

Seaside Fire & Rescue

Operations Protocols

Edition: 2020

**General
Considerations**

- A - 1 Introduction & General Information
- A - 2 ICS and Chain of Command
- A - 3 Accountability / Passports
- A - 4 Radio Communications & Terminology
- A - 6 Incident within an Incident (IWI)
- A - 7 Non- Emergent Responses
- A - 8 Alarms
- A - 9 PIO Duties
- A - 10 Firefighter Rehab
- A - 11 Firefighter DECON
- A - 12 Establishing a Landing Zone (LZ)
- A - 13 Vehicle Lockout
- A - 14 Pre-operational Inspections
- A - 15 Conflagration Deployment Pre-plan
- A - 17 Tsunamis / Earthquakes

**Response
&
Apparatus**

- B - 1 Apparatus Response Order
- B - 2 Incident Response
- B - 3 Apparatus Driving and Response
- B - 4 Support Vehicle Operations
- B - 5 Brush Truck Operations
- B - 6 Tender Operations
- B - 7 Engine Operations
- B - 8 Truck Operations
- B - 11 Aerial Operations
- B - 12 Mutual Aid Staffing
- B - 13 Mutual Aid: Technical Rescue
- B - 14 Highway Response
- B - 16 Windstorm Damage / Trees Down
- B - 17 Apparatus backing in the station
- B - 18 Apparatus Backing

HAZMAT

- C - 1 HAZMAT Incidents
- C - 2 Natural Gas Emergencies
- C - 3 Propane Emergencies
- C - 4 White Powder/ Suspicious Packages
- C - 5 Bomb Threat
- C - 6 Explosions / Bombing Incident
- C - 7 Weapons of Mass Destruction
- C - 8 WMD Considerations
- C - 9 Biohazard / Respiratory Exposure
- C - 10 Gross Decontamination
- C - 11 DECON Corridor setup for HAZMAT Team

FIRE

- D - 1 Fire Command
- D - 2 Offensive Structure Fire
- D - 3 Defensive Structure Fire
- D - 4 Commercial Fires
- D - 5 High-Rise / Standpipe Operations
- D - 6 Heavy Content (Hoarder) Fires
- D - 7 Attic Fires
- D - 8 Basement Fires
- D - 9 Garage Fires
- D - 10 Vehicle Fires
- D - 11 Wind Driven Fires
- D - 12 Non-Hydranted Area Fires
- D - 13 Hydrant Water Supply
- D - 14 Overhaul & Salvage
- D - 15 Forcible Entry
- D - 16 Structural Search and Rescue
- D - 18 Ventilation
- D - 19 Vertical Ventilation
- D - 20 MAYDAY
- D - 21 Rapid Intervention Crew (RIC) Duties
- D - 22 Wildland Urban Interface
- D - 23 Wildland

RESCUE

- E - 1 Rescue Terms
- E - 2 Rescue Signals
- E - 3 Water Rescue: General Concerns
- E - 4 Ocean Rescue
- E - 5 Ocean Rescue (with Lifeguards)
- E - 6 Swift Water Rescue
- E - 7 Rope Rescue
- E - 9 Confined Space Rescue
- E - 11 Trench Rescue
- E - 13 Structural Collapse
- E - 16 Motor Vehicle Collisions
- E - 17 Aircraft Crash/ Rescue
- E - 18 Elevator Emergencies
- E - 19 Overland Search and Rescue
- E - 20 Active Shooter
- E - 21 Patient Extrication using the Aerial

Equipment

Changes, Addendums & Authorization

Changes and addendums shall be recorded and updated in the master copy of the response protocols until the next complete manual is placed into service.

Changes and addendum will be denoted with a black line on the left side of the page. |

Record of Changes

Protocol	Page	Date effective

I authorize the use of the 2020 Edition Seaside Fire & Rescue Response Protocols as the guide to operations for all responders working at Seaside Fire & Rescue.

In the event that these protocols become contrary to any State of Oregon Revised Statutes or Administrative Rules, they shall supersede these protocols.

Joey Daniels
Joey Daniels
Seaside Fire & Rescue Fire Chief

6-10-2020
Date

Seaside Fire & Rescue
Operations Protocols

General Considerations

<i>Page</i>	<i>Protocol</i>
A-1	Introduction and General Information
A-2	ICS and Chain of Command
A-3	Accountability / Passports
A-4	Radio Communications & Terminology
A-6	Incident Within an Incident (IWI)
A-7	Non-Emergent Responses
A-8	Alarms
A-9	PIO Duties
A-10	Firefighter Rehab
A-11	Firefighter Decon
A-12	Establishing a Landing Zone (LZ)
A-13	Vehicle Lock-out
A-14	Pre-Operational Inspections
A-15	Conflagration Deployment Pre-plan
A-17	Tsunamis / Earthquakes

Introduction & General Information

These protocols are intended as guidelines for all personnel operating under the Direction of the Fire Chief as members of Seaside Fire & Rescue. All personnel must have knowledge and understanding of all applicable Fire Department and City of Seaside policies, when a conflict arises these protocols may be superseded by: Federal and Oregon State law, City, and Fire Department Policies.

Emergency Incidents are stressful, dynamic, and constantly changing environments. These guidelines cannot cover every type of circumstance which may be encountered. These protocols are not absolute doctrines, Incident Commanders or Company Officers may give orders that may conflict with these protocols, always follow orders from your chain of command, providing for safety first.

These protocols are intended to:

- Standardize and provide a framework for initial response to incidents.
- Facilitate a response to a wide variety of incidents.

These protocols are not all inclusive policies:

- The Seaside Fire & Rescue policy manual is found in Lexipol, all members will have Lexipol logins and are required to read and acknowledge applicable policies designated by the Fire Chief.
- The City of Seaside Policy Manual also may have further requirements and rules for Seaside Fire & Rescue members.
- The City of Seaside Emergency Operations Plan (EOP) will be used for all large scale disaster type events.

These protocols are not all inclusive for response:

- Use of such programs such as ENROUTEPRO, Active 911, and Emergency Reporting are tools to assist in response and day to day operations.
- Material Safety Data Sheets, also known as Safety Data Sheets for chemicals used at Seaside Fire & Rescue can be found on ENROUTEPRO: General Information, SDS.

Responsibilities and Addendums:

- The Fire Chief will review or designate a periodic review and update of these protocols.
- These protocols shall be made available to all Seaside Fire & Rescue personnel
- All Personnel working as responders for Seaside Fire & Rescue shall be responsible for being familiar with and following these protocols.
- Addendums of additions to the current protocols will be signed by the Fire Chief and be effective immediately.

ICS & Chain of Command

Chain of Command

- An Incident Command System (ICS) shall be used on every incident, it can be expanded or reduced as needed based on the size and the complexity of the incident.
- All responders shall act in accordance to their assigned roles during an incident until placed in another assignment of given additional duties.
- Personnel given an Assignment (with a title) shall utilize that designator on the radio
- Changes or additions to positions should be announced over the radio
- Rules for ICS: Everyone reports to one supervisor
 - Personnel receiving conflicting orders should advise the supervisor issuing the conflicting order of the previous order.

Incident Command Common Terms

This list is not all inclusive of all ICS positions

- Incident Command Post (ICP). A temporary facility or location that signifies the management organization for an incident. The ICP may be denoted by a green light
- Incident Commander (IC). Responsible for the entire incident. The first arriving unit is always the default Incident Commander until command is passed to another IC.
- Safety. In charge of the safety of the incident looking at both the incident and the responders. If a Safety is not designated IC retains the position.
- Public Information Officer. Responsible for gathering information and coordinating with IC to release the information to the media and public
- Liaison Officer. Coordinates with other agencies involved with the same Incident
- Accountability Officer. Designated person that works directly for the IC to establish tracking of personnel during the incident
- Operations. Responsible for current operations, reporting directly to IC
- Planning. Responsible for coordinating the next operational period
- Logistics. Responsible for coordinating additional equipment, food, and necessities for responders not brought in during initial assignments

Divisions and Groups. Used to further divide an incident when the IC or Operations are exhausting their span of control or have a complex incident

- Divisions typically handle a geographic area. *Example: Division A has the west side; Division B has the east side.*
- Groups typically handle a purpose. *Examples: In wildland you may have a Fire Attack Group and Structure Protection Group. During structure fires you may have a Fire Attack Group, Ventilation Group, and a Search and Rescue Group, etc...*
- Company Officer (CO). Any officer or authorized Firefighter acting in capacity (AIC) sitting in the front right seat of an apparatus, the CO is responsible for the crew
- Strike team (ST). A group of (usually 5) apparatus of the same type with a leader (STL)
- Task Force (TF). A group of (usually 5) apparatus of different types with a leader (TFL)

Accountability / Passports

Considerations:

- Crew Accountability shall be maintained on all incidents and trainings, two options are:
 - Company Officer or IC keeping track of responders (small incident)
 - Using the passport system with an Incident Command or Accountability Officer
- During large incidents the Accountability Officer should use both a passport tracking board and a notepad/ Unit log to account for units/crews moving locations

Response Using Passports

- Passport Shields will be worn on the helmet by all responders on apparatus
- Chief Officers, SAFETY, RIT, other specialty designators should wear an appropriate shield

ON Scene Using Passports

- By Default Company Officers will attempt to provide the passports to Command (IC) as soon as possible upon arrival
 - If operations dictate that this is not possible (first arriving Engine and Truck usually) the Company Officer will notify Command Via radio that their passports are on the officer seat, IC will retrieve them as soon as practical
- ICP will keep track of passports and tags on scene utilizing a passport board to ensure tracking of crews in any IDLH environment, hot zone, or dangerous operation
 - IC may at any time designate an “Accountability Officer”

Passport System

- Passport Tag Colors: White: Chief Officers Yellow: Firefighters
 Red: Company Officers Taped: Probationary / Non-FF1
 - Position of passport tags on passports:
 - Company Officer (or AIC): On top
 - Engineer: Second down, Upside-down
 - Aerial/Tiller Operator: Upside-down, Below Engineer
 - All Firefighters: In line down the board
 - Apparatus Passports & Command Board
 - 1 Passport tag from each member passports (2 total passport tags from each responder)
 - Red on top of Red (A and B) • White on top of White (A & B)
 - Goes to Command ➤ Stays in Apparatus
- Allows Command to split the crew if required In case of operations requiring additional passports or a catastrophic event occurs*

Radio Communications & Terminology

Considerations:

Keep radio communication clear and concise so other units can talk if necessary.

When talking on the radio remember CAN: Conditions, Actions, Needs.

Radio Information

- Seaside Dispatch (Green Repeater) is the licensed fire dispatch channel for South County
- Fire Dispatch (FD Meglar) is the licensed Fire Dispatch channel for North County
- The Clatsop county Radio Matrix will be used for the most current, up to date information on Banks (Zones) and channels, this list has the name of the channel and the frequency if needed
- Normal operations will be on Seaside “B” bank
 - Normal scene operations will be assigned a working channel
 - Normal beach & water rescue working channel by default will be “Tac 9”
 - Talking to in-water responders: Marine channel 17.
- Vehicles with two mobile radios will have one designated for Dispatch radio traffic and the second designated for Working channel(s) Traffic
- Default scan channels are set for all department mobile and portable radio, any responder changing a radio’s scan list will ensure it is set back to the default list after using it
- All Responders should carry a radio on the correct channel during any operations, consideration should be to keep volumes low or off except for the crew leader to minimize feedback during transmissions
- Any responder utilizing a “radio purse” will ensure it is under their turnouts with the radio antenna exposed lower than their coat during structural operations to minimize damage as well as reduce the potential for being a snag hazard

Radio Operation

- When talking to another unit, say their designator first, followed by yours
 - When using multiple channels state which one your one (example: 3123, 3121 on tac 7)
- When broadcasting information on a frequency to no-one specifically do not use an identifier first (example: 3163 on scene with a vehicle on fire)

Tillamook County

- When responding to Tillamook County consult the Station 13 Box alarm assignment for information
- Apparatus will check in with Tillamook Dispatch at Oswald West State Park (AKA: Short Sands)
 - Utilizing the “H” bank
 - Tillamook Dispatch North (TilCoDispN)
 - Firetac 1 is the most commonly used working channel for Nehalem units

Radio Communications & Terminology (Cont.)

