TRUCK COMPANY OPERATIONS

FIRE SCENE OPERATIONS FOR PRIVATE DWELLINGS

I. INTRODUCTION

a. Private dwelling fires challenge the expertise of our fire fighting forces and require a coordinated team operation.

b. This type of building is usually constructed of combustible material. The furnishings and decorations used by the occupants have varying degrees of fuel content and flammability. Fire conditions will generate heat, toxic smoke and gases.

c. Complicating fire operations we may expect obstacles such as; hilly terrain, set backs, overhead wires, fences, trees, shrubbery, diverse architectural features and numerous floor plans.

II. DESCRIPTION OF PRIVATE DWELLING

a. Originally built for one or two family occupancy, these structures are usually one to three stories in height.

b. Usually rectangular in shape, although alterations and extensions are common. They average 20’ x 40’ in dimension, although there are many much larger in size and area.

c. Wood frame with truss roof construction and exterior walls of wood, brick, brick veneer, composition materials, aluminum or vinyl siding are the most common.

d. Roofs are peaked or flat. Roof coverings may be asphalt shingles or asphalt roll roofing. The installation of skylights in new construction and during renovation has become increasingly common.

e. Windows may include the older wooden double hung type, jalousie, metal-framed casement or aluminum sliding type.

f. Two entrances are usual. A main entrance in the front and a secondary entrance on the side or rear. In structures more than one story, the interior stairs to the cellar will usually be located under the main stair. Occasionally an outside entrance to the cellar will be found in the rear.

g. Fire stopping is limited depending on the type of construction. Fire stopping in balloon construction is particularly poor, having little or no vertical fire stopping between stories on exterior walls.

III. SPECIAL PROBLEMS

a. Open and unenclosed stairway. This is a major weakness from a fire fighting and fire protection standpoint.

b. Lack of secondary means of egress from upper floors.

c. Interior stairs are often narrow and sometimes turning. Landings are small. Movement of the operating force is often restricted, impeding on interior attack.

d. Bedrooms are usually located on upper floors, and bedroom doors may be nonexistent, removed, poorly fitted, or left open. For an evident two family dwelling (separate entrances, two-mail boxes etc.) assume bedrooms on both floors.

e. Individual window air conditioners may be installed in the only window in the room. The air conditioner may fall if the window is opened. Special care must be exercised if this window has to be entered from a ladder.

f. Windows of multiple varieties and dimensions are often inadequate in size for escape or rescue.

g. Interior access to attic spaces is usually difficult or non-existent. Where access is provided, it may be via a very narrow stair, straight ladder in a closet, or a pull down type stairs.

h. Interior access to the attic space may be non-existent or difficult as via small windows, louvered openings, etc.

i. Unenclosed boilers and hot water heaters, some without ceilings.

j. Attached and built in garages, with the attendant problem of automobile fires, flammable liquids etc.

k. "Do-it-yourself" alterations and repairs.

l. Aluminum siding fire involving the electrical service.

m. Overhead electrical service supplying private dwellings require extra caution when operating around or near them with aluminum ladders.

n. Shrubbery – Thoroughly examine areas under windows, porch roofs etc. as persons may have jumped prior to our arrival.

IV LIFE HAZARD

a. A rapid build up of heat and smoke in the confined areas of a private dwelling aided by the normally open interior doors is an extreme threat to the occupants. A coordinated effort by the Inside and Outside Team to search for and remove all endangered occupants must be the primary consideration of all ladder company operations, especially on the upper floors.

V. GENERAL AREAS OF RESPONSIBILITY

a. The first to arrive ladder company is responsible for, forcible entry, ventilation, and search of both the fire floor and floors above. The second to arrive ladder company will primarily be used to augment the search for life and then to assist as needed.

VI. FIRST LADDER COMPANY TO ARRIVE

a. Rapid comprehensive exterior size-up of fire situation. Determine life hazard and rescue as required.

b. Vent, entry, and search, (VES), of all occupied areas of the dwelling either via the interior or by combination of an interior/exterior approach.

c. Nothing must delay primary search, but an examination of the entire building must be made as soon as possible.
d. After arrival of the second ladder company, the first ladder company is generally responsible for the first floor and floors below.

