Rescue

Unit 27: Rescue
Date last updated: February 19, 2020

This presentation Copyright © 2017 Paul J. Morris Some Rights Reserved.

This presentation is not a complete manual for search and rescue response. The materials are not meant to replace field training by competent search and rescue leaders or to replace actual experience. NEWSAR and the authors and contributors do not endorse any specific equipment mentioned or shown in this program. The authors, contributors, and NEWSAR take no responsibility for the use of this guide or the information contained within. The authors, contributors, and NEWSAR take no responsibility and cannot be held liable for statements made by instructors who use this presentation. It is the duty of every community, organization, volunteer group, and agency, to obtain the knowledge, skills, and proficiency to perform and maintain effective search and rescue management and operations. The information presented in this presentation serves as part of a beginning outline and body of knowledge for proper search and rescue respons programs at the community level.

A course presented using this material may only be represented as a NEWSAR course, and may only use NEWSAR marks if presented by an authorized NEWSAR instructor under the auspicies of NEWSAR. No authorization for the use of NEWSAR marks is given or implied by this document.

LAST

- Locate
- Access
- Stabilize
- Transport

Search phase involves locating the subject, Rescue phase involves accessing them, stabilizing them, and transporting them.

What phase are we looking at here? [Access]

Any of these, including locate, might involve technical rescue environments and resources.

Is this a technical environment?

Sometimes it is obvious.

How about this, is this a technical environment?

Is access dangerous? [yes, confined space]

What do you do here?

Stay out, report it.

Recognize technical rescue environments:
high angle, confined space, cave, mine, water,
mountain rescue.

Access/Stabilize/Transport

- May be easy, subject may be able to walk out.
- May require lots of people for a litter carry out.
- May require technical rescue resources.

- Decisions to be made.

- The Golden Hour is a concern.

Once you've located the subject, things may be simple.
Or they may not.
Why?

Subject might need medical care [discuss the golden hour].

Subject might need to be carried out. (Are we likely to be able to do that within the golden hour? Consider getting advanced care to the subject).

Subject might be in a technical rescue situation.

Decisions to make.

Let's think about the decision making process.

What is the first priority here?

What is the situation?

Your safety comes first.

Risk Management Process

- Situational Awareness
- Hazard Assessment
- Hazard Control
- Decision Point: Go or No go.
- Evaluation
    - Individual: experience, distractions, fatigue, attitude
    - Everyone: Changing Situation

Decision making follows a risk management process.

Be aware of the situation.

Assess hazards.

Control hazards (obtain resources to manage them)

Have a clear go/no go decision point.

Continually evaluate.