Standard Radio Communications

- Responding: [*Unit*] *Responding*
 - Medical: add the EMS level Example: 3123 Responding *BLS*
 - Fires: add number of responders Example: 3123 Responding *with 4*
 - Rescues: may add pertinent info Example: 3156 Responding *w/ 2 Rescue swimmers*
- Units arrived: [*Unit*] *Arrived*
- Taking Command: [*Unit*] *is* (Name the Incident) *Command*
- No additional needed: *3100 Hold Additional, or 3100 Remain in station*
- Incident is Complete: *3100 Clear*
 - On large incidents command may terminate and turn the scene over to another agency
- When In Service: *3100 in Service* (wait until crews are actually back in service such as fires or crewmembers rode into the hospital)
- *Code 99*: Statement notifying of a cardiac arrest event, usually it should be followed by a re-tone

- Company Officers are designated by their apparatus number
 - Splitting crews: Officer will retain the apparatus number and the lead Firefighter of the crew is designated the “B” (Example: 3148 and 3148B)
 - When splitting crews the minimum number should be 2
- Driver/ Engineers: Designated as [unit] Apparatus
- Aerial Operator: Designated as [unit] Aerial
- Firefighters: Designated as [unit] FF or last name

- Other common radio terminology:
 - Priority Traffic. Someone has an important message they are about to relay, usually associated with a life safety concern. All other units on scene will wait for that unit to finish before continuing with other radio traffic
 - Evacuate. A term to denote the removal of civilians from a building or area
 - Withdraw. Used to indicate crews will tactically retreat from a building or area with tools, equipment, etc. due to unstable conditions
 - Abandon. An Extremely unstable situation has developed, all crew are to escape the building or area immediately taking only what they need for survival and leaving all other equipment in place.
 - Mayday. Used to declare an emergency from a firefighter or crew in a building
 - Shelter in Place. Indicates crew have found a safe area and can survive temporarily due to unsafe conditions.
 - Escape route. Typically used in the wildland and outdoor settings, this is a relatively safe location to retreat if the situation becomes unsafe
 - Safety Zone. Typically used in the wildland setting, it is a pre-designated area where crews should be protected from fire
 - Incident within an incident. A term denoting some sort of injury or illness has effected a responder and actions need to happen to mitigate the new emergency and continue the current incident or assignment

Incident within an Incident (IWI)

Considerations:

- An Incident within an Incident can be described as any unplanned situation that develops during an incident not directly related to the incident that requires attention or extra resources to handle.
- Examples may include, but not limited to:
 - A medical emergency
 - Broke, stuck, or damaged equipment
 - Injured responder
 - Mayday in a fire
 - Secondary collision /struck-by
 - Overturned RWC

Initial Actions

- Identify the IWI and determine if it is an Emergency or non-emergent
- Notify up through the chain of command to the Incident Commander as soon as practical
 - Declare an *Emergency* or *Priority Traffic* on the radio
- Original scene Incident Commander
 - Identify type and severity of the IWI Incident and determine if additional resources are needed to handle both scenes
 - Identify an IWI IC or PIC (person in charge) depending on Command Structure / Needs
 - Consider secondary radio frequencies for the IWI
 - Notify Dispatch
- IWI Incident Commander
 - Handle life threatening emergencies first
 - Identify needs for the Incident including:
 - Additional personnel
 - Medical needs (including air or ground ambulance)
 - Vehicles, tow truck ,special rescue, etc.
 - Law enforcement
- Special types of IWI considerations
 - ✓ Water incidents. Designate someone to keep “eyes on” the situation
 - ✓ Roadway: Stop traffic and secure the scene (with apparatus) from potential further incidents or complications until the situation is resolved
 - ✓ Structure Fires: Consult *MayDay* and *RIC* protocols
 - ✓ Wildland Fires: Consult IRPG
 - ✓ Violent situation: Notify dispatch for police response and protect rescue personnel from injury or further considering retreating out of the scene if unsafe

Medical Need for an Incident within an incident

- Treat the Patient first considering life threats, airway, breathing, circulation
- Closest EMS responder starts care for sick / injured
- Stabilize the scene as necessary to reduce further risks
- Consider utilizing the 8 line medical report available in the back of a current IRPG

Non – Emergent Responses

Considerations:

- The number one concern is the safety of all personnel when dealing with the public

Smoke and Burn Complaints

- Any unit responding to a complaint for smoke or burning
- Notify dispatch
 - When in route
 - On scene
 - Clear, with pertinent information of the incident
- Provide the occupant the rules and any restrictions currently in effect
- Complete an Incident record (call sheet) and any other necessary paperwork

Public Assists

- Notify dispatch
 - When in route (and reason if a direct call to the station)
 - On scene
 - Clear, with pertinent information of the incident
- Complete an Incident record (call sheet) and any other necessary paperwork

Non-Emergent Incidents (misc.)

- Notify dispatch
 - When in route
 - On scene
 - Clear, with pertinent information of the incident
- Complete an Incident record (call sheet) and any other necessary paperwork

*Exception: Meetings, inspections, pre-incident plans, etc. do not require notifying dispatch

Beach Patrols /Burn Issues

- Any unit checking the beach for issues such as burning, attendance, safety issues between sunset and sunrise needs to notify dispatch they are on the beach and when clear
 - Units are recommended to contact dispatch with location and information anytime they making contact with people when other 3100 units are not on the beach or aware of your location

Alarms

Considerations:

- Never assume an alarm is false, always investigate and verify there is no emergency before resetting and clearing the address.

Silence and Reset:

Whenever responding to an alarm always attempt to educate occupancies on the following:

- The Responsible Party (RP) for an occupancy may silence an alarm after verifying there is no incident.
- Occupancies must wait for a representative from the fire department before resetting an alarm.

ON Scene Protocol

1. Upon arrival grab the appropriate Knoxbox/lockbox keys
2. Apparatus staging
 - a. Stage apparatus in accordance with appropriate Fire Protocol
3. Investigation
 - a. Attempt to make contact with a responsible party and gather information
 - b. Investigate the Panel for the type and location of the alarm
4. Forcible entry
 - a. Avoid forcible entry unless investigation leads to an actual emergency
 - b. Consider waiting for RP to arrive if they are not on scene and no keys are present
5. Walkthrough
 - a. Conduct a walkthrough of the suspected problem area to verify no issues
6. Reset
 - a. Attempt a reset if no issues are found

Fire Watch

1. In the event an alarm system is malfunctioning or it cannot be reset and the alarm will not notify the building occupants dial out occupancies will be placed on *Fire Watch* until the system is fully operational
2. Provide the Fire Watch form and go over it with the Responsible Party including listing what they must do
3. Provide a Fire Watch log, it is their responsibility to make more copies if needed
4. Ensure they understand they must contact dispatch or the fire department once the alarm issue is resolved and fully operational
5. All completed Fire watch logs are to be turned into the fire department
6. Ensure the Incident record (Run Sheet) denotes the issue and the Fire Marshal is aware
7. Send out a *Groupme* to all officers notifying them of the fire watch issue

PIO Duties

Considerations:

- Treat the media like a respected partner.
- Provide facts not opinion; if you don't know don't speculate.
- Use simple terms and avoid acronyms.
- If time permits write down a couple key bullet points to discuss beforehand.
- The ultimate goal is to build community trust in the Fire Department.

Dressed for Success

- Fire Department personnel are seen as “authorities”, look the part:
 - Wear uniforms zipped up and presentable.
 - Consider Structural PPE during Structure Fires and Rescue Operations.
 - Wildland PPE during wildland incidents.
 - Wear a PFD during water incidents.

Working with Media (interviews):

- If there is time before the interview starts ask what they would like to talk about.
- Follow their directions on where to stand, look, etc.
- Speak clearly and slowly, answer their question but still get your speaking points across.
- Nothing is “off the record”, avoid the “after-interview interview”.

PIO Actions

- A PIO (Public Information Officer) should be notified during any high-profile incident to assist the Incident Commander with public notification
- Options for the PIO to release information may include, but not limited to:
 - a. Utilize NIXLE *as necessary* for reporting incidents to residents
 - b. Utilize the department's social media accounts *as necessary* during and after incidents
 - c. Provide press releases
 - d. Set up interviews with media
 - e. Designate a location for reporters during an incident
- The PIO may have follow-up duties after the incident has been cleared

Interviews with press

- Responders should not engage in interviews or questions unless directed to by the PIO or IC
- During an incident if any press arrive firefighter should notify the ICP and get clarification on where to send them, do not automatically send them to the ICP

Firefighter Rehab

Considerations:

- Rehab is a location for personnel to rest, receive refreshment, and obtain a medical evaluation.

ON Scene Protocol

1. Command will establish a rehab area on any incident when conditions indicate that rest and rehabilitation are needed for responders whether during training or on an incident
2. IC will designate the location or multiple locations for rehab
 - a. Considerations for rehab should be away from the scene, away from water drainage, and consider weather conditions (rain, heat, shade, etc.) and away from vehicle exhaust
3. IC will designate a Person in Charge (AKA: REHAB)
 - a. The Rehab Officer and Company Officers will work with Accountability to ensure what crews are in Rehab and what crews are available for assignment or leaving Rehab
4. Crews entering Rehab should complete Gross Decon *if indicated per* the Decon Protocol
 - a. Crews will remove SCBA's, helmets, jackets, and nomex hoods in Rehab and swap for fresh, clean hoods and new bottles
5. Officers and the Rehab Officer will monitor crews for exhaustion or dehydration and if warranted request a vitals check of the responder to include at a minimum:
 - a. Temperature
 - b. Blood pressure
 - c. Pulse rate
 - d. Pulse oximetry
6. Responders with vitals readings outside of normal limits for more than 20 minutes should receive an ALS evaluation including an ECG prior to being released from Rehab

REHAB Setup

- At a minimum Rehab will include:
 - Water, Snacks
 - Medical Box, Airway bag, and AED or Heart Monitor
 - Equipment listed in the GROSS DECON protocol
- In addition it may include:
 - Fresh SCBA bottles
 - Stair chair(s) or chairs to sit
 - Food
 - Pop-up tent
 - Fan (hot days)
 - Coffee/ Hot drinks

Firefighter DECON

Considerations:

- The intent of this protocol is to minimize further contamination on scene from carcinogens after suppression operations.

ON Scene Protocol

1. Hose, tools, and equipment should not be handled without wearing gloves (of any type)
2. Helmets, jackets, and hoods should be removed to allow the Firefighter to cool down.
3. Cancer reduction and cleaning
 - a. Hood swap
 - i. Fresh (clean) hoods will be located at REHAB or available on an apparatus
 - ii. Firefighters exiting the IDLH environment and entering rehab will
 1. Remove their used hood and place it in a designated garbage bag, then select a new hood for reentry or future use
 - b. Cleaning
 - i. Use Hand sanitizer on hands
 - ii. Wipe the head, neck, and hand/forearm areas with cleansing wipes
4. Gross Decon of PPE
 - a. Dish Soap and water will be mixed in a bucket of water
 - i. All Boots will be scrubbed with a brush using soapy water
 - ii. Any charred or blackened spots on PPE will receive a brush-down with soapy water
5. Any SCBA packs, tools, equipment, or PPE used on scene should be sprayed down with water (or cleaned) before being placed back on an apparatus

After the Incident

6. All SCBA packs and air bottles involved in suppression are to be rinsed and cleaned per manufactures recommendations
 - a. Swap shoulder straps if necessary with clean ones
7. Turnouts and structure gloves will be washed
 - a. Separate and wash exterior liners separate from interiors, hang dry all components
8. Helmets, boots, SCBA masks and tools used should be cleaned with a soapy water and a brush
9. Wipe down surfaces in the apparatus with disinfectant wipes
10. All firefighters should shower as soon as possible and don clean clothes after a structure fire
11. It is recommended to drink plenty of water (at least 1 liter) immediately after a fire
12. Return all PPE and gear back to service, ensuring your SCBA mask works correctly and you have a clean hood in your gear

Establishing a Landing Zone (LZ)

Considerations:

- Expect that a helicopter will always land into and take off into the wind.
- Landing Zone size should be closest to 100 feet by 100 feet, bigger is better.
- Helicopters usually conduct 1 or more passes of the LZ before landing.