VII. SECOND LADDER COMPANY TO ARRIVE

Report to the IC and prepare to:

a. Augment or supplement laddering operations of the 1st ladder company, where required.
b. Search areas not yet covered by the 1st ladder company or perform secondary search as required.
c. As soon as possible, assure responsibilities for operations above the main body of fire, to include opening of the roof if necessary.

NOTE: Members of all companies not on scene shall monitor radio transmissions for information relative to possible location of occupants, ventilation-required etc.

CONCEPT OF OPERATIONS

I. ASSUMPTIONS

a. There is a light to medium fire situation in an occupied, detached, two story private dwelling, peaked roof, with one or more rooms involved. The operations described herein are based on this hypothetical situation.
b. The first ladder company to arrive will operate in all areas of the building pending the arrival of a second ladder company.
c. Search and rescue operations must be anticipated and will be of primary importance.
d. Ladder companies are manned by an officer and five firefighters.
e. VES (ventilation, entry, search) as it is used is, when necessary, the complete removal of glass, window sash, curtains, blinds, etc., from the window selected for entry/search/rescue.

II. FIRST LADDER COMPANY TO ARRIVE

- The first ladder company to arrive on scene will institute a Two Team offence that will attack on different levels of the private dwelling simultaneously.
- An Inside Team consisting of:
    a. Officer
    b. Forcible Entry Position (Irons)
    c. Extinguisher Position (Can)

  Will make their entry to the building via an entrance on the first floor level, (main entrance to the occupancy), and move to areas of probable life occupancy.
- An Outside Team consisting of:
    a. Chauffeur
    b. Outside Vent Position (OV)
    c. Roof Position (Roof)

  The Chauffeur will insure a water supply by hooking-up to the hydrant. The OV and Roof will use ladders for VES of the upper floors.
- The objective of this concept is to remove all visibly endangered persons to safety and to search for and rescue any trapped or overcome occupants, and to do so in the shortest possible time.
- *Unless there is a confirmed life hazard, no ladder company member shall enter the floor above the fire without confirmation of the attack line in position and operating on the fire floor and a known and secure second means of egress exists.*

LADDER COMPANY PERSONNEL ASSIGNMENTS

ASSIGNMENT AND POSITION	***EQUIPMENT***	***DUTIES***
OFFICER • Main entrance to occupancy	SCBA Radio Light Officer's Tool Thermal Imaging Camera	1. Size-Up 2. Locate Fire 3. Supervise Inside Team Ves 4. Coordinate Ves With Outside Team
FORCIBLE ENTRY (IRONS) • Main entrance to occupancy	SBCA Radio Light Halligan Tool Axe	1. Force Entry As Required 2. Part Of Interior Ves Team Or As Directed By The Officer
EXTINGUISHER (CAN) • Main entrance to occupancy	SCBA Radio Light Extinguisher 6' Hook	1. Assist Forcible Entry 2. Part Of Interior Ves Team Or As Directed By The Officer
CHAUFFEUR • At hydrant to insure water supply	Radio Light Any Tool Necessary For Task	1. Insure Hook-Up And Water Supply 2. Operate As Directed By Ic
Outside Vent (OV) • Rear/sides of build-ing	SCBA Radio Light Halligan Tool Halligan Hook Portable Ladders As Needed	1. Part Of Outside Ves Team 2. Ladder Rear, Sides 3. Ves Of Upper Levels
Roof Position (Roof) • Rear/sides of build-ing	SCBA Radio Light Halligan Tool Halligan Hook Portable Ladders As Needed	1. Part Of Outside Ves Team 2. Ladder Rear, Sides 3. Ves Of Upper Levels

OPERATION OF FIRST LADDER COMPANY

I. INSIDE TEAM

General duties will be to force entry, locate fire, search and removal of victims, and ventilation as required.