Talk it through
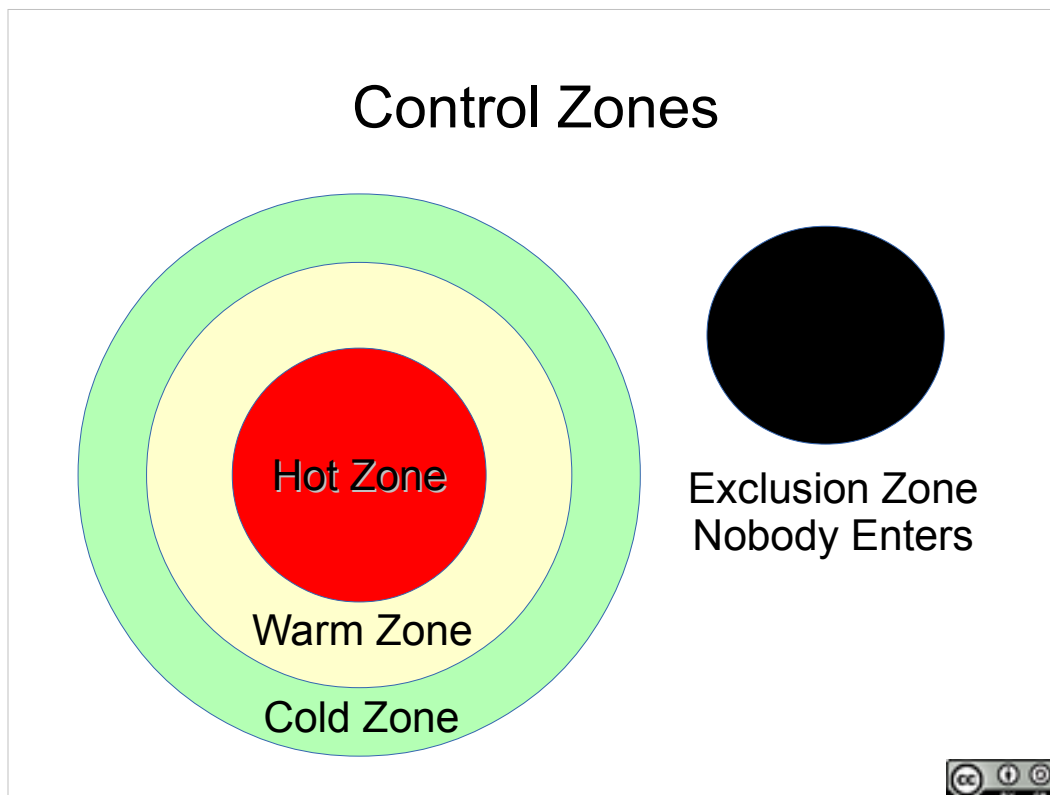
- Out loud
- GAR (Green/Amber/Red Risk Assessment)

Use a formal tool like GAR (Green/Amber/Red) for risk assessment, or not: key is discussing the observed hazards out loud.

What are the hazards here?

How are we going to control the hazards?

Control Zones

Hot Zone
Warm Zone
Cold Zone

Exclusion Zone
Nobody Enters

One of our tools for managing hazards – keep people out of them....

We could declare a hot zone 10 feet from the edge.

Review: What goes on in each zone?

Cold Zone: ICP, Staging
Warm Zone: Support for entry into Hot Zone
Hot Zone: Enter only with appropriate PPE and with a specific assignment.
General public kept out of the cold zone.

Exclusion zone, nobody is to enter.

Where do you put tag in/tag out access controls? [hot zone]

Risk Management Process

- Situational Awareness
- Hazard Assessment
- Hazard Control
- Decision Point: Go or No go.
- **Evaluate/Monitor**
  - **Individual: experience, distractions, fatigue, attitude**
  - **Everyone: Changing Situation**

Continually evaluate.

Conditions change.

<mark>Suppose it is getting colder, it is starting to rain, the rain turns to freezing rain.</mark>

<mark>How does that affect our approach to the person at the bottom of the cliff?</mark>

Another situation: You've located your subject.
Down in there.
They are unresponsive.

What is the process for figuring out what to do (or not do)?

Practical: Assess Risk with GAR risk assessment tool.

Situation?
Rescue? Recovery?
Hazards?
Hazard Control?
Go – No Go?

What could go wrong here?

Equipment seldom fails

- Most accidents in technical rescue operations are due to **human error**.
- Maintain situational awareness.

Very easy to get tunnel vision focusing on the subject – maintain situational awareness.

What can you do to avoid tunnel vision?

And situations change.

FAILURE

- F – Failure to understand the environment
- A – Additional medical implications not considered
- I – Inadequate rescue skills
- L – Lack of teamwork and experience
- U – Underestimating the logistical requirements
- R – Rescue versus recovery mode not considered
- E – Equipment not mastered

Acronym: Failure: Reasons why technical rescue operations fail.

Particular risks for SAR:

Failure to understand the environment – hazardous environments not recognized as such (tunnel vision, inadequate training).

If there's a door, don't assume there's a floor on the other side.

Inadequate rescue skills, lack of experience, equipment not mastered – call for help – get trained technical rescue resources.

FAILURE

- F – Failure to understand the environment
- A – Additional medical implications not considered
- **I – Inadequate rescue skills**
- L – Lack of teamwork and **experience**
- U – Underestimating the logistical requirements
- R – Rescue versus recovery mode not considered
- **E – Equipment not mastered**

Highlight: As searchers, this course isn't training or preparation for technical rescue.