Radio Communications:

- Life Flight can switch to any channel we use if you can provide this on the phone request.
- Coast Guard aircraft are often accessible on 22A, or you can attempt 16 if unable to reach them.

Safety around Aircraft:

- Never approach an aircraft until escorted or instructed to do so by an aircraft crewmember.
- Never approach or go near the tail rotor of a helicopter.
- All loose clothing and hats shall be secured around aircraft or in the LZ.
- Eye and ear protection should be utilized around aircraft.
- Secure lights at night to assist the aircrew's vision, never point a light directly at an aircraft.
 - LEDs, strobes, and headlights harshly affect a flight crewmember on night vision goggles.
- Always ensure the LZ is protected from bystanders or traffic.

Initial Actions

- A Landing Zone Officer will proceed to, and establish the landing zone perimeter
 - a. Daytime, cones turn on their sides
 - b. Nighttime: consider chemlights
- If time permits have all personnel at the LZ conduct a FOD (Foreign Object Destruction) walk-down of the landing zone removing any debris that may negatively impact the aircraft

Landing / Takeoff

1. The Landing Zone Officer will be the only person to communicate with the aircraft
 - a. **Establish Radio communications** (Speak slow and concise)
 - b. **Your name or call sign, location of the LZ** GPS (degrees, minutes, seconds), or just use simple geographical features (the aircrew may not be familiar with the area)
 - c. **Wind Speed, Direction, and Current Conditions of the LZ** (fog, clear, etc.)
 - d. **Provide LZ Characteristics** including **Size, Surface** (pavement, gravel, grass), **Slope**
 - e. **Identify any hazards** (including trees, poles, towers, buildings, etc.)
2. **Radio silence during landing** is necessary unless an immediate danger to the aircraft is noted in which case over the radio announce: "Wave-off, Wave-off!"
3. Aircraft on ground: Position a guard no closer than 50 feet in front of the helicopter on the forward right side (starboard) in view of the pilot
4. After completing patient loading all personnel shall clear the LZ until the aircraft has departed

Vehicle Lock-out

Considerations:

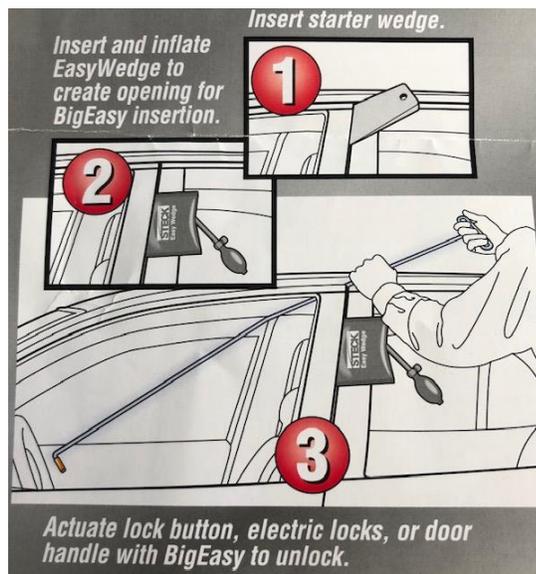
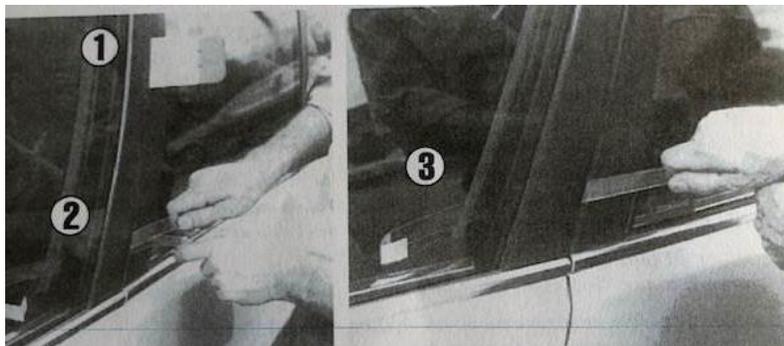
- Lockout Kits/Tools are only to be used during emergencies.
- For normal lockout civilians need to contact a locksmith or tow company.

Big Easy Kit Inventory

- Big Easy unlocking tool
- Suregrip lock knob lifter
- Non-Marring door wedge
- Easywedge inflatable cuff
- Paint protector

ON Scene Protocol

1. Insert wedge at the uppermost rear corner of the door
 - a. Use soapy water to assist in lubrication *if* necessary
2. Insert and inflate the Easywedge inflatable cuff
 - a. Use soapy water to assist in lubrication *if* necessary
3. Unlock door by one of the two methods
 - a. Bigeasy Unlocking tool (use the paint protector)
 - i. Actuate the lock button, slide lock, or door handle
 - b. Suregrip lock knob lifter
 - i. Insert and slide down to the vertical to the vertical lock knob
 - ii. Hold one leg of the strip with each hand
 - iii. Push and pull opposite legs to “steer” the grip onto the knob
 - iv. Pull rearward until snug to grip the knob and then give slight upward pressure to lift the knob up and unlock the door



Pre-Operational Inspections

Considerations:

- Apparatus, equipment, and PPE must be in-service for the next incident.
- SCBAs are to be checked in-service based on the manufacture's recommendations.

Daily Checks

- All apparatus are to receive a “quick check” daily to ensure they are ready for service, including:
 - Including walk-around inspection and SCBA Pack Inspection
- Detailed Apparatus of the day
 - A list will be available and rotate as needed to list a specific apparatus (or multiple) that are due each day of the week
 - After quick checks are completed on all rigs the detailed check will include:
 - Sanitizing all touching surfaces, Firecoms, portable radios
 - Cleaning out compartments, including vacuuming and wiping
 - SCBA detailed checks and battery swaps (As needed)
 - Inventory of all bags, equipment, packs, etc.
 - Inspection throughout all compartments
 - Inspection of all rope rescue equipment (including filling out logs)
 - Calibration of gas monitors
 - Inspection of all medical equipment
 - Gas power equipment will be started

After Use Checks

- The following equipment must be inspected after each use:
 - Ground ladders
 - Rope rescue equipment, rope and webbing
 - SCBA's, bottles, and masks
 - Personal protective equipment, including:
 - Technical rescue PPE and equipment
 - Structural turnouts
 - Wildland PPE
 - Water rescue PPE

Routine Inspections

- Rope rescue equipment must be inspected at least annually
- 3148's cleaning and lubrication will be inspected and completed quarterly
- Ground ladders and the Aerial will be inspected and tested yearly

Conflagration Deployment Pre-Plan

Considerations:

- The Office of the State Fire Marshal (OSFM) relies on local Fire Defense Board districts and their Fire Agencies for support in the event of a Conflagration Declaration throughout the State of Oregon.
- In addition, fire agencies may also be asked to mobilize for other events specific to fire protection through OSFM in support of other states facing natural disaster.

Before Fire Season

- All responders eligible (up to date with required training) and wanting to deploy on a conflag will put their name on a list.
 - Any responder wishing to deploy will need to have an agreement signed by their employers and turned into the fire department
- The Fire Chief or designee will provide a list rotating by week on what responders are first up on rotation based on Firefighter and the Engine Boss positions
- All eligible responders:
 - Should have their personal items bags packed and ready to go
 - Expect a deployment to be 2 weeks
 - Cannot deploy if they are injured or on light duty
 - Must have a medical form completed
- Task Force / Strike Team configurations
 - Configurations are impossible to predict, while brush engines are a crew of two, type 1 engines staff with 4. If another agency is needing personnel they may take a responder from a different agency

Deployment Response

- The call to respond may come at any time of the day. Responders are expected to be packed and leaving the station within 1 hour of the call
- Responders first up on the list for the week get priority, if they are unable to commit or do not answer their phone, the next responder on the list will get the call
- Once a ST or TF deploys the list will be re-evaluated for the next responders available

Deployment Rules

- All personnel will follow their chain of command during deployment: Firefighter, Engine Boss, Task Force/Strike Team Leader, Division Supervisor (OSFM)
 - Personnel issues should first be handled within the strike group/ task force
- While deployed you represent Seaside Fire & Rescue, Clatsop County, and the State Fire Marshal
- Alcohol and non-prescription drugs are not allowed during the entire deployment

Conflagration Deployment Pre-Plan (Cont.)

Personal Items

- All units are expected to be self-sufficient for 3 days before being re-supplied
- Any gear/equipment needed day to day while in the apparatus be packed in a separate bag
- Personal items should be packed to be left in camp or in the deployment trailer
- The following items are banned:
 - Firearms
 - Shorts, tank tops and opened toed shoes (except for shower shoes)
- You should plan on at least one pair of civilian clothes (pants and shirt)
- Class B uniforms are required for deployments in California
- List of personal Items to Pack / Bring:

<input type="checkbox"/> Sleeping Bag	<input type="checkbox"/> Dirty clothes Bag	<input type="checkbox"/> Socks (10 Pair)
<input type="checkbox"/> Pillow	<input type="checkbox"/> Laundry detergent	<input type="checkbox"/> Underwear (10 Pair)
<input type="checkbox"/> Toilet paper/ baby wipes	<input type="checkbox"/> Soap / Shampoo	<input type="checkbox"/> T-shirts (10 Pair)
<input type="checkbox"/> Toothbrush / Toothpaste	<input type="checkbox"/> Hand Sanitizer	<input type="checkbox"/> Pants
<input type="checkbox"/> Deodorant / Foot powder	<input type="checkbox"/> Phone charger	<input type="checkbox"/> Long sleeve T-shirt
<input type="checkbox"/> Shaving Items	<input type="checkbox"/> Sweatshirt	<input type="checkbox"/> Shoes
<input type="checkbox"/> Feminine Hygiene products	<input type="checkbox"/> Glasses/ contacts	<input type="checkbox"/> At least 20\$ cash
<input type="checkbox"/> Shower Shoes	<input type="checkbox"/> Sunglasses	<input type="checkbox"/> Wristwatch
<input type="checkbox"/> Clean clothes to wear in and around fire camp		
- List of work items to pack / bring:

<input type="checkbox"/> Leather boots (8in. Min)	<input type="checkbox"/> Wildland pants	<input type="checkbox"/> Web gear, including:
<input type="checkbox"/> Wildland pants	<input type="checkbox"/> Wildland shirt	<input type="checkbox"/> Fire shelter
<input type="checkbox"/> Wildland gloves	<input type="checkbox"/> Rain Jacket	<input type="checkbox"/> Water bottle holder
<input type="checkbox"/> Facemask	<input type="checkbox"/> Hat / beanie	<input type="checkbox"/> Radio Harness
<input type="checkbox"/> Wildland helmet	<input type="checkbox"/> Sweatshirt	<input type="checkbox"/> Snacks
<input type="checkbox"/> Spare boot laces	<input type="checkbox"/> Bug repellent	<input type="checkbox"/> Sunscreen & Chapstick
<input type="checkbox"/> Reusable spill-proof coffee cup		
- Consider items to eat/ drink
- Engine Boss needs to coordinate with the Fire Chief on payment plan for fuel/food
- Seaside Fire & Rescue will supply all items listed in the current OSFM Mobilization plan for the type of apparatus, including:
 - Cooler
 - Drinking Water
 - Sunscreen
 - Emergency Rations

Tsunamis and Earthquakes

Considerations:

- As a coastal community we face the threat of natural disasters such as flooding, tsunamis, and earthquakes
- Family safety is the number 1 priority of our volunteers and responders
- Seaside Fire & Rescue encourages all responders and their families to prep a “go bag” in the event of a sudden natural disaster such a tsunami

Distant Event

- Distant events (such as tsunamis and earthquakes) are characterized by a significant amount of time (at least 1 hour) before the coast can expect impact.
- Distant events should give responders enough time to take care of their families and move the apparatus and station equipment out of predicted danger areas to the Elementary School
- A list will be provided of what apparatus and equipment needs to be moved and the operational priorities during a distant event, it will be available on ENROUTEPRO
- Based on time and the expected impact responders may be tasked with evacuations of special populations

Local Event

- The local event is characterized by less warning (10minutes to 1 hour) before excepted impact from a tsunami or a catastrophic earthquake with a tsunami immediately following
- This is the hardest event to plan for, expectations are that if a local event occurs responders immediately head for high ground with whatever they have based on terrain conditions and wait for the impact of the wave before proceeding

**Seaside Fire & Rescue
Operations Protocols**

**Response
&
Apparatus**

Page	Protocol
B-1	Apparatus Response Order
B-2	Incident Response
B-3	Apparatus Driving & Response
B-4	Beach Driving
B-5	Support Vehicle Operations
B-6	Brush Truck Operations
B-7	Tender Operations
B-8	Engine Operations
B-9	Truck Operations
B-11	Aerial Operations
B-12	Mutual Aid Staffing
B-13	Mutual Aid: Technical Rescue
B-14	Highway Response
B-16	Wind Storm Damage / Trees Down
B-17	Apparatus Backing in the station
B-18	Apparatus Backing

Apparatus Response Order

Consideration:

- Incident Command may at any time special request a different apparatus than the assignment, crews should also alter response for the next apparatus to continue to meet the needs of the incident.

