



Fire Protection Training

Procedures Handbook 4300

STRUCTURE FIRES

TOPIC: Structure Fire Salvage

TIME FRAME: 1 Hour

LEVEL OF INSTRUCTION:

BEHAVIORAL OBJECTIVE:

Condition: A written quiz

Behavior: Upon completion of this lesson the student will be able to list and describe the categories, objectives and methods of effective salvage operations during and after a structure fire.

Standard: With a minimum of 70% accuracy

MATERIALS NEEDED:

- Appropriate visual aids
- Audio visual equipment

REFERENCES:

- IFSTA, Essentials of Fire Fighting, 2nd Edition, Chapter 12
- IFSTA, Salvage & Overhaul, 7th Edition, Chapter 1

PREPARATION:

Salvage operations, like rescue and emergency medical care, are part of firefighting and require careful preparation. Reducing losses through salvage operations depends on careful planning and effective training.



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STRUCTURE FIRE SALVAGE

PRESENTATION	APPLICATION
<p>I. SALVAGE</p> <p>A. Definition</p> <ol style="list-style-type: none">1. Those techniques and operating water, and smoke during and after firefighting operations. <p>B. Salvage May be Undertaken Any Time After Size-up</p> <ol style="list-style-type: none">1. Salvage is a lower priority property conservation operation2. Salvage operations are generally initiated to a limited degree simultaneously with firefighting operations3. Salvage assumes a higher priority once extinguishment is complete<ol style="list-style-type: none">a. Life safety concerns lessenedb. More resources available and redirected <p>C. Salvage Operations Can be Simplified by Properly Performing Other Firefighting Operations</p> <ol style="list-style-type: none">1. Size up - identify and develop plan with high value items in mind2. Exposure - protection of contents as interior exposures3. Confinement - proceeding from uninvolved toward involved4. Extinguishment - interior attack and fire stream control to reduce water usage5. Overhaul - exercise care in locating and protecting valuables to minimize breakage6. Ventilation - to minimize:	



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<ul style="list-style-type: none">a. Amount of smoke in the buildingb. Amount of time smoke is in the building <p>D. Salvage Objectives:</p> <ul style="list-style-type: none">1. To protect building contents from primary (fire caused) damage<ul style="list-style-type: none">a. Burning or charringb. Smoke2. To protect building contents from secondary (firefighter caused) damage<ul style="list-style-type: none">a. Water<ul style="list-style-type: none">(1) Water damage is the biggest firefighter caused problem; accounts for 75% of total fire related damageb. Breakage <p>E. Priority for Salvage Operations</p> <ul style="list-style-type: none">1. Order<ul style="list-style-type: none">a. Fire floorb. Floor below fire floorc. Floor above fire floor2. Salvage operations should concentrate on<ul style="list-style-type: none">a. Protecting contents in place<ul style="list-style-type: none">(1) Group contents within room(2) Protect with salvage covers	



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<ul style="list-style-type: none"><ul style="list-style-type: none">b. Removing them from the fire area/building3. Locate, inventory, and collect valuable items for return to property owner<ul style="list-style-type: none">a. Moneyb. Jewelryc. Willsd. Deeds<ul style="list-style-type: none">(1) Assign teams to work together to:<ul style="list-style-type: none">(a) Guard against theft(b) Guard against claims of theft4. Deal with excess water<ul style="list-style-type: none">a. Create drains<ul style="list-style-type: none">(1) Remove toilet bowls(2) Open cleanouts(3) Make stairwell drains(4) Make water chutes(5) Make catch basinsb. Water pumps<ul style="list-style-type: none">(1) Apparatus pump only as a last resort(2) Sump pumps work well(3) Siphons, ejectors, eductors	



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<ul style="list-style-type: none">c. Water vacuumsd. Squeegees, mops, and towels <p>II. STAGES OF SALVAGE OPERATIONS</p> <p>A. Pre-fire</p> <ul style="list-style-type: none">1. Good fire ground salvage operations can be best accomplished through TRAINING and PLANNING.2. Successful salvage operations depend on training personnel in:<ul style="list-style-type: none">a. Use and care of salvage equipmentb. Utilizing correct fire control techniques<ul style="list-style-type: none">(1) Utilize interior, not exterior attack, to force heat, smoke and fire out(2) Forcible entry, with an eye toward minimizing damage(3) Ventilation - to relieve smoke, extinguish fire faster, less water damage, less salvage work on carpets, draperies, upholstery, furnishing and clothingc. Operation of sprinkler systems - less fire, less smoke, less water damage, and less heat damage3. Planning<ul style="list-style-type: none">a. Preplanning anticipates salvage problems<ul style="list-style-type: none">(1) Pro-active firefighting	<p>EXPLAIN AND EMPHASIZE!</p>