Key aspect is to recognize that additional trained and experienced help is needed.

Additional Help Needed
How is it going to get to you?

Public Domain: National Park Service, photographer Jacob W. Frank

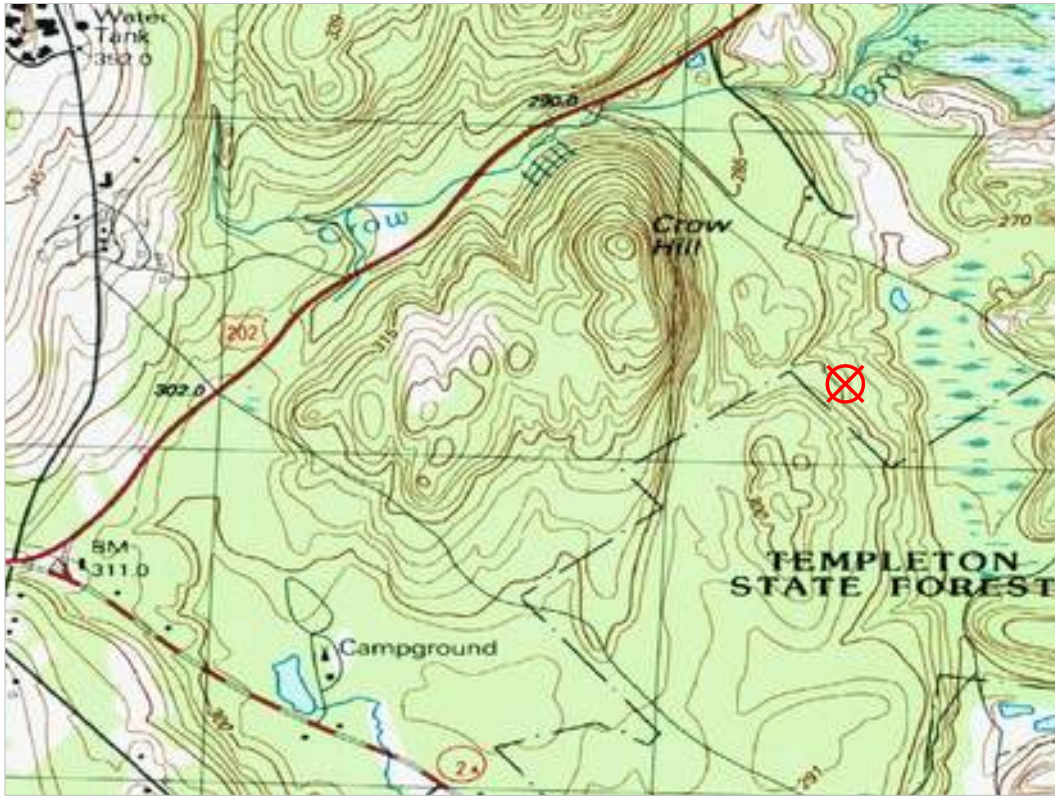Sometimes getting help is easy.   Sometimes not...

If it isn't easy - if the subject can't simply walk out, what will you need? (resources, how do they get there?)

Directing resources to your location.

Planning a route out.

Will the route out be the shortest?

Here's your find.

How are you going to get resources there?

What is your route out?

Establish a common set of signals

- Example: SUDOT whistle signals
  - One: Stop
  - Two: Up
  - Three: Down
  - Four: Off Rope
  - Long Blast: Trouble.
- Example: OATH whistle signals
  - one: OK
  - two: Advance
  - three: Take Up
  - four: Help

What happens when you don't?

Particularly when people from different agencies and disciplines are working together, important to review signals.