Initial Apparatus Response

Medical Response / Motor Vehicle Collisions 1 st : 3123 2 nd : 3121	Vehicle Fires / Hazmat 1 st : 3123 2 nd : 3121
Structure Fire (City) 1 st : 3148 2 nd : 3123 3 rd : 3121	Structure Fire (District) 1 st : 3123 2 nd : 3122 3 rd : 3121
Wildland 1 st : 3179 2 nd : 3123 3 rd : 3121 (City) 3122 (District)	Wildland Interface 1 st : 3179 or 3123 based on info 2 nd : 3123 or 3179 based on first out 3 rd : 3121 or 3122 based on IC request
Beach Rescue: No Lifeguards 1 st : Duty Vehicle(s) for IC / Rescue 2 nd : 3156 with RWCs 3 rd : 3185/3188 As needed: Duty Vehicles/ 3179 As needed: 3123 Ave. A Approach	Beach Rescue: Lifeguards On Duty 1 st : Duty Vehicle(s) for IC / Rescue 2 nd : 3156 with RWCs As needed: Duty Vehicles/ 3179 As needed: 3123 Ave. A Approach
River Rescue in Seaside 1 st : Duty Vehicle(s) for IC / Rescue 2 nd : 3156 with rescue swimmer(s) 3 rd : Duty Vehicle w/ RWCs <i>if needed</i> 4 th : 3123 Medical / Rehab	Mutual Aid: Ocean/ Columbia River Rescues 1 st : 3156 with RWCs 2 nd : Duty Vehicle with Rescue Swimmer 3 rd : Additional Apparatus as needed
Overland SAR Duty Officer will coordinate with dispatch 3100 will standby for assignment	Tree down / Storm Response 1 st : Duty Vehicle 3100 will standby for assignment
Technical Rescue Response based on type of incident and trained responders, considerations: 3148, 3156, 3123	
Mutual Aid Always base assignments off of current Clatsop County Mutual Aid Agreements (ENROUTEPRO)	

Incident Response

Initial Response Considerations

1. All department personnel shall respond to incidents in a department vehicle or apparatus
2. Responders are not to leave the station during or after an incident unless relieved by an officer
3. In responding to the station you must follow all traffic laws, do not drive aggressively or cut through the NE parking lot between Broadway and Highway 101 (AKA: Chambers Bathrooms)
4. Always respond with the appropriate crew in the appropriate apparatus to the incident
5. Apparatus and responders should continue to respond to the incident per the initial response plan until a unit on scene informs them to stage, return/clear the incident, or remain in quarters

Apparatus Staging

1. Level 1 staging: Come into the scene and park the apparatus where appropriate, send crews
2. Level 2 staging: Currently your unit is not needed, stage away from the scene, ready to:
 - a. Respond into the scene if needed
 - b. Respond to an additional incident

Apparatus Crew Assignments

- Company Officer
 - Right-hand seat designated to be in charge of the crew. Responsible for crew assignments, PPE, Accountability, Safety of the crew.
 - Carries out orders from Incident Command, leads crew during operations
 - May be the initial IC, important at the task and tactical levels of operations
- Engineer
 - Drives the apparatus, responsible for pumping the apparatus
 - Takes care of all tools and equipment coming off the apparatus during operations and ensures the apparatus is in service after an incident
 - Designated to stay at the apparatus *unless* reassigned for the incident needs
- Firefighter 1
 - Sits behind Driver, takes task level instructions from Company Officer
 - Initial assignments may be: Water can, irons set, high-rise kit, saws, pre-connect
- Firefighter 2
 - Sits behind Officer, takes task level instructions from Company Officer
 - Initial assignments may be: Hydrant connection, long (or hand) tools, pre-connect
- Tiller Operator
 - Responsible for driving rear of tiller and spotting for aerial placement
 - Works with Engineer for water / pump needs
 - Responsible for Aerial ladder functions and operation

Apparatus Driving & Operation

Considerations:

- The “due regard for the safety of all persons” is the number one priority while driving

Requirements

1. Fire department vehicles shall only be operated by authorized City of Seaside Employees and members of Seaside Fire & Rescue
2. Responders operating a vehicle must have a current valid Oregon Driver’s license
 - a. Certain exceptions may be made for active duty military
3. Responders operating a UTV or ATV shall also have an Oregon ATV Safety card on file
4. Responders may operate the smaller vehicles (without airbrakes) without the use of lights or sirens
5. Firefighters who have completed an approved NFPA driver course may operate apparatus under the supervision of NFPA “certified” driver for training
6. Only NFPA “certified” drivers may operate any vehicle with lights and/or sirens engaged
 - a. Exception 1: Lights and sirens can be used on the beach during an emergency, providing the driver does not travel faster than 20mph
 - b. Exception 2: The use of emergency lights is authorized anytime an emergency vehicle must park or disregard normal traffic patterns for an emergency
ORS 820.300(1)(a): Park or stand in disregard of a statute, regulation or ordinance prohibiting that parking or standing or (b) disregard regulations governing the direction of movement of turning in specified directions

Response

3. A walk-around inspection shall be completed prior to any apparatus moving
4. Drivers are responsible for the safe travel of the apparatus and its crew
5. When driving code 2/3 the siren shall be engaged at any stop sign or stop light, drivers are responsible for stopping and clearing traffic prior to proceeding.
6. When approaching an intersection, the person/ the Company Officer should provide the driver with:
 - a. “Clear”, indicating the driver is clear to proceed
 - b. “Hold” or “Traffic”, indicating it is not clear to proceed
7. Air brakes should be engaged anytime crewmembers are embarking or disembarking

Additional

- If approaching a school bus while traveling with lights and siren (Code 3), the driver shall stop the apparatus and wait for the school bus to turn off their red lights and wave them through prior to proceeding past, you may need to shut off your lights to avoid confusion

Beach Driving

Considerations:

- The beach is a unique environment where people do not expect vehicles and often are unsure what to do with an emergency vehicle responding with lights and/or sirens.
- Always yield to the pedestrians on the beach, specifically watching out for children or the parents of children concerned with you driving between them
- The national average is one person is run over by emergency personnel each year on U.S. beaches

1. Watch out for holes, depressions, and debris that may cause damage to the vehicle
2. Park so you have best view of the ocean from your vehicle when scanning
3. Complete a 360^o walk around of any vehicle prior to moving it checking for people
4. Backing vehicles is to be done with a spotter (if available) and emergency lights activated
 - a. Always attempt to park where you can leave by driving forward
5. Non-City Employee passengers are only allowed in the performance of work duties
 - a. Dispatch is to be notified when providing a courtesy ride off the beach
6. Vehicles driven on the beach are to be cleaned (inside and out) and washed after the incident or at the end of a shift

Response

7. Special care must be exercised when driving on the beach around pedestrians. Choose your path to avoid people and their “camps”, operate slowly around children, stop with extra distance and allow them to cross.
 - a. ALWAYS Yield the right of way to pedestrians
8. Always attempt to drive as much as possible in the wet sand, especially with patients or responding to an emergency
9. The beach speed limit is 20mph, there is no reason to drive faster than the conditions allow
10. Vehicles are not to be driven in the surf or water. If this does occur during an incident, special attention must be made to thoroughly clean the underside of the vehicle
11. Vehicles are only to drive in the dunes if it is essential to an incident,
 - a. If operating in the dune emergency lights will be activated
12. Always park facing the water with your emergency lights on during a water rescue
13. Emergency Lights are to be activated on the beach (at a minimum) for the following:
 - a. Any incident involving water rescue or potential water rescue
 - b. Any BLS or higher medical emergency
 - c. Fires

RWC Deployment & Recovery

14. Deploy the RWCs with the tow vehicle facing the water
15. During recovery turn the vehicle around (if needed) to aid in loading the RWCs

Support Vehicle Operations

Command Vehicles

- Stage apparatus in best location for the incident
- Never seat more than 3 for an incident

Apparatus Functions

- Provide command, control, and communications
- Carry additional personnel and equipment
- Provide off-road capability during overland SAR and water rescue

Side by sides

- Stage apparatus in best location for the incident
- Never seat more than 2 for an incident

Apparatus Functions

- Carry additional personnel and equipment
- Provide off-road capability during overland SAR
- Provide off-road and water rescue capability

3156

- Stage apparatus in best location for the incident
- Never seat more than 3 for an incident

Apparatus Functions

- Primary functions of 3156:
 - Provide Water rescue capabilities (surface, swift, flood, and surf)
 - Pull the double RWCs when indicated for water incidents
 - Support Technical Rescue incidents including: Rope rescue & overland SAR
 - Limited medical response and patient care

Brush Truck

Considerations:

- Staffing for the brush truck in district: minimum 2, maximum 4

Apparatus Placement

- Stage apparatus in best location for an escape plan or exit strategy
- Always anchor in a safe place, in the black, or at the heel of the fire if able for Initial Attack (IA)

Apparatus Functions

- Primary functions of a brush truck:
 - Initial Attack on Brush/ Wildland fires
 - Limited medical response and patient care
- Secondary functions of a brush truck:
 - Support overland SAR operations
 - Support water rescue and beach operations

Brush truck Operations

- 4-wheel drive
 - Normal positioning should be hubs locked, 4 wheel drive off
 - Unlock hubs when traveling out of county
- Beach Operations
 - The brush truck should be deployed into the black or attack from the beach based on the fire location
 - Care must be taken to not get stuck; it is always recommended to drive on the hard sand and then drive straight up or backup to the fire in the soft sand (wide sweeping turns often lead to being stuck)
- Off-road operations
 - Always have a plan to escape
 - Scout out ahead if unsure
 - Stay in communication with other units

Tender Operations

PPE Considerations:

- Structural PPE will be carried by all personnel.
- During summer months consider bringing Wildland PPE, especially on move-ups
- Staffing for a tender in district: minimum 2, maximum 4

Apparatus Placement

- Fires/ Alarms / Investigation
 - a. Stage appropriately leaving room for additional engines
 - b. Never park directly behind another apparatus making their ground ladders inaccessible
- Wildland fires / Backyard burns
 - a. Stage apparatus with an exit strategy
- Vehicle fires
 - a. Stage at a 45° angle away from the vehicle 70 to 150ft. away (based on hose-line being pulled) in a position that that apparatus will not become a target should the vehicle roll or an explosion happen

Apparatus Functions

- Primary functions of a Pumper-Tender:
 - Supply water and fire attack
 - Limited medical response and patient care
 - Support wildland operations
 - Drafting & relay pumping
 - Provide water as a tender (standalone) or in a tender shuttle

Water Supply

- When taking a hydrant, always attempt to “sweep” the road of your supply line to one side for additional apparatus to stage closer to the scene
- Always attempt to hook large diameter intakes on the officer side *if* able

Tender Operations

- If designated for a tender shuttle the Company Officer may split the crew and leave two for the shuttle, and the rest for operations at the scene

Engine Operations

PPE Considerations:

- Structural PPE will be carried by all personnel.
- During summer months consider bringing Wildland PPE, especially on move-ups.
- Staffing for an engine in district: minimum 2, maximum 4

Apparatus Placement

- Residential Fires/ Alarms / Investigation
 - a. If first on scene, leave room for truck placement
 - b. Never park directly behind another apparatus making their ground ladders inaccessible
- Commercial Fires /Alarms / Investigation
 - a. If first on scene, leave room for truck placement
 - b. First due engine should plan to supply the truck from a hydrant
 - c. Second due engine should plan to supply the FDC / Standpipe
- Wildland fires / Backyard burns
 - a. Stage apparatus with an exit strategy
- Vehicle fires
 - a. Stage at a 45° angle away from the vehicle 70 to 150ft. away (based on hose-line being pulled) in a position that that apparatus will not become a target should the vehicle roll or an explosion happen