LADDER COMPANY OFFICER

- Size-up to determine life hazard.
- Directly supervise the Inside Team. Determine the location of the fire, control ventilation, direct search and rescue efforts.
- Coordination of Outside Team through portable radios. When outside operation is not necessary, notify members to prevent unnecessary window damage.
- Communicate with ladder company, engine company and IC to insure all assignments are covered.

FORCIBLE ENTRY POSITION (IRONS)

- Force the main entrance to the building. Forcing the main entrance provides access to the interior stairs for the protection and control of this vital area.
- If the main stairs would not be endangered, and the engine company could extinguish the fire more readily from the side entrance then it too shall be used.
- Conduct search of the lower floors and ventilate as directed by the officer.

EXTINGUISHER POSITION (CAN)

- Operate with and assist the forcible entry member.
- Conduct search of lower floors and ventilate as ordered.
- Since search and removal of occupants are the prime consideration the extinguisher must be used with specific objectives in mind.
    a. To cover members in search and removal operation, when working near or passing the main body of fire.
    b. To enable members to get close enough to a room out of which fire is lapping, so as to close an open door and confine the fire.
    c. To control a developing situation, as determined by the officer.
    d. The practice of trying to expend the extinguisher into a fully involved room, solely for extinguishment purposes, has minimal effect, and is a waste of much needed time.

ADDITIONAL CONSIDERATIONS FOR THE INSIDE TEAM:

a. Aggressive leadership by the officer is the most important factor in conducting the inside attack
b. The dominant consideration of the "inside team" is the search and removal of those occupants who have a chance of survival if immediately removed. Therefore, if the officer and members of the inside team are met at the front door by fire they will not wait to advance in behind the line. Rather, they will seek another means of access into those rooms not yet involved in fire. In this event the Irons firefighter will remain with the engine company to perform any required truck work as needed.
c. The time of the incident plays a key role in search operations. During sleeping hours a heavy emphasis must be placed on bedroom search. Limited time is spent on living room, dining room, and kitchen areas. Concentration must be on first floor bedrooms (if any).
d. When search of the first floor is completed, the inside team, shall make a rapid advance to upper floor bedrooms via the interior stairs.
e. Search of the cellar floor shall be the responsibility of the inside team when directed by the officer.
f. For a fire on a lower floor, where outside ventilation is necessary to permit the engine company to advance the line, the officer may designate the Irons firefighter to perform this operation.
g. Ventilation of lower floor windows should not jeopardize those members operating into upper floor stories via outside portable ladders.

II. OUTSIDE TEAM

GENERAL DUTIES:

- Make a rapid size-up of all four exposures and report findings to the IC.
- Ladder the building as directed by these S.O.P.'s.
- Make VES via upper level window or windows for search and rescue.
- Consideration should be given to the removal of skylights if required by fire conditions to provide vertical ventilation.
- Coordinate VES of upper floor windows with officer and relay all findings to IC.

OUTSIDE VENT POSITION (OV)

- Rapid size-up of exterior of dwelling, report any findings to the IC.
  - Endangered or trapped occupants.
  - Fire or smoke showing from windows or eves.
  - Setback in the rear.
  - Inground swimming pool.
  - Report positive findings too (outside clear).
- Position is generally rear/side of the building for VES and removal of trapped occupants on the upper floors via the upper floor windows.

- Initial laddering of the building assisted by the Roof firefighter.
- Raise portable ladder to a usable porch or extension or to a window in an upper level room.
- If possible ladders should be placed at one side and the rear of the building.
- Perform VES of upper floor room or rooms via selected window.
- A proper operation at this window in carrying out VES requires the complete removal of glass, window sash, curtains, blinds, etc.
- VES will be carried out at other strategic windows as required.
- Perform outside ventilation of upper floors.