Communicate for Safety

- Be direct – don't worry about seeming rude.
  - *"Lieutenant – Get away from that edge."*
- Communicate safety concerns by being direct
  - Address relevant person by name (or title)
  - Say: "I" (think/feel/believe)
  - Clear message
  - Demand a response: "What do you think?"
  - "*Nancy: I think that compartment has a low oxygen atmosphere. Responders need SCBA. Don't you agree?*"
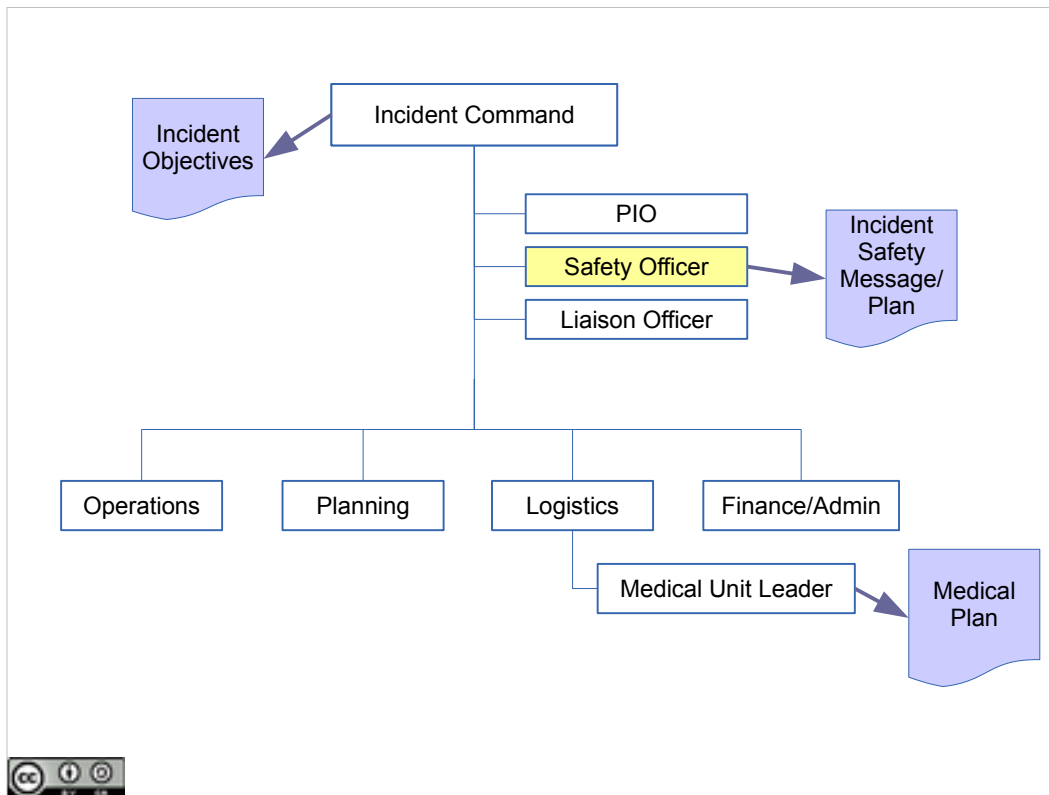
<mark>How do you communicate a life safety issue?</mark>