Apparatus Functions

- Primary functions of an engine:
 - Supply water and fire attack
 - Support the truck or an FDC
 - Provide extrication during motor vehicle collisions
 - Medical response and patient care
 - Support wildland operations
 - Drafting & relay pumping

Water Supply

- When taking a hydrant, always attempt to “sweep” the road of your supply line to one side for additional apparatus to stage closer to the scene
- Always attempt to hook large diameter intakes on the officer side *if* able

Truck Operations

PPE Considerations:

- Structural PPE will be carried by all personnel.
- During summer months consider bringing Wildland PPE, especially on move-ups.
- Staffing for the truck in district: minimum 3, maximum 5

Apparatus Placement

- Residential Fires/ Alarms / Investigation
 - a. Consider the address side just forward of the front door with best positioning for aerial
- Commercial Fires /Alarms / Investigation
 - a. Consider placement on a corner of the building to maximize ladder usage on 2 sides
- Wildland fires / Backyard burns
 - a. Stage apparatus with an exit strategy
- Vehicle fires
 - a. Stage at a 45° angle away from the vehicle 70 to 150ft. away (based on hose-line being pulled) in a position that that apparatus will not become a target should the vehicle roll or an explosion happen

Apparatus Functions

- Primary functions of the truck:
 - Fire attack
 - Aerial and ground ladder placement
 - Elevated master-stream
 - Medical response and patient care
 - Provide technical rescue support including, but not limited to:
 - ❖ Rope rescue, trench collapse, confined space rescue, structural collapse

Quint Operation

- Always attempt to hook large diameter intakes on the officer side *if* able
- Always attempt to hook the master-stream ladder pipe intake on the officer side *if* able
- The truck DOES NOT take a hydrant or lay-in
 - The truck is set up so that the Engineer may take a hydrant if within 100ft. of the apparatus by “hand-jacking” the supply line from either side of the cross-bed

Truck Operations (Cont.)

Considerations:

- 3148 provides a unique apparatus being a quint as it can perform “Truck Operations” well and it can provide “Engine Operations” well, but initially it cannot do both until more units arrive
- IC or the Truck Officer needs to pick which assignment is first

Truck Placement

- The Tiller Operator is responsible for staging the truck in the best placement for the aerial
- The tractor will be placed “in-line” or slightly canted away (roughly 20°) from the objective building
- At least 2 chocks will be placed on the front driver wheel, in steep inclines a second set should be deployed on the officer-side front wheels
- DO NOT place outriggers on soft ground, over vaults or covers, they need to be placed on hard, packed ground (pavement or concrete is preferable)
- On inclines the truck should be placed “tractor downhill”

Initial Operation Fire Attack vs, Truck Operations (Rescue)

- Upon arrival if the truck:
 - Is designated for truck work
 - The crew will work to deploy the aerial device, set up ground ladders, and go inside for: Search and Rescue, Investigation, etc.
 - Is designated for Fire Attack:
 - The Company Officer and firefighters will pull lines and perform fire attack
 - The Aerial operator will stay behind to assist the Engineer and then Transition to Aerial operations for a next-in engine crew will then assume “Truck Company” functions *if necessary*

Water Supply, Rescue/ Waterway Pin

- Only one 1 ¾” pre-connect line can be deployed without a water source established
- The 2.5” attack line is not pre-connected like the engines; it needs to be pulled (from either side) and then hooked to a 2.5” discharge
- Supplying the master-stream should be from the Officer side if able, estimated max pressure is 225PSI following the rule of 80/80/80, the supply hose must be rated to support that PSI
- The Rescue/Waterway Pin will be left in “rescue” mode during all initial assignments
- If the Aerial is to be used for master-stream operations the aerial must be retracted prior to moving the pin from one position to another

Aerial Operations

Aerial Operation

- A certified Aerial operator is required for operating the aerial during incidents
- Outriggers should always be “maxed” out in the extended position if able, if needing to “short jack”, short jack on the side away from the objective building
- Jack pins may be utilized if the Aerial Operator chooses to use them
- The Aerial Operator is responsible for safety and guidance to all crews on the ladder
- Utilize a spotter whenever possible for ladder placement
- Always attempt to align the rungs

Tip Riding

- “Riding the tip” is an extremely dangerous maneuver and should only be performed when necessary for rescue, firefighters must ensure feet, hands, tools and ladder-belts are clear of moving parts. Tip riding should not be done during routine training
- Two markings are on the bed section and correspond to a marking on the first fly
 - Fly tape matches single bed tape: Lowest spot before the top steps are at danger zone
 - Fly tape matches two bed tape: Lowest spot before the bottom steps are at danger zone
- The Aerial operator must raise the ladder past the first marking prior to letting a firefighter “ride the tip out”
- The Aerial Operators must stop the ladder at the correct marking when lowering if personnel are on the tip

PPE

- Ladder belts are:
 - Required anytime someone is “working” off the ladder
 - Not required when using the ladder to transition up or down
- Any firefighter climbing the aerial for the first time shall be hooked into the fall arrestor
- Gloves and helmet are minimum ladder PPE at all times

Hand Signals for Aerial Spotting

- Always attempt to make your hand signals large and noticeable to the Aerial Operator, stand where they can see you
 - Extend: Thumbs facing out away from head
 - Retract: Thumbs facing in towards each other
 - Left or Right: Point towards the objective with an open hand
 - Raise: pointing up, or hand straight up
 - Lower: point towards the ground and rotate your hand (faster or slower)

MUTUAL Aid Staffing

Considerations:

- Initial mutual aid response is assigned from the Clatsop County FDB mutual aid plan.
- Apparatus can be specially requested from an Incident Commander.
- An apparatus shall not respond until it has a qualified crew per the minimum requirements.
- Trainees (black hats) shall not respond out of district except one On-duty Resident Volunteer.

Engine Response (Mutual Aid)

- Minimum of 3 qualified personnel
 - a. Crew: Engineer, Company Officer, and 1 or 2 firefighters

Truck Response (Mutual Aid)

- Minimum is 4 qualified personnel
 - a. Crew: Engineer, Company Officer, Tiller Operator, and 1 or 2 firefighters
 - b. Firefighters not qualified on the truck shall not respond on a mutual aid on the truck

Tender Response (Mutual Aid)

- Minimum:
 - a. Tender Crew 2: Engineer, Company Officer *or* Firefighter
 - b. Engine Crew 3: Engineer, Company Officer, and 1 or 2 firefighters

Brush Truck Response (Mutual Aid)

- Minimum is 2 qualified personnel
 - a. Note: Each member must be at a minimum FFT2
 - b. Crew: An Officer or a qualified Engine Boss must be onboard

MUTUAL Aid: Technical Rescue

Considerations:

- Seaside Fire & Rescue may be called upon to respond to technical rescue incidents outside of our normal response area, it is impossible to plan for every type of event.
- Crews must not leave the station until rescuers trained in the type of incident arrive.

Technical Rescue (CSR, TRENCH, ROPE Rescue Urban environment)

- 3148 will respond, follow all *appropriate protocols* pertaining to the incident
 - a. Take a second primary rope bag from one of the engines
 - b. Additional apparatus to respond *if* needed for manpower support
 - i. 3156 will respond second only *if* a trench rescue with trench panels

Rope Rescue in Rural environment

- 3156 will respond (max crew of 4), follow all *appropriate protocols* for operations
 - a. Consider the following:
 - i. Take a second primary rope bag from one of the engines
 - ii. Need for arizona vortex? Grab all 4 bags off of the truck
 - iii. Additional duty rigs or apparatus to respond for manpower support

Swift Water Rescue

- 3156 will respond (max crew of 3), follow all *appropriate protocols* for operations
 - a. Consider the following:
 - i. Take a second primary rope bag from one of the engines
 - ii. Additional duty rigs or apparatus to respond for manpower support

Ocean Rescue

- 3156 will respond (max crew of 3), follow all *appropriate protocols* for operations
 - a. 3156 will tow the double RWC trailer
- Duty Vehicle will respond (crew of 2)
 - a. At least one crewmember is a RWC Operator or Rescue Swimmer
- Consider 2nd duty vehicle to act as Rescue Group Supervisor/ Liaison for requesting agency
 - a. Note: This is necessary on Indian Beach rescues or other coastal areas where the RWCs must launch and travel a distance over water

Highway Response

Considerations:

- Highway Incidents are a leading cause for injuries and death to responders nationwide. Never underestimate the incident, never turn your back to traffic, always continue to assess for and provide for the safety of responders until the incident is terminated.
- Always consider: “Lane plus one” when working a roadway scene.
- When in doubt, shut down the highway and reopen after scene stabilization.

Priorities:

1. Responder Safety
2. Patient Care
3. Traffic Flow

Background Information:

- US Department of Transportation and the State of Oregon recognize and practice TIMS (Traffic Incident Management), all personnel are responsible to maintain a working knowledge of current TIMs practices.

Life Safety:

- All personnel working at any roadway incident shall have at a minimum a 5 point breakaway safety vest on.
 - Exception: Crews actively engaged in the hot-zone performing life safety extrication or fighting fire.
- Never turn your back to moving traffic, especially before an adequate block is in place
 - If you have to turn your back ensure a spotter is positioned to watch and alert you
- Cones do not stop traffic, our vehicles do.
- Apparatus shall be used whenever possible to protect a roadway scene to limit as much as possible the chance for a driver to enter into the working area and strike a responder.

Actions

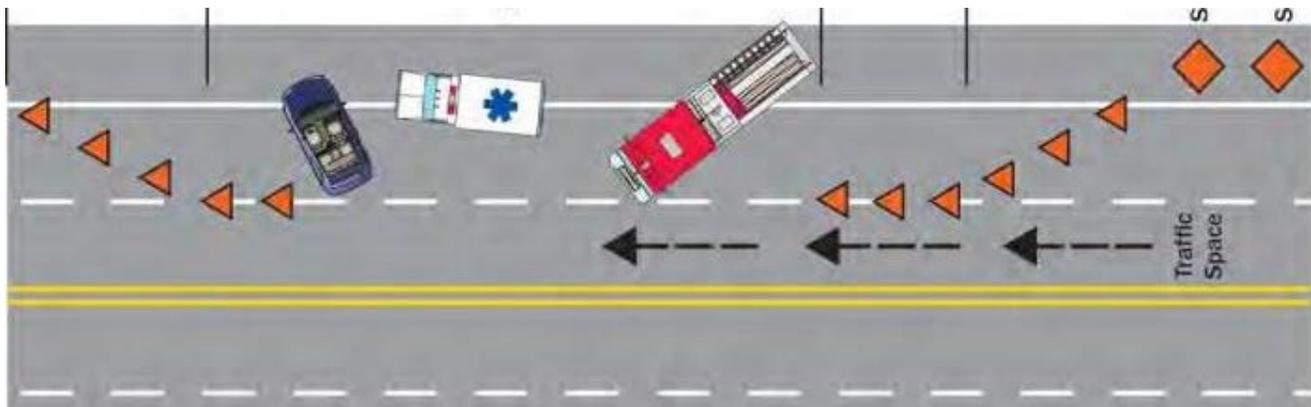
1. The first unit on scene shall provide a summary size up of the incident
 - a. Detailed size up may occur after a scene 360° is conducted
 - b. If an MCI is warranted, treat patients *per* MCI protocols
2. More than one fire unit on scene: Establish command and get a working channel
 - a. All units and incoming units switch to the working channel as soon as practical
3. Scene Management
 - a. Position (or reposition) apparatus in accordance to current TIMS/DOT procedures
 - b. If able have all emergency response vehicles on the same side of the road as the scene unless the scene is being managed with traffic control flaggers
 - c. Consider emergency light management and headlight dimming to minimize distractions
4. Establish traffic control as soon as practical when enough personnel are on scene to handle patient care or rescue operations
5. Fire IC should make contact with all agencies on the incident to ensure everyone is working together on handling the incident

Highway Response (cont.)