ROOF POSITION

- Roof operations are generally not feasible during initial fire operations at fires in private dwellings with peaked roofs. Therefore the Roof firefighter will be used to advantage in the VES.
- The Roof firefighter will operate with, assist and reinforce the duties of the OV.
- When the OV enters a window from a portable ladder to search, the Roof firefighter will lower the ladder to sill level, butt the ladder and otherwise assist as required.
- If a second window is selected for entry and search the Roof will exchange positions with the OV. The Roof will make the search and the OV will butt the ladder.
- This exchange of positions will continue if more windows have to be entered.
- If removal of a victim is necessary, the buttman shall call for assistance to butt the ladder and climb to a point where he can receive the overcome individual and descend. Dependent upon the size and weight of the rescued person, he may need back up while descending the ladder.
- If it is possible to butt the ladder by some physical source or added manpower, the buttman may climb the ladder to window height after #1 man has entered the window. This is to assist him in any way possible, render support, and to vocally direct the inside member back to the window area, if this becomes necessary due to an exceptionally heavy smoke condition. Similarly once the room has been entered and conditions dictate, the buttman might perform additional outside ventilation as long as he is alert to assist the other firefighter upon his return to the window.

LADDER COMPANY CHAUFFEUR (MPO)

- Positions engine at hydrant and insure a water supply as per SOP 602.
- Observe the conditions of all supply lines stretched.
- Be prepared to deal with water loss situations.
- Monitor apparatus pump panel.

- Monitor radio for instructions and information that may require action and be ready to assist members in distress or provide assistance to the members as directed by the IC.
- Operate as part of the Outside Team performing VES after a water supply has been insured and the second due Engine Company MPO has provided relieve of this position.

Additional Considerations of the Outside Team

- Under light smoke and heat conditions a completely interior operation may be feasible. Under any other condition however utilization of portable ladders to upper sleeping areas is usually preferable and provides for:
  a. A two sided approach to any potential area of life occupancy on upper floors.
  b. Members on ladders are usually working in relatively "clean air" until actual entry into rooms.
  c. Proper positioning of ladders, based on knowledgeable outside size-up, assures putting members into two of the usual three bedrooms of the upper level. (Inside attempt to locate rooms, doors, etc., is often more difficult due to heat, smoke, and limited visibility.)
  d. Members entering rooms via ladder normally will not be more than ten feet (average room) from the ladder. Chances of getting disoriented or lost are lessened.
- Since possible attic occupancy must be considered by the Outside Team, visible indications that attic spaces or upper levels are being utilized for living purposes are:
  a. Adequate height (approximately seven feet).
  b. Dormered attic areas.
  c. Windows of fair size and normal appearance.
  d. Screens and/or storm windows.
  e. Curtains, drapes, venetian blinds,etc.
  f. Air conditioner at this level.
  g. Multiple door bells, mailboxes, etc.

III. MINIMUM FIREFIGHTER RESPONSE

When a ladder company is responding without a full complement of firefighters the IC must be notified and the following shall be followed:

1. Five members responding on the first due ladder:
   - ***The Roof position will be eliminated and the OV will operate unassisted until the IC can provide an additional member to perform the Roof responsibilities.***
   - ***Where there is a porch or garage roof access to an upper floor window, a port-***

able ladder will be raised to this roof. The OV will operate from this area into the window. This will enable the OV to operate rapidly, by himself. All that is required to get to the porch roof is a small ladder.

- If there is no porch access, the OV will work from an area that provides a physical butt for the ladder
- If the conditions are such that the proceeding methods are not feasible, the OV will work in the front of the building where if need be, he can get the momentary assistance of any uncommitted member on the scene.
- Whenever the OV enters a window to search and he is operating alone, he will notify his officer via portable radio.
- This position will be reinforced by the 2nd to arrive Ladder Company or upon the OV's call for assistance.

2. Four members responding on the first due ladder:

   - The Roof and The Forcible Entry positions will be eliminated.
   - The OV will operate as per five-member response.
   - The officer will operate as part of the inside team assuming the Forcible Entry position tools and responsibilities. This position will be reinforced by the 2nd to arrive Ladder Company or upon the officer's call for assistance.