Who can communicate a safety issue?   (anyone)
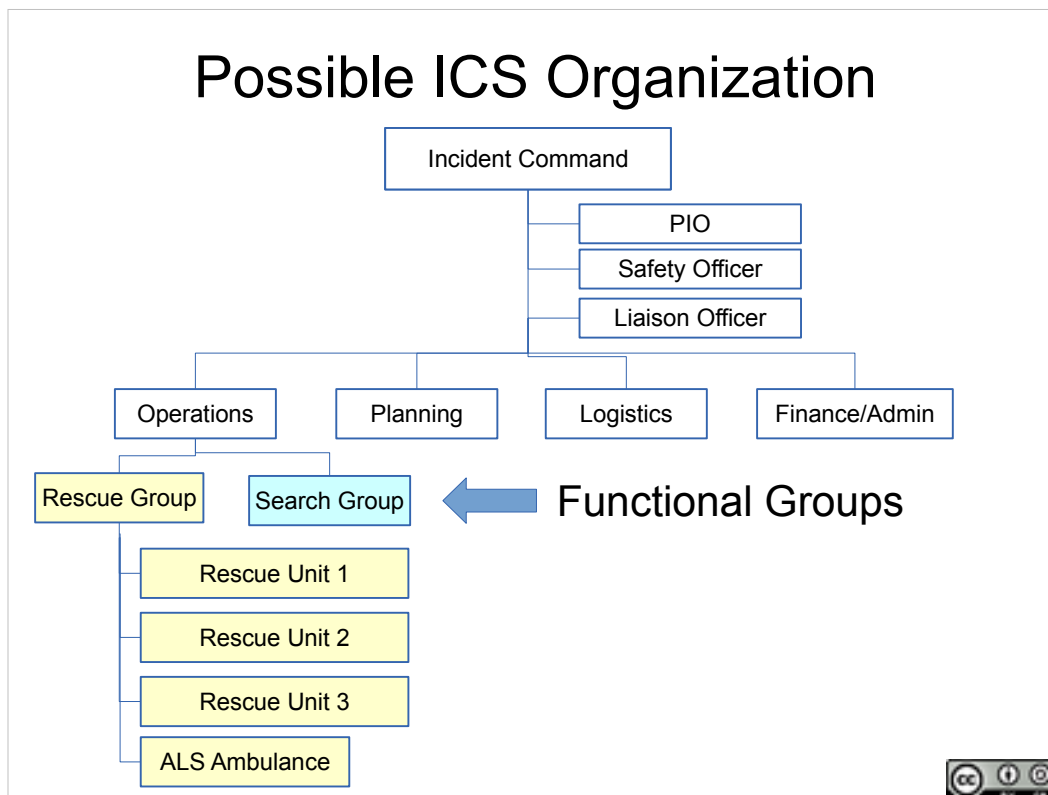
Anyone can call **Stop** at any time

Anyone can call **Stop** at any time.

What are some of the things baked into ICS for safety as a priority?

What else?

Discuss.

Possible ICS Organization

```
                    Incident Command
                          |
                          |------- PIO
                          |------- Safety Officer
                          |------- Liaison Officer
          |               |               |               |
      Operations      Planning        Logistics      Finance/Admin
      |        |
  Rescue Group  Search Group   <===   Functional Groups
      |
      |--- Rescue Unit 1
      |--- Rescue Unit 2
      |--- Rescue Unit 3
      |--- ALS Ambulance
```

Rescue tends to require tight local tactical control – people who know what they are doing working together on a focused problem.

One mechanism for encapsulating that in ICS is functional Groups – a Rescue Group that carries out the rescue.

Rescue also tends to involve hazards, how can those be addressed? (among others: Site Safety Officer)

Stabilization

- Physical
- Medical
- Emotional

Three aspects to stabilization:

Physical – is the subject in a physically stable situation?

Medical – is the subject medically stable?

Emotional – is the subject emotionally stable? (suicidal, scared, at risk for catastrophic reaction (autistic, dementia)). How do we reduce the likelyhood of a catastrophic reaction by the subject?

Approaching the Subject

- **Is the scene Safe?**
- Subject may have a catastrophic reaction
  - Particularly autistic and dementia
- Simplify the environment
  - Reduce noise, turn down radios, etc.
- Approach from the front
- Identify yourself
- Make eye contact
- Ask simple direct questions

When you make a find, what is the first priority?

Stabilization

- F – Failure to understand the environment
- **A – Additional medical implications not considered**
- I – Inadequate rescue skills
- L – Lack of teamwork and experience
- U – Underestimating the logistical requirements
- R – Rescue versus recovery mode not considered
- E – Equipment not mastered

That's a matter for medical training.

Plan ahead:
What medical training for SAR responders?
What sort of additional medical implications might come into play in a rescue?   (shock, golden hour, hypothermia, suspension syndrome, HAPE....)

Multiple functional roles to be filled in an assignment: leadership, clue aware searchers, navigation, communication, medical...

Report what you've got, get skilled help.

If more victims than there are medical resources to treat them, then **triage**.