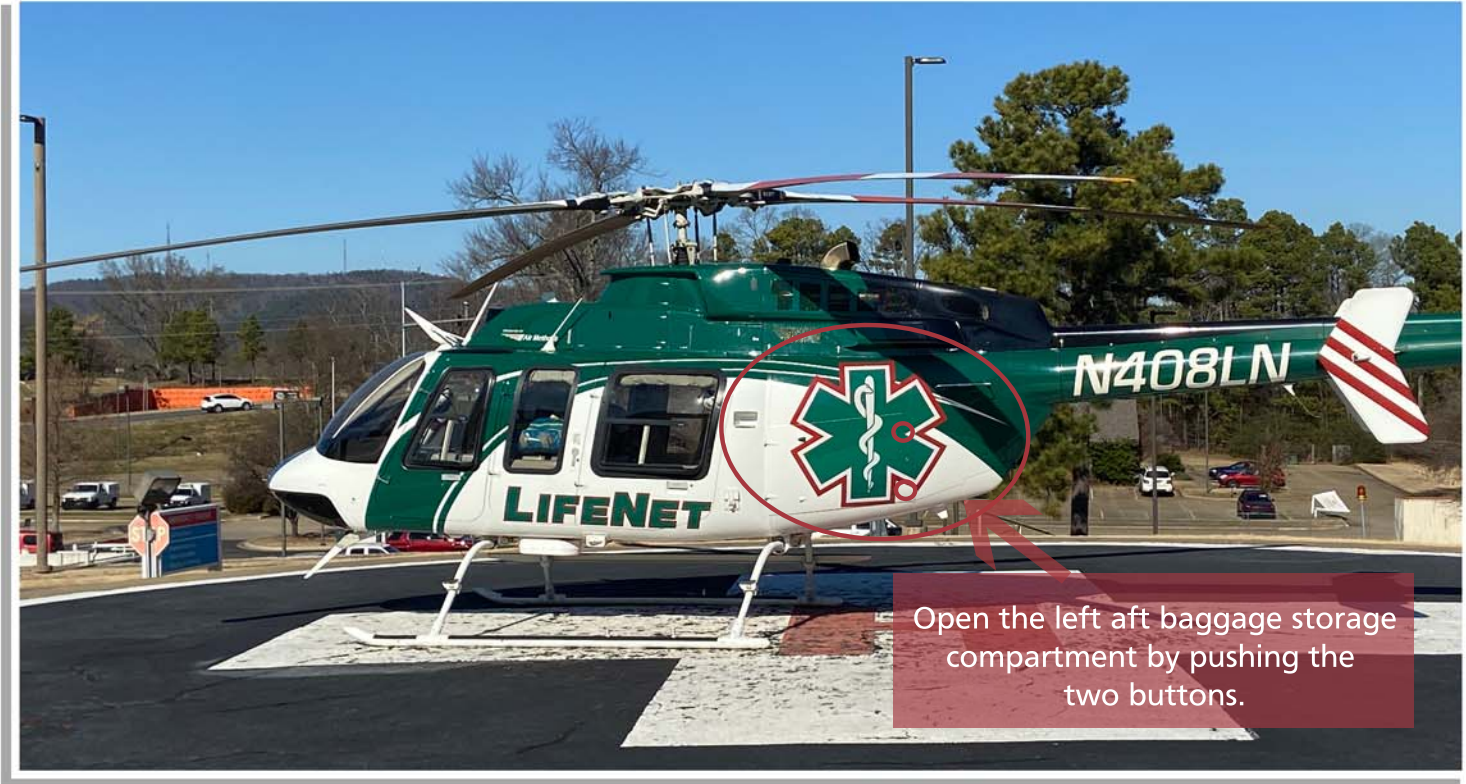


Bell 407 GX
Pull on the
t-handle and
continue twisting
to the left
until the battery
is released.

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Access the Oxygen System



The oxygen system contains 3000 liters of gaseous oxygen.