3. Ladder Companies responding with less than four firefighters must notify the IC and should await orders to operate as needed.

OPERATION OF SECOND TO ARRIVE LADDER COMPANY

I. COMMUNICATIONS

a. Members of the 2nd due Ladder Company shall monitor the radio while en-route to the scene for information relative to possible location of occupants, ventilation-required etc. and to receive any instructions from the Incident Commander. If no instructions are received en-route, report to the IC on arrival.

II. OPERATIONS

a. Assignment of members to perform required tasks shall be the duty of the Officer of the 2nd due Ladder Company.
b. When necessary, assign members to assist the Outside Team of the 1st Ladder in portable ladder operations where occupants are being removed, butting of ladders where required, ascending ladders to assist in VES and raising additional portable ladders. Reinforce Inside Team of 1st ladder to arrive.

III. POSITIONS AND TOOLS

a. Positions and tools remain the same for all responding Ladder Companies.
b. The 2nd to arrive Ladder Company Chauffeur if not ordered to assist the 1st due Ladder's Chauffeur with insuring a water supply will become part of the Outside Team and operate as directed by his officer. The Chauffeur will carry any tool necessary to complete the task.

IV. SEARCH

a. Search all areas not yet covered by the first Ladder Company via interior or exterior or both.
b. Assume responsibilities for operations above the fire.
c. Perform secondary searches as required.

VENTILATION

I. VENTING FOR FIRE

a. Accomplished to facilitate the engine company advance to, and extinguishment of, the fire. This venting is normally delayed until the engine company has its water, and is ready to "move in".

b. On lower levels, ventilation of the fire area will be carried out by a member of the forcible entry team, on direction of the Officer.

c. For a fire on upper level, ventilation must be accomplished via ladder. In addition to ventilation of the fire room, ventilation must be provided to facilitate movement of the engine company up the interior stairs. There is often a window right at the head of this stair; in other buildings, a bathroom located at the top of the stair may be vented to improve the interior situation.

d. To conserve time when using portable ladders, ladders might be raised to proper height and dropped into the windows to break out the large sections of glass. Stand clear of the ladder when it is dropped into the windows to prevent injury from pieces of glass sliding down the ladder.

e. Porch or garage roofs provide a stable platform from which to operate and should be used whenever possible. They afford protection from fire venting below and provide a temporary refuge for rescued occupants. Screened or open porches may not provide protection from fire venting below, and must be evaluated before use.

f. When breaking windows with a tool, member should be to the side of the window, up wind. Break the upper panes first and then the lower panels, keeping the tool on an angle so glass does not slide down the handle.

g. Avoid ventilation that will endanger members operating from portable ladders to upper stories.

h. Ventilate in a manner so as not to create auto-exposure or exposure of unprotected nearby structures. Particularly avoid venting under overhanging eaves.

i. Under heavy smoke and heat conditions, proper window ventilation entails removal of all shades, venetian blinds, drapes, etc. that might hinder the free flow of the smoke and heat, out of the building. This cannot be accomplished from yard level by dropping portable ladders against the windows. To complete their removal would require ascending the ladder.

II. VENTING FOR LIFE

Accomplished to facilitate movement of member(s) into an area where there is a known or suspected life hazard. With an inherent calculated risk of eventually "pulling fire" it is performed as part of attempt to reach possible survivors as soon as possible.