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<ul style="list-style-type: none">b. Prefire plan should address specific salvage problems taking into account<ul style="list-style-type: none">(1) Area involved(2) Nature of contents(3) Value of contents(4) Auto sprinkler system operational(5) Salvage equipment available(6) Drains(7) Can material be moved quickly(8) Should material be covered4. Planning by the private sector can be a major asset to the fire service in making salvage operations easier<ul style="list-style-type: none">a. Some suggestions to make salvage easier<ul style="list-style-type: none">(1) Provide drains to reduce water damage(2) Provide extra sprinkler shut-offs and wrenches on-site(3) Skip load stock for easy removal(4) Provide adequate ceiling space for proper sprinkler operationB. During the Fire<ul style="list-style-type: none">1. Time to place your training and planning into practice	



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<ol style="list-style-type: none">2. Salvage may start anytime during the suppression effort after size up3. Salvage should be considered by initial attack forces4. When fire is suppressed place salvage plan in full operation<ol style="list-style-type: none">a. More resources should be available5. The sooner salvage operations are started the better the outcome<ol style="list-style-type: none">a. Save property from fire (primary damage)b. Reduce damage from fire fighting operations (secondary damage)6. Salvage plan should include ventilation, removing smoke, gases and humidity makes salvage operations easier and prevents further property damage.7. Salvage can be started in the areas adjacent to the area where the fire is being confined<ol style="list-style-type: none">a. Once the fire is confined, start salvage operation in the fire area itself8. If your crew is well trained, salvage operations will have started before complete extinguishment has been accomplished9. Utilize salvage equipment to its fullest10. Well managed salvage operations can overcome personnel shortages	



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<p>11. Because of contaminated or oxygen deficient atmosphere always wear protective clothing and SCBA when performing salvage operations</p> <p>12. During the fire, it's important to remember to salvage all areas affected by the fire</p> <ul style="list-style-type: none">a. Protect the floor and those items that sit on itb. Protect the walls and those items that hang from themc. Protect the ceiling and those items that hang from it <p>C. After the Fire</p> <ul style="list-style-type: none">1. Continue and complete salvage operations started during the fire2. Make the building safe<ul style="list-style-type: none">a. Remove debris to minimize hazardsb. Remove equipment to minimize hazardsc. Mark hazards that may remain (such as stacked and/or covered items) with flagging to reduce hazards3. Cover openings in roof, windows, walls, doors, and floors to prevent theft and weather damage4. Lock the building, or notify local law enforcement agency to secure building upon leaving	<p>EMPHASIZE!</p>



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<ul style="list-style-type: none">5. If commercial property, notify maintenance staff or building manager, upon leaving6. Place the building or dwelling contents in order, or as close as possible (chairs, tables, etc.)7. Locate, protect and mark valuables such as jewelry, money, notes, wills, etc.; this protects items from theft and you from accusations of theft8. Make the area around the building safe9. Dry the building and the contents<ul style="list-style-type: none">a. Water chutes to channel water from the ceiling or upper story floorsb. Water vacsc. Squeegees, mopsd. Towelse. Drains, keep open, remove debris10. Restore the sprinkler system<ul style="list-style-type: none">a. Stop the water flow from open sprinkler headsb. Restore the system11. Restore the standpipe system12. Deodorize the building and contents<ul style="list-style-type: none">a. Electric or gas deodorizer	<p>Subject to local policy</p> <p>Subject to local policy</p> <p>Subject to local policy</p>



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<p>13. Even if the building is a total loss, salvage efforts should still be commenced since valuables may be found</p> <p>D. Salvage Operations Critique</p> <p>1. How effective was the salvage operation. Be prepared to discuss the following:</p> <ul style="list-style-type: none">a. Was salvage operation coordinated with attack operations?b. Was damage less or greater because of salvage?c. What areas hampered the operation?d. Is further training needed to improve salvage operations?	



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SUMMARY:

Salvage procedures, like rescue and emergency medical services, are part of fire fighting and require careful preparation. Reducing losses through salvage procedures depends on careful planning and effective training.

EVALUATION:

A written quiz.

ASSIGNMENT:

To be determined by instructor(s).