



Fire Protection Training

Procedures Handbook 4300

HOSE APPLIANCES & TOOLS

TOPIC: Safety Precautions When Using Master Streams

TIME FRAME: 30 Minutes

LEVEL OF INSTRUCTION:

BEHAVIORAL OBJECTIVE:

Condition: A written quiz

Behavior: The student shall describe safety precautions to be used when operating master stream appliances.

Standard: With a minimum of 70% accuracy

MATERIALS NEEDED:

- Chalkboard and chalk
- Master stream appliances
- Appropriate visual aids
- Audio visual equipment

REFERENCES:

- IFSTA, Essentials of Fire Fighting, 2nd Edition, Chapter 9
- IFSTA, Fire Streams, 7th Edition, Chapter 2

PREPARATION:

Master stream appliances are by definition, "fire streams that are too large to be controlled without mechanical aid." While flowing 1,000 GPM, the master stream device is moving over 8,000 pounds per minute. This force would easily injure or kill a firefighter or cause walls and floors to collapse. Your undivided attention must be directed to safety practices when operating or working around master stream appliances.



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SAFETY PRECAUTIONS WHEN USING MASTER STREAMS

| PRESENTATION | APPLICATION |
|---|--|
| <ul style="list-style-type: none">11. Anticipate wind and fire effects on fire stream.12. Align hose so that hoseline placement will not move the master stream device.13. Consider future fireground operations when selecting location. <p>B. Safety Precautions While Operating a Master Stream.</p> <ul style="list-style-type: none">1. Monitor master stream device for movement.<ul style="list-style-type: none">a. Adjust stakes or attachment as necessary.b. Watch for shifting from vibration.2. The master stream device should be staffed, if safe to do so by at least one firefighter at all times, and by two or more firefighters if available.3. Avoid traversing stream side to side more than manufacturer's specifications.<ul style="list-style-type: none">a. Usually no more than 15o off center either way.b. Shut down and reposition if necessary.c. Move side to side slowly.4. Avoid traversing stream up and down more than manufacturer's specifications.<ul style="list-style-type: none">a. Usually not lower than 10o. | <p>Have students cite safety precautions associated with using a master stream</p> |



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| PRESENTATION | APPLICATION |
|--|-------------|
| <ol style="list-style-type: none">1. Consider fatigue.2. Get assistance.3. Shut master stream down slowly.4. Disconnect lines before moving.5. Use legs not back to lift.6. Avoid slippery surfaces.7. Watch for nighttime obstructions.8. Clean before putting appliance back in service.9. Check for debris in nozzle and appliance.10. Lubricate as necessary. | |

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SAFETY PRECAUTIONS WHEN
USING MASTER STREAMS

SUMMARY:

Master stream devices are vital fireground tools but are dangerous to operate if safe practices are not followed. While flowing 1,000 gallons per minute, we are impacting a fire or object with 8,000 pounds per minute. This force can easily be deadly if improperly handled.

EVALUATION:

A written quiz.

ASSIGNMENT:

To be determined by instructor(s).