Mississippi State Fire Academy
Rope Rescue Operations Level Skill

Objective: NFPA 1006 5.2.20 & 5.2.21 2017 Ed.

Primary Task: Building and Operating Compound Mechanical Advantage

PERFORMANCE EVALUATIONS & INSTRUCTION SHEET

Performance Steps

1. Determines incident needs as related to choosing compound rope systems
2. Chooses correct anchor system
3. Selects appropriate equipment
4. Selects effective knots
5. Calculates expected load
6. Evaluates incident operations as related to interference concerns and set-up
7. Chooses anchor points for expected load
8. Performs system safety check
9. Evaluates system components for compromised integrity
10. Directs personnel effectively
11. Communicates commands
12. Analyze system efficiency
13. Manages load movement
14. Identifies concerns

INSTRUCTIONS TO THE CANDIDATE

The candidate, given equipment likely to be used in a technical rescue anchors, a load, and edge; shall construct a simple or compound mechanical advantage system suitable to sustain a rescue sized load. Candidates will then operate the system (haul ,set, reset) by directing the evaluator(s).

Compound & Simple Mechanical Advantage System Set-up Evaluation Criteria:

Full Points (all must apply)

- Ideal Mechanical Advantage (IMA) is the system instructed;
- Candidate correctly identifies the IMA;
- MA utilizes a progress capture device that is safe, appropriate for the application, and effective;
- Hauling system is directly attached to the load by a single line and MA is in workable area, not

Mechanical Advantage Operation Evaluation Criteria:

Full Points (all must apply)

- Candidate operates system until reset is needed, is able to capture progress and reset the system;
- Candidate is able to demonstrate lowering/reverse haul through the MA.

Equipment Evaluation Criteria:

Full Points (all must apply)

- Life support equipment is chosen and appropriately applied.

Edge Protection Evaluation Criteria:

Full Points (all must apply)

- Candidate addresses edge concerns and applies protection to reduce abrasion.

Anchor Evaluation Criteria:

Full Points (all must apply)

- Anchoring techniques are adequate for life support;
- Knot(s) in webbing configurations are appropriately located;
- Knot(s) termination will not slip under load;
- Weight is evenly distributed among legs of webbing;
- (for HSTO only:) Rope is tensioned and not deflected from anchor in such a way that little tension is
- Direction of pull is toward designated edge.

Knots Evaluation Criteria:

Full Points (all must apply)

- Knots are correctly tied, dressed, safetied, oriented, and appropriate for the application.

Safety Evaluation Criteria:

Full Points (all must apply)

- Candidate demonstrates a system safety check before testing or operating system;

Time Evaluation Criteria:

Full Points (all must apply)

- Under 5 minutes.