SEARCH AND RESCUE

I. SEARCH FOR LIFE

a. *PRIMARY SEARCH* is an immediate search for life. Primary search is rapid but thorough and systematic.
b. *SECONDARY SEARCH* is a thorough and painstakingly complete search, to insure that no possible victims are overlooked, as children may hide in closets or under beds or in bathrooms. The secondary search must include the entire perimeter of the building and basement.
c. Firefighters must be aware that removal of draperies or curtains and the moving of large objects, or furniture although frequently necessary, may hide a victim or seal off a closet or other area being used as a refuge. Another area that will frequently hide a victim is the entrance door. A victim will usually try to reach a means of egress, they often can be found in the vicinity of or behind the entrance door.
d. A thorough search is required on all floors above the fire for several reasons. A partially open door, even a remote door, may have allowed a bedroom to become heavily charged with smoke and heat. This open door would be even a greater hazard on the top floor where heat and smoke could have mushroomed prior to ventilation. In addition the presence of energy efficient windows may intensify the extension of heat, smoke and gases to the upper floor via pipe recesses and/or improperly fire stopped vertical arteries.
e. If primary or secondary search is delayed or not completed for any reason, the Incident Commander must be notified.
f. Since the first ladder company is responsible for VES of the fire building, it shall conduct an exacting primary search of the dwelling starting with the fire floor and floor above and moving to any additional remote areas until a complete primary search has been conducted. The second ladder company to arrive is responsible for a primary search of all areas not yet covered by the first ladder company.
g. Upon completion of the primary searches, the secondary searches shall be conducted as soon as conditions permit and shall be conducted by personnel other than those who conducted the primary searches of these areas.

II. SEARCH OF THE FLOOR ABOVE THE FIRE

a. Prior to proceeding above the fire the ladder company officer should insure that the officers operating on the fire floor are made aware of his intentions so that those operating on the floor above the fire can be warned of any situation necessitating withdrawal.
b. All members operating above the fire must be constantly alert to conditions on the floors below them. The existence of resources to control the fire situation on the fire floor does not guarantee that their position will remain tenable.

c. The engine and ladder company officers operating on the fire floor must make the units above aware of any conditions affecting their safety. These officers are responsible for the control of the door to the fire area.
d. Prior to proceeding to the floor above the fire, all of the following should be considered:
    1. Life hazard. (Known or suspected?)
    2. Status of the line. (Charged or uncharged?)
    3. Door to the fire area.
        - Forcible entry complete?
        - Integrity of the door?
        - Control of the door?
    4. Location and volume of fire.
        - Fire in the front or rear of the dwelling?
        - Light, medium or heavy fire condition?
    5. Has ventilation of the fire area been effected?
    6. Is the roof or attic space vented? (Skylight, attic louvers or windows)

III. SEARCH BASIC ELEMENTS AND HINTS

a. Do not wander aimlessly, plan your search.
b. Move toward light, ventilation, and secondary means of egress.
c. If heat and smoke prevent entrance into an area, probe gently with arms or legs or tools to determine if any victims are lying close to the door or window.
d. Check behind and around a door as soon as you gain access. Don't pass up any doors.
e. If fire is discovered a charged line should be called for immediately.
f. Closing a door may temporarily contain a fire, allowing for the search of the occupancy.
g. Children hide when they are afraid. Search all closets and any other spaces kids can hide thoroughly.
h. To locate victims under beds, insert your leg under the bed and sweep gently back and forth.
i. A low mattress might indicate bunk beds; you'll have to check for an upper bunk.
j. Check for victims who might be caught in the space between the bed and the wall.
k. If you remove a victim from a bed check again - there may be others.
l. Always be alert for signs of trapped victims, such as crying, coughing or moaning.
m. Ventilate as you move, providing fire will not extend by your venting.
n. Communicate all findings with Incident Command.
o. Notify Incident Command when search is completed.

IV. RESCUE BASIC ELEMENTS AND HINTS (UPPER FLOOR)

a. Immediately upon entering a room from the window, if an excessive amount of heat and smoke is pushing in from the interior hall, close the door to the room. Once this door has been closed a more detailed search/rescue will be permitted since the completely removed window will adequately vent the room and the possibility of pulling fire toward the vented room will have been negated.

b. When no overcome persons have been found in the room, and in the event the door to the interior hall has been closed to facilitate the search/rescue, it should be reopened before leaving the room via ladder.