6. Emergency vehicles coming into the scene should be cognizant of oncoming / turn-around traffic in the opposite lane of travel as they approach the scene
7. When clearing the incident ensure all personnel are aware of the breakdown process
 - a. Flaggers should consider alerting the first stopped vehicle in line of the plan and when it is clear to drive as the emergency vehicles depart

Traffic Control

- Place vehicle to protect personnel in the roadway, angle to block as much as possible (don't forget to block the shoulder)
- Second apparatus shall continue to stage to protect the scene and the ambulance loading
- Cones and electronic warning lights (traffic disks) should be used to direct traffic from upstream of the blocking vehicles and through the scene
- Cones, flares, or signs may be used for extended scenes or on a corner
 - A driver at 55mph needs about 500 feet to stop upon seeing a warning device
- Consider the use of Law Enforcement and ODOT to assist in traffic control
- Flaggers need to have communication with the IC and each other (verbal, radio, hand signals) and be able to alert other responders of an emergency (Air horn, radio, whistle, etc.)
- Never redirect traffic into a privately owned road or parking lot



Terms

- **Advanced Warning Area:** Section of highway where a driver is informed of upcoming incident
- **Upstream:** Traffic flow approaching the scene
- **Transition:** Where traffic is redirected out of their normal path
- **Activity Area:** Also known as the scene or incident space
- **Termination:** Where traffic is redirected back to their normal path
- **Downstream:** Traffic flow departing the scene

Wind Storm Damage Trees / Lines Down

Considerations:

- A risk vs. benefit decision must be made on any tree down incident. If the potential for further trees to cause injuries or damage is present and there are no victims or patients, consideration may be made to close off roads and streets and await the storm to subside.

Safety Considerations:

- Helmets shall be worn if there is the potential for trees or overhead obstructions striking responders
- Any personnel operating a saw will be competent in their operation, providing for: eye, ear, head, hand, and leg protection

Initial Response

1. Duty Officer / Vehicle will respond first
 - a. Establish command, stage with a safety margin looking for secondary blow-downs
 - b. Provide size-up and determine the need for additional response considering:
 - i. Has the hazard been mitigated and there is no further need?
 - ii. Do you have an imminent threat of additional blow-down that can cause injuries?
 - iii. The incident is safe but requires the fire department response for clearing
 - c. Follow *Highway Response* Protocol if applicable
 - d. Identify need for other resources: Power Company, ODOT, Public Works, etc.

Secondary Actions

2. If no need for additional fire department units:
 - a. Determine if you can clear or need to remain on scene due to hazards until relieved by another appropriate agency
3. If further fire department response is needed:
 - a. Establish communications and provide staging and assignment instructions
4. Never approach the scene if power lines have been involved until Power Company clears the scene
5. If further fire department response is needed
 - a. Provide staging and assignment instructions
 - b. Communications

Incident

6. On any incident with the threat of further damage or injury by trees a lookout or lookouts shall be posted and:
 - a. Able to notify all crews of a threat by radio or voice and a blast of an air horn
7. Apparatus should be placed to block or provide cover from trees
8. Clear incident safely and expeditiously with the minimum number of responders necessary

Apparatus Backing At the Station

Safety Considerations:

- Vehicle's "Reverse" option shall only be engaged while actually backing.
- Airbrakes are to be engaged anytime embarking or disembarking crewmembers.
- Emergency lights shall be activated anytime when stopping, backing, or making unexpected maneuvers that do not conform to normal traffic patterns.
- All crewmembers should check both ways when disembarking for vehicles in the street.

Protocol

1. If able, drivers should position the apparatus on the apron or across the street in the parking lot with emergency lights off until spotters and road-guards are in place
 - a. If stopped in the street: Activate emergency lights and take a blocking position while disembarking road-guards
2. Drivers shall have their window down when backing
3. All road-guards and spotters shall wear reflective equipment at night
4. Road-guard and spotter positions
 - a. 4 or more personnel available:
Backing spotter, North road-guard, South road-guard, Front bumper spotter
 - b. 3 personnel available
Backing spotter, North road-guard, South road-guard
2 persons available
Backing spotter, South road-guard
 - c. 1 person available:
Backing spotter
5. Drivers will wait to be signaled into entering the street or starting their backing
6. Backing spotters will position themselves to maintain eye contact with the driver and minimum walking (I.E. do not walk all the way out to the street if it is not needed), once in the bays the spotter will move all the way back into the station where the rig's tailboard will be
7. Backing spotters shall not stand directly behind the apparatus in case they fall, be extremely careful to not end up in an "pinch point" next to the building or posts
8. Backing spotters are responsible for keeping personnel from walking behind an apparatus and for stopping the vehicle should an emergency develop; the driver is responsible for backing on the line

Additional

1. Front bumper spotters need to be in a position at the front officer side of the apparatus to see down the Officer's side and have voice or hand signal communication with the driver
2. When backing the tiller, the Tiller Operator is the "Driver" in charge of backing
3. Should an apparatus do a "Pull-through" parking, 1 person should take up a position as the front bumper spotter to clear the pinch-point of the building

Apparatus Backing

Safety Considerations:

- Vehicle's "Reverse" option shall only be engaged while actually backing.
- Airbrakes are to be engaged anytime embarking or disembarking crewmembers.
- Emergency lights shall be activated anytime when stopping, backing, or making unexpected maneuvers that do not conform to normal traffic patterns.
- All crewmembers should check both ways when disembarking for vehicles.

Protocol

1. Drivers should have their window down when backing
2. All road-guards and spotters shall wear reflective equipment at night
3. One backer or spotter at a minimum should be positioned to clear the apparatus of any obstructions anytime an apparatus needs to backup
 - a. Spotter: Provides instruction to the driver to stop only if needed to clear an obstruction
 - b. Backer: Provides specific directions to the driver to stop, turn, etc. to clear all obstructions
4. Drivers will wait to be signaled by their Spotter / Backer prior to backing
5. Spotters / Backers will position themselves to maintain eye contact with the driver
6. Spotters / Backers shall not stand directly behind the apparatus, plan for a minimum of a 10-foot distance from the rear of the vehicle
7. Drivers will stop their vehicle at any time they lose sight of their backer/spotter

Additional

1. Consider the use of additional spotters or road-guards if needed
2. Consider using radios to communicate amongst backers /spotters and the driver if needed
3. Front bumper spotters need to be in a position at the front officer side of the apparatus to see down the officer's side and have voice or hand signal communication with the driver
4. When backing the tiller, the Tiller Operator is the "Driver" in charge of backing

**Seaside Fire & Rescue
Operations Protocols
HAZMAT**

Page	Protocol
C-1	Hazmat Incidents
C-2	Natural Gas Emergencies
C-3	Propane Emergencies
C-4	White Powder / Suspicious Package
C-5	Bomb Threat
C-6	Explosions / Bombing Incident
C-7	Weapons of Mass Destruction
C-8	WMD Considerations
C-9	Biohazard / Respiratory Exposure
C-10	Gross Decontamination
C-11	DECON Corridor setup for Hazmat Team

HAZMAT Incidents

Chemtrec:	1-800-424-9300	(Chemical information)
Poison Control:	1-800-222-1222	(Reactivity and material compatibility)
OERS:	1-800-452-0311	(Activate special resources and Hazmat Team)

Hazardous Materials Incident Priorities:

- Life Safety
- Incident Stabilization
- Environmental Protection
- Property Conservation

Initial Response

1. Approach cautiously, observe from a distance. Consider uphill, upwind, upstream
 - a. Utilize Emergency Response Guidebook for unknowns or mixed cargo (111)
2. Establish command and provide a size-up
3. Establish zones and scene perimeter, your first goal is to *Isolate and Deny Entry*
 - a. HOT, Warm, and Cold Zones
4. Establish communications
5. Gather information and attempt to identify the nature of the emergency
 - a. Materials involved, any available data (SDS, shipping papers, packing slip, etc.)
 - b. Access online or on iPads (WISER, ASK RAIL)
6. Establish ACCOUNTABILITY
7. Contact HAZMAT 11 via phone for consult

Secondary Actions

8. Establish a Safety officer
9. Establish Staging for all incoming units
10. Establish Medical (if there are multiple patients)
11. Activate a PIO, public notification if necessary
12. Utilize Public Works for perimeter control (notification, barriers, cones, signs, etc.)
13. Activate a Hazmat Response if needed via dispatch through OERS

Incident

14. Evacuate any areas that may be affected by the product
 - a. Casualty collection point
 - b. Decontamination area
15. Triage, Treatment, Transport areas
16. Defensive measures (Damn, Dike, Divert)

Natural Gas Emergencies

Natural Gas Considerations:

- Natural Gas is lighter than air and it will rise.
- Has no natural odor and Mercaptan is added for odor, it will separate from the gas & sink over time.
- Can be found in liquid form in storage vessels and a gas form in pipelines.
- Natural gas can be used in vehicles as an alternative fuel source.

Natural Gas Emergencies on fire:

- DO NOT Extinguish a natural gas fire until the source/flow can be secured

Initial Response

1. Establish command and provide a size-up. 360° walk around with gas monitor
2. Consult ERG guide #115
3. DO NOT MAKE ENTRY / RETREAT from door or building when LEL is 10% or greater
4. Secure and maintain a perimeter. Evacuate any civilians
5. Identify what the issue is with the incident
6. Establish Accountability
7. Secure source to a building

Secondary Actions

8. Establish a Safety officer
9. Notify gas company
10. Notify power company if necessary

Incident

11. All units in the hot zone in full PPE and SCBAs
12. Establish a water source
13. Deploy appropriate handlines if necessary
 - a. Any unit in a structure without a handline should carry a dry chemical extinguisher
14. Do not operate electrical devices (light switches, cell phones, etc.)
15. Investigate and identify cause, obtain gas monitor readings
16. Ventilate buildings naturally, fans may be used after windows and doors are opened
17. Consider and provide for if needed:
 - a. Rehab
 - b. Staging
 - c. PIO
 - d. Medical treatment/ transporting ambulance

Propane Gas Emergencies

Propane Considerations:

- Heavier than air and it will sink and find its way through low places like culverts, basements, etc.
- Propane has no natural odor, Mercaptan is added for odor.
- Propane can be found in storage tanks from a few ounces to thousands of gallons.
- Propane is stored as a liquid and released as a gas.
- Propane can be used in vehicles as an alternative fuel source.

Propane Emergencies on fire:

- DO NOT Extinguish a propane fire until the source/flow can be secured
- Propane produces a white cloud vapor when released
Can readily ignite at the edge of the vapor cloud
- Plan for defensive operations

Fire impinging (threatening) a propane tank:

- Number 1 priority is to cool the tank
- Beware of BLEVE (Boiling Liquid Expanding Vapor Explosion)
- Cool tanks with a minimum of 500GPM for large tanks, 250GPM for smaller tanks

Initial Response

1. Establish command and provide a size-up. 360° walk around with gas monitor
2. Secure and maintain a perimeter. Evacuate any civilians
3. Identify what the issue is with the incident
4. Establish Accountability
5. Secure source *if* able

Secondary Actions

6. Establish a SAFETY officer
7. Activate a Hazmat Response if needed via dispatch through OERS

Incident

8. All units in the hot zone in full PPE and SCBAs
9. Establish a water source
10. Deploy appropriate hand-lines, ground monitors, or master-streams if necessary
11. Consider and provide for if needed:
 - a. Rehab
 - b. Staging
 - c. PIO
 - d. Medical treatment/ transporting ambulance

White Powder / Suspicious Package

Initial Response

1. DO NOT ATTEMPT to put “eyes on” the package
 - a. Units should not stage in direct line-of-sight of the incident within 1500ft. Utilize buildings, vehicles, or other natural barriers
2. Establish unified command with Police and provide a size-up
3. Establish zones and scene perimeter, your first goal is to *Isolate and Deny Entry*
 - a. HOT, Warm, and Cold Zones
4. Follow *HAZMAT Incident* Protocol as needed
5. Establish Accountability
6. Contact:
 - a. HAZMAT 11 via phone for consult if needed
 - b. Have Police contact OSP Bomb Squad via phone for consult if needed

