Overview of Mountain Rescue

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Disclaimer

- I have no financial or other conflicts to declare.
Objectives

- Describe the realms of Mountain SAR
- Acknowledge special considerations in each setting
- Discuss Evacuation strategies
Mountain SAR Realms

- Avalanche/Snow
- Swiftwater
- Cave
- High Angle
- Low Angle

- ICS - MSF
Avalanche Case

- 30 yo Male caught in avalanche
- Carried 2,000 vertical feet
- Single Patient
- Avalanche Danger: Considerable
- Weather: Overcast, Intermittent Snow Showers
Scenario


Page
Granite Canyon adjacent to Jackson Hole Mountain Resort
Avalanche Crown
Open Femur/Pelvis Fracture
Pulmonary Contusion/Aspiration
Timeline

- 1437  Initial 911 Call (lost)
- 1440  SAR Callout
- 1544  First Responder on Scene
- 1627  Helicopter on Scene
- 1642  Helicopter Departs Scene
- 1656  Transfer to EMS
- 1711  Arrive Hospital

TOTAL TIME: 2 hours 34 minutes
Wilderness Considerations

- Scene Size Up
  - Safety, MOI, Number of Patients
- Initial Assessment
  - ABC’s (Spine Stabilization)
- Rapid Trauma Exam
- SAMPLE, Vitals (BP?)
- Rapid Transport
Treatment

- Spinal Immobilization
- Bleeding Controlled?
- Femur Fracture
  - To Traction or Not to Traction?
- Mental Status (? Traumatic Brain Injury)
- Hypothermia
Trauma Team Activation

- Rapid Transport of Patient
  - Golden Hour (already used up)
  - Helicopter feasible

- Early Notification of Hospital
ED Arrival

- Vital Signs
  - Prehospital BP 101/77, HR 85, RR 26, 77% RA
    - 2 16 gauge IV’s in place
  - BP 132/85, HR 130, RR 24, 100% NRFM, 96.7

- Volume Shock
Hospital Course

- Intubated in ICU for 6 days
- Discharged after 12 additional hospital days
- Prolonged rehab and multiple surgeries
Swiftwater Rescue

Jackson Hole Daily

Valley pilot dies in crash

Rescue crews recovered the body of a Jackson Hole man who died in a Civil Air Patrol plane crash in Snake River Canyon on Friday morning.

Fletcher V. Anderson, 57, died at the scene from injuries he suffered in the crash that happened at about 8:55 a.m., according to the Civil Air Patrol's Wyoming Wing.

The plane crashed in the Snake River about 17 miles south of Hoback Junction near Wolf Creek. No one else was aboard the Jackson-based Civil Air Patrol plane.

Anderson may have collided with a cable hanging across the canyon while flying the single-engine Cessna 182K, said Doug Henry, a member of Star Valley Search and Rescue and Civil Air Patrol.

"He may have not been aware of the gauging cable" used to measure the river's flow, Henry said at the scene. "We don't know why he was that low."

A Wyoming Highway Patrol trooper who discovered the crash said the canyon did not have clouds at the time. "He stated it was clear," Trooper George Nykun said after talking with his colleague.

"We were asking the same thing, why he'd be flying so low, but there was no cloud coverage in the canyon this morning," Nykun said Friday.

See CRASH page 2
Swiftwater Rescue

- Technical Skills
- Equipment
  - Dry Suit/Wet Suit
  - PFD
  - Throw Bag
  - Cow’s Tail (releasable tether)
Swiftwater Rescue

- Patient Transport
  - Backboard
  - PFD
Cave Rescue

- Confined Rescue
- Special Rescue Techniques
- Communication
- Environment
- Prolonged
High Angle Rescue
High Angle Rescue

- Highly Technical

- Special Training and Proficiency

- High Consequences if System Failure
Low Angle Rescue

- Car over Teton Pass
Low Angle Rescue
Incident Command and Managing Search Function
How do you find someone here?
Search and Rescue

- Managing Search Function (MSF)
- Incident Command System (ICS)
  - 5 main ICS Sections
    - Incident Command (IC)
    - Planning
    - Operations (OPS)
    - Logistics
    - Finance/Administration
Wind River Search

- 56 y.o. Male
- Overdue 1 week
- Solo peak bagging trip in Wyoming wilderness
MSF - Initial Response

- Investigate
  - Lost Person Data, Determine Urgency
- Point Last Seen (PLS) or Last Known Point (LKP)
- Direction of Travel
- Hasty Search High Probability of Areas (POA)
Evacuation in the Wilderness

- Rehab patient - walk out
- Ground
  - Wheeled Litter
  - Improvised Litter
  - Horse
  - Four Wheeler
- Helicopter
Helicopters
Helicopters - Long Line
Helicopters

- Rapid Transport of Resources
- Rapid Extrication
Summary

● Mountain Search and Rescue has many areas of focus.

● Special training is essential for personal, team, and patient safety.

● Patient care considerations change in each environment.
Lecture Notes: www.wildmedconsulting.com