- This will assist in overall interior ventilation.
- This door should be reopened carefully. In the event there is any possibility that fire in the interior hall might be pulled into the room toward the open window, the door shall be left closed.

c. If you discover a victim, give first consideration to removal down the interior stair. When possible and consistent with safety, open the door to the hall and call for assistance from members operating inside the building.

d. If interior removal is not possible, prepare for removal via ladder or out onto a porch roof.

e. In the case where several occupants have been found on an upper floor, all personnel not committed to actual control of the fire must be directed toward their removal. The engine company's primary function during this critical period should be to protect the interior stairs and the rescued persons should be removed via these stairs.

ROOF OPERATIONS

I. GENERAL PROCEDURES

a. Physically cutting and opening the roof is usually not considered an initial operation in peaked roof – private dwelling Fires.
b. The venting or removing of attic windows or louvers, the size of which may be enlarged, is frequently sufficient for vent purposes.
c. Due to the pitch of many roofs and particularly when they are wet or icy, opening the roof may be a slow and difficult job.
d. If a skylight is present and conditions warrant, the skylight should be removed.
e. Once a fire is under control, ladder company members, operating from within the attic may push out roof boards, etc., in case additional venting is needed.
f. If it is necessary to open the roof from the exterior, this task is assigned to the second ladder company to arrive.

II. ROOF ACCESS

Priority for roof operations is if available:

1. TOWER LADDER

a. Affords safety and protection for operating members.
b. Power saw can be used from the basket.
c. More efficient and quicker operation.
d. More stable platform.
e. Better overall reach and maneuverability.

2. AERIAL LADDER

a. Shall be used in preference to portable ladders as they provide a more stable platform, with better maneuverability and safety for members to operate from.

3. PORTABLE LADDERS

a. Shall be used where obstructions, setbacks etc., prevent the use of a tower ladder or aerial ladder.

NOTE: A hook ladder in conjunction with any of the above three ladders may be necessary to reach the peak.

III. OPENING A PEAKED ROOF

1. Cutting the Roof with an Axe:
   a. Member carefully sizes up the operation to assure that he does not cut himself off from a safe return to his ladder.
   b. Working from a position straddling the peak, member cuts hole over the fire, parallel to and on the lee side of the ridge. (See diagram A)
   c. Working from a ladder is only justified when the stability of the roof is in question, and a ladder is necessary for safety.
   d. The member's reach and maneuverability limit the size of the opening. (~2' x 3')
   e. Dependent upon the type of roof shingles, member either cuts through asphalt or breaks up tile or slate over the selected area. Shingles are then removed by either hand or scraped up with an axe.
   f. He then cuts through roof boards, removing all boards in one operation, after all sides have been cut.
   g. A 6' hook has to be brought to the roof to push down the ceiling on the top floor after the hole has been cut in the roof.

   Note: Since the member straddling the peak, or working off the ladder has much less maneuverability and speed than would a member in a standing position, he must be extremely careful not to be caught by erupting fire, once the hole has been cut.