Secondary Actions

7. Determine who has been in contact with the package / substance
 - a. Keep them on scene, isolate and treat if needed
8. Follow-up Information
 - a. Is the package accompanied by a threat
 - b. What is the type of package or container involved
 - c. Is the package open, leaking, emitting odors or vapors
 - d. Is the package stained, discolored, making noise, protruding wires
 - e. Any markings, numbers, symbols, etc.
 - f. Is anyone sick, injured or complaining of being sick
9. Activate a PIO
10. Utilize Public Works for perimeter control (notification, barriers, cones, signs, etc.)
11. Activate a Hazmat / Bomb Squad Response as needed via through OERS
12. Consider the possibility of secondary devices
13. Plan for the worst, come up with a “Plan B”, considering:
 - a. Medical treatment plan, structural collapse, Triage, Treatment, Transport areas

Incident

14. Secure utilities as needed based on the information
 - a. HVAC systems
 - b. Machinery
 - c. Power, Propane/ Gas
15. Set up DECON and leave room for Hazmat’s decon equipment
16. Continue to maintain perimeter and wait for specialty unit to provide an “all clear”

Bomb Threat

Report anything you find suspicious immediately to Incident Command

Initial Response

1. Stage and Assess from a safe location
 - a. Units should not stage in direct line-of-sight of the incident within 1500ft. Utilize buildings, vehicles, or other natural barriers
2. Establish a Unified Command with Police and provide a size-up
3. Establish zones and scene perimeter, your first goal is to *Isolate and Deny Entry*
 - a. HOT, Warm, and Cold Zones
4. Follow *HAZMAT Incident* Protocol as needed
5. Establish Accountability
6. Police contact OSP Bomb Squad via phone for consult if needed

Secondary Actions

7. Activate a PIO, public notification if necessary
8. Utilize Public Works for perimeter control (notification, barriers, cones, signs, etc.)
9. Activate a Hazmat / Bomb Squad response as needed via dispatch through OERS
10. Consider the possibility of secondary devices
11. Plan for the worst, come up with a “Plan B”, considering:
 - a. Medical treatment plan, structural collapse, Triage, Treatment, Transport areas

Incident

12. Continue to maintain perimeter and wait for specialty unit to provide an “all Clear”

Explosions / Bombing Incident

Life Safety:

- Report anything you find suspicious immediately to Incident Command
- Consider the possibility of secondary devices
- Respiratory protection is a must due to particulates in the air. Levels of protection should be established and all personnel aware based on zones

Initial Response

1. Stage and Assess from a safe location
2. Establish a Unified Command with Police and provide a size-up
3. Establish zones and scene perimeter, your first goal is to *Isolate and Deny Entry*
 - a. HOT, Warm, and Cold Zones
4. Establish Accountability
5. Police contact and/ or activate OSP Bomb Squad
6. Follow-up information and report
 - a. Number of victims
 - b. Fire control problems
 - c. Building Collapse and structural integrity issues
 - d. Ingress and egress routes
7. Follow other *Fire/ Rescue/ Hazmat/ Medical* Protocols as needed

Secondary Actions

8. Determine or rule out WMD, Chemical Biological, radiological threats
9. Activate a PIO, public notification if necessary
10. Additional resources if needed (Mutual aid, engineers, heavy equipment, Hazmat, etc.)
11. Establish a Safety officer
12. Establish staging for all incoming units
13. Establish an Medical Command (if there are multiple patients)
14. Utilize Public Works for perimeter control (notification, barriers, cones, signs, etc.)

Incident

12. Keep responders not actively assigned to a task in STAGING or REHAB
13. Casualty collection point (walking wounded)
14. Decontamination area
15. Triage, Treatment, Transport areas
16. Minimize number of responders committed into hazard areas

Weapons of Mass Destruction (WMD) Incidents

Considerations:

- Avoid unknown liquids.
- Don't expose yourself to threats that may be invisible, you can't help if you become a victim

Initial Response

- Approach cautiously, observe from a distance. Consider uphill, upwind, upstream
 - ✓ Stop 500 feet from incident site or where casualties/ damage are first encountered and size-up the situation before deciding if you need to move closer
- Establish unified command with Police and provide a size-up
- Establish zones and scene perimeter, your first goal is to *Isolate and Deny Entry*
 - ✓ HOT, Warm, and Cold Zones
 - ✓ Do not let incoming units become part of the scene, always stage away and move closer as needed or as hazards are mitigated
- Establish a Recon Unit: Don full firefighting gear with SCBA and gather as much information as possible about the incident without directly exposing themselves to hazards
 - ✓ Avoid contact with unknown liquids and victims
- Follow *HAZMAT Incident* Protocols as needed
- Establish Accountability
- Activate a Hazmat / Bomb Squad Response as needed through OERS

Secondary Actions

- Follow-up Information by reconnaissance
 - ✓ Conditions found
 - ✓ Apparent need for rescues
 - ✓ Gross estimated number of victims
 - ✓ Signs and symptoms of victims
 - ✓ Need for victim decontamination
- Activate a PIO, public notification if necessary
- Utilize Public Works for perimeter control (notification, barriers, cones, signs, etc.)
- Expand the incident, considering:
 - ✓ Additional units and ambulances
 - ✓ MCI Protocols
 - ✓ Casualty collection points
 - ✓ Triage, Treatment, Transport areas, notify all area hospitals
 - ✓ Decontamination corridors
- Conduct snatch and grab rescues if feasible
- Identify agents through detection devices and patient signs and symptom

(WMD) Considerations

WMD Common Signs and Symptoms based on type of agent	
Nerve Agents - G & V agents <ul style="list-style-type: none"> • Salivation • Urination • Defecation • Dim vision • Pin Point pupils 	Blister Agents <ul style="list-style-type: none"> • Reddening of the skin • Blisters • Eye pain • Coughing • Airway Obstructions
Blood Agents – Cyanide / Chlorine / Phosgene / Chlorine <ul style="list-style-type: none"> • Eyes & Airway irritation • Dizziness • Pulmonary edema 	

Radiological Incidents

- Always assume chemical, radiological or biological material are present in an explosive event
 - ✓ Always consider:
 - Maximize distance
 - Minimize exposure time
 - Maximize shielding
- Wear full PPE and use an SCBA until such materials can be ruled out
- In the absence of dosimeters, lifesaving operation may be conducted for a maximum of 15 minutes by a crew.
- Remove only savable victims, bodies can be recovered later
- Field Decontamination needs to be done on all victims and responders who entered the Hot Zone. Remove and bag all clothing and times
- Wait for HAZMAT team to arrive for any further investigation into the hot zone

Biohazard / Respiratory Exposure

If Suspected prior to Entry / Exposure

1. Notify fire dispatch and transporting ambulance dispatch (if not aware already)
2. Limit the amount of responders needed in the hot zone
3. Don correct PPE based on the concern following current PPE guidelines

If suspected after Entry / Exposure

1. Stop any further responders from entering and clear all unnecessary personnel to don PPE
2. Utilize hand sanitizer and set aside or discard any equipment or gear that may have been contaminated (bag up items to be laundered or disinfected)
3. Don correct PPE based on the concern following current PPE guidelines

PPE Donning

4. Don correct PPE based on the known or perceived threat:
 - a. Routine EMS Incidents: Exam Gloves & Eye glasses
 - b. Droplet contamination: Tyvek suits, eye goggles, N-95 masks
 - c. Boot covers: Protect boots (generally not needed in conjunction with suits)
 - d. Splash shields: worn as an alternative to goggles, especially by crews not in direct patient contact
 - e. Respiratory protection
 - i. N-95 mask. As needed to protect against airborne particulates
 - ii. SCBA. Needed during high demand physical operations
 - iii. Confined space manifold. Extended operations inside the hot zone

Scene Termination

5. One responder must be available to assist in helping others doff their equipment
 - a. They should be one step below what the Hot Zone responders were wearing
6. Doff all equipment using isolation methods, throw away disposable equipment, bag disinfect reusable equipment
7. Avoid touching your face, use hand sanitizer immediately, wash hands as soon as available
8. Disinfect all equipment using approved chemicals

Reporting

9. Complete required documentation or notification regarding contact or exposure

Gross Decontamination

Considerations:

- This procedure is based on a large amount of civilian personnel or emergency responders needed immediate gross decontamination based on a known or perceived threat.

Initial Response

1. Follow appropriate Hazmat Protocols for setting up and containing the scene
2. Identify the location of the DECON corridor and stage all personnel there
3. Set up one (1) or two (2) engines based on the severity of the incident for DECON
4. Engage pump and let it warm up the water

Decon Set-up

10. First option may be a bumper line pulled for wash-down of individuals
11. Second option is to set up DECON shower(s) on the officer side of the pump panel
12. Consider: Time to set-up, exposure duration of the product on people, and privacy
 - a. Park two engines approximately 12 feet away from each other with officer sides facing each other
 - b. Place two roof ladders across the engines one in the front, one in the back.
 - c. Deploy a salvage tarp and a rug runner on each roofer, adjusting for a walkway through them and leave extra on the ground, weight them down with cones
 - i. If the need for two corridors is required place an extension ladder across from one roofer to the next and drape additional tarps across it
 - d. Activate showers, have individual strip and enter shower, after a full rinse they will proceed to the rear and be given blankets, Tyvek suits, clothing, towels, etc. to cover up with until they can be evaluated by EMS
 - e. Personal items should be bagged to either be returned or destroyed. Label bags with names/identification, and if time/responders allow, inventory valuables
 - i. Responders conducting this should be wearing appropriate PPE for the product contamination concerns



Decon Set-up for Hazmat Team

Considerations:

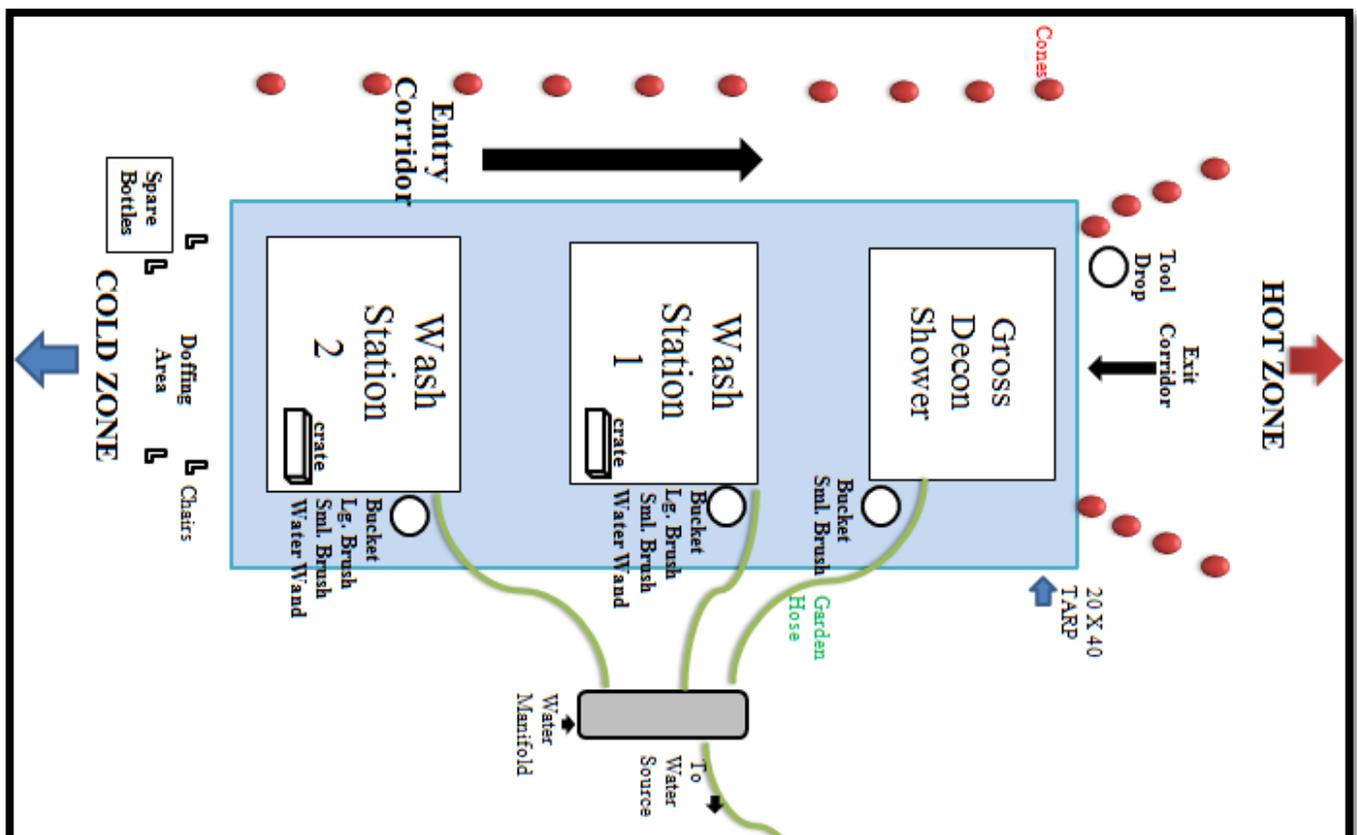
- When a hazmat team is responding the DECON Corridor must be planned in the warm zone with adequate are for set-up.