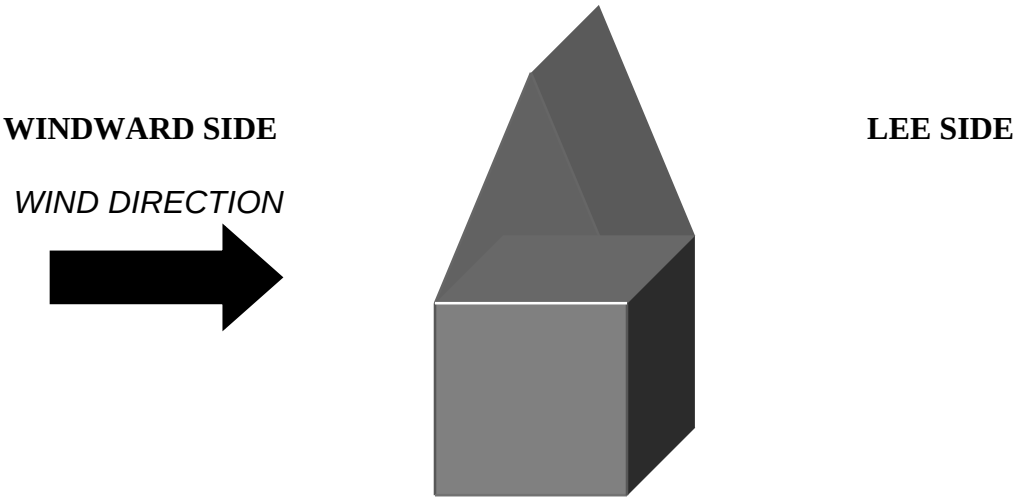


DIAGRAM A

2. Cutting the Roof with the Power Saw:

   The power saw should not be used on a peaked roof except when conditions dictate members will be able to operate with reasonable means of safety and are authorized to do so by the Incident Commander.

The power saw should not be used on a peaked roof due to the following:

- Limited maneuverability.
- Member is working in a position where balance is critical.
- Little possibility of having another member back up the operator.
- Relatively small opening required can be readily made with an axe.

Note: Use of the power saw from a ladder (except a Tower Ladder Basket) is not recommended if there is another alternative.

a. Member carefully sizes up the operation to assure that he does not cut himself off from a safe return to his ground ladder.

b. Position hook ladder on the ridge pole. Check the stability of the roof with available tools.

c. Saw is started on the ground, warmed up and shut down. Operator shall bring the saw to the roof and restart it when he is in position to make the first cut.

d. The saw operator always has one foot on the hook ladder. The size of the cut will depend on the reach of the operator. He shall never over extend himself. Reposition the hook ladder if a larger opening is necessary.

e. Back-up member shall work with both feet on the hook ladder at all times, maintaining contact with the operator and monitoring roof conditions.

f. Make the first cut parallel to the ridge pole and follow as shown in the diagram: (see figure 1)

g. Proceed to remove cut roofing with 6' hooks and push down any ceiling below.

h. Area beneath the cut and the ground ladder shall be kept clear of members to prevent injuries from falling objects and tools.

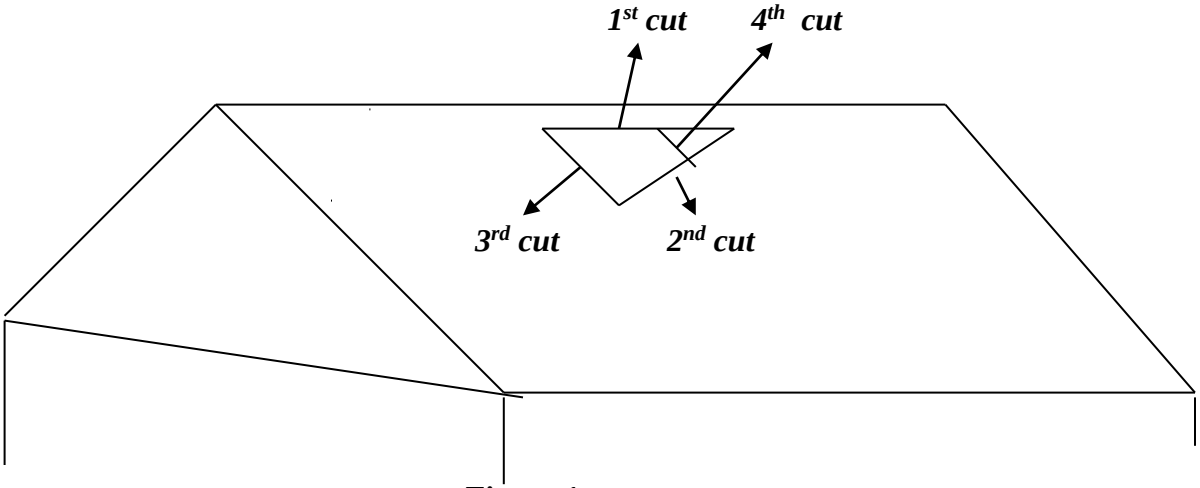


Figure 1