Decon Priorities

1. Low air takes priority
2. Emergency DECON 90° of the incident (uphill/upwind) with pool and booster line
3. DECON area needs to have constant air monitoring
4. During Gross DECON responder washes their own hands
5. Communication is key amongst all personnel in the DECON process

Decon Corridor Rules

1. DECON team is one level below the Entry team
2. Cleanest Responder through first
3. When assisting with removing suits do not touch the inside of a suit
4. Crates are for washing the bottom of boots, not for standing
5. DECON team does themselves starting with the responder closest to the hot zone



**Seaside Fire & Rescue
Operations Protocols**

Fire

Page	Protocol
D-1	Fire Command
D-2	Offensive Structure Fire
D-3	Defensive Structure Fire
D-4	Commercial Fires
D-5	High-Rise / Standpipe Operations
D-6	Heavy Content (Hoarder)
D-7	Attic Fires
D-8	Basement Fires
D-9	Garage Fires
D-10	Vehicle Fires
D-11	Wind Driven Fires
D-12	Non-Hydranted Area Fire
D-13	Hydrant Water Supply
D-14	Overhaul
D-15	Forcible Entry
D-16	Structural Search and Rescue
D-18	Ventilation
D-19	Vertical Ventilation
D-20	MAYDAY
D-21	Rapid Intervention Crew (RIC) Duties
D-22	Wildland Urban Interface
D-23	Wildland

Fire Command

Considerations:

- Consider an operational period for a structure fire as every 12 Minutes... start planning for the next operational period early

Tactical Priorities (RECEO-VS):

- Rescue
- Exposures
- Confine the fire
- Extinguish the fire
- Overhaul
- Ventilate
- Salvage

A constant risk assessment must be performed by all members on the fire-ground

- Risk a lot to save a lot
- Risk little to save little
- Risk nothing to save what is lost already

Initial Considerations for the Incident Commander

1. Provide a size-up, obtain a 360° view (or as much as you can)
 - a. Size, type & scope of building
 - b. Type of smoke, possible type/location of fire
 - c. Identify sides of building (“Alpha” side is defaulted to the address side)
2. Establish Incident Command (IC), name the incident and establish the ICP location
 - a. Establish working channel
3. Assess and identify any immediate rescues
4. Assess and identify for threatened exposures
5. Give orders for Task, Location, Objectives

Secondary Considerations

6. Establish IC structure with OPERATIONS, ICP AID, and Divisions *and/or* Groups (As needed)
7. Establish SAFETY Officer, unless IC retains it
8. Establish as needed:
 - a. ACCOUNTABILITY: In charge of passports, monitoring locations of crews
 - b. REHAB: Assisting crews coming off of work with needs (hydration, food, medical, etc.)
 - c. STAGING: Large incidents may need a staging officer (for crews and/or apparatus)
 - d. COUNTY FIRE CHIEF: Responds on 2nd alarm, liaison to IC for county availability

Passing Command

9. Always announce an IC change over radio, Command should be passed off face-to face-if able
10. If passing command to a unit arriving or about to arrive:
 - a. Provide brief update with current objectives and any needs

Offensive Structure Fire

Considerations:

- Used for single or multi- story, single or multi- family dwellings house, townhomes, apartments.
- Objectives are the same, tactics may vary slightly and adjust based on the scale.

Initial Considerations

1. Establish size-up and Command per *Fire Command* Protocol
 - a. Consider protocols for: *Attic, Garage, Basement, Wind Driven, Hoarder*
2. Identify positioning for truck and first 2 engines
 - a. Announce if truck crew is assigned fire attack or ladder company operations early
3. Announce: *Offensive Attack* over the radio (or that you are transitioning to Offensive)
4. Give orders for: Task, Location, Objectives
5. Identify collapse zones (1 ½ times the height of the building) and danger areas
6. Establish 2in, 2out

Secondary Considerations

7. First due engine: Establish water supply and hook first arrived apparatus
8. Establish Rapid Intervention Crew (RIC)
9. Utilities secured
10. Secondary water source *if* needed
11. Structural Search and Rescue *per* protocol

Fire Attack Considerations

12. Consider initial attack from outside to cool/reset fire
13. Extinguishment and investigation in structure with hose-line(s)
14. Deploy Additional Lines
15. Multi-story buildings:
 - a. Ground ladders to upper floors and roof
 - b. Aerial deployed *if able*
16. Ventilation Plan

Extinguishment

17. Overhaul: Check for extension in void spaces and floors above and below
18. Salvage Assessment
19. Contact building official or fire investigation team as needed

Defensive Structure Fire

Considerations:

- Used for single or multi- story, single or multi- family dwellings House, townhomes, & apartments.
- Objectives are the same, tactics may vary slightly and adjust based on the scale.

Life Safety:

- During Defensive operations crews will not enter the involved structure, this attack is exterior only due to conditions of the building or limited crews on scene

Initial Considerations

1. Establish size-up and Command per *Fire Command* Protocol
 - a. Consider protocols for: *Attic, Garage, Basement, Wind Driven, Hoarder*
2. Identify positioning for truck and first 2 engines
 - a. Announce if truck crew is assigned fire attack or ladder company operations early
3. Give orders for: Task, Location, Objectives
4. Announce: *Defensive Attack* over the radio (or that you are transitioning to Defensive)
5. Identify collapse zones (1 ½ times the height of the building) and danger areas

Secondary Considerations

6. First Due Engine: Establish water supply and hook first arrived apparatus
7. Establish Rapid Intervention Crew (RIC) *if* needed
8. Utilities secured
9. Secondary water source *as* needed

Fire Attack Considerations

10. Engine placement for master stream
11. Aerial deployed *if able* for overhead master stream
12. Establish large hand-lines and ground monitors *as* needed
13. Exposures should be checked and protection established for them if threatened
14. Attack fire from outside accesses, make accesses *as* needed

Extinguishment

15. Overhaul: Check for extension in void spaces and floors above and below
16. Salvage Assessment
17. Contact building official or fire investigation team as needed

Commercial Fire

Considerations:

- Used for Assemblies (schools, churches, convention center, etc.), grocery stores, restaurants, mercantile, hotels, any large buildings with common open areas and not designed for living.
- Commercial occupancies present a life safety danger in that most of the occupants may be unfamiliar with the building layout including: escape routes and exits.
- Objectives are the same, tactics may vary slightly and adjust based on the scale and type of building.

Initial Considerations

1. Establish size-up and Command per *Fire Command* Protocol
2. Identify and plan for positioning of: 1st and 2nd due Trucks and first 3 engines
3. Identify collapse zones (1 ½ times the height of the building) and danger areas
4. Investigation / Information from building responsible and/or Pre-plan database
 - a. Nature and location of emergency
 - b. Life safety concerns, number of occupants and locations
 - c. Enunciator panel location
 - d. Identify stairwells for access
 - e. Lockbox/Knoxbox locations
5. Give orders for: Task, Location, Objectives
6. Establish 2in/2 out, followed by *RIC* when able, consider multiple crews

Secondary Considerations

7. Truck Placements: Corners of building for best access to two sides and the roof
8. First Due Engine: Establish water supply and hook first arrived apparatus
9. Second Due Engine: Hook FDCs (if the building has one) and supply them with water
10. Utilities secured
11. Multi-story buildings: Ground ladders and Aerials deployed to upper floors and Roof
12. Structural Search and Rescue *per* protocol

Fire Attack Considerations

13. Utilize *High-Rise/ Standpipe* Protocol
14. Extinguishment and Investigation in structure with hose-line
15. Ventilation Plan

Extinguishment

18. Overhaul: Check for extension in void spaces and floors above and below
19. Salvage Assessment
20. Contact building official or fire investigation team as needed

High-Rise / Standpipe Operations

Considerations:

- The use of elevators needs to be evaluated prior to using (power, smoke, stability)
- If using an elevator is an option only travel to the floor below the fire.
- Consider multiple operating channels or using a repeated channel if radio operations are hindered.
- If assigning divisions go by the floor the Division Supervisor is assigned (I.e., 3rd Floor: Div 3).

Initial Considerations

1. Establish size-up and IC per *Structure Fire Command* Protocol
2. Follow *Commercial Fire* Protocol
3. Minimum equipment to the fire floors:
 - a. All firefighters with SCBAS and full turnouts
 - b. High-rise bundle
 - i. 100ft 1 ¾ with nozzle, 50ft stick of 2 ½, High-rise bag
 - c. Knox keys, Fire extinguisher, TIC, and Gas monitor
 - d. Irons set & Long tool (pike pole or roof hook)
4. Identify staging location on the floor below the fire for equipment and additional resources
5. Determine: Investigation mode or Fire attack mode, communicate to Chain-of-Command
 - a. Protected stairwell
 - i. Consider fire floor standpipe connection
 - b. Unprotected stairwell
 - i. Connect to standpipe on the floor below and stretch hose up to fire floor
6. Initiate fire attack once 2in/ 2out has been established

Secondary Considerations

7. Ladders: Aerial Placement and Grounds Ladders up
 - a. When laddering a roof: primary ladder up and a secondary (escape ladder up)
8. Water supply established
9. Back-up team(s) to the fire floor
 - a. Bring extra equipment and SCBA bottles
10. Search and Rescue
 - a. Priorities: 1: Fire Floor, 2: Floor above, 3: Floor Below, 4th: all other floors above
11. RIC Established *per* protocol

Multi-story building with no standpipe

12. Make an improvised standpipe with 2 ½" Hose either inside a stairwell or exterior

Heavy Content Structure (Hoarder Home)

Considerations:

- Hoarder homes are extremely dangerous to firefighters because of so much debris in the structure and that common access/exit points may be blocked.
- Livable spaces: Typically the kitchen, bathroom, and living room are the main living spaces. Basements, bedrooms, and the attic are statistically the first rooms to “fill up” with stuff.
- Look for your indicators: If the yard is full of stuff (often covered in tarps) with paths, consider the house is full of stuff as well.
- Heavy content fires may actually help to isolate the fire and keep it contained (initially), this may be to the advantage of the fire department for a rescue. Incident Command must make a risk decision and initial probing inside the structure for the occupant may be done without a hose line. Utilize search-line and check only the immediate areas inside the openings.

Life Safety:

- Disregard standard openings such as doors and windows, look for and use the access points the resident uses. If you see padlocks, consider the space behind those inaccessible.
- Be aware of booby traps, some people may be concerned others will try to steal their collected items.
- If the occupant is out of the house and tells you there is no one else inside, consider it empty.
- When searching inside a structure, use of TICs is a must, stay inside of the “paths”, avoid moving or going over the piles.
- Only move debris if you are using stairs but do not stack the debris in your exit path!

Initial Considerations

1. Establish size-up and IC *per* Structure Fire Command Protocol
2. Announce over the radio that this is a Heavy Content Fire
3. Consider a 2nd alarm very early in this incident if you have signs of a fire inside
4. Continuous 360^o walk-arounds with a TIC should be done
5. Establish water supply and plan for large amount of water for extinguishment
6. Secondary crews need to probe and establish secondary exit points early

Fire Attack / Search and Rescue

7. Use paths inside the structure for your search
 - a. Do not leave paths, utilize search-rope and oriented searches to your advantage
 - b. Temperature and conditions will be deceiving inside the paths, utilize a TIC to scan the entire room as the crew moves forward
 - c. If you come to a room that has no pathways, DON'T search it!
8. Exit or do not enter the structure more than necessary for search and rescue, create access holes from the exterior and work in for fire attack

Attic Fire

Considerations:

- Attic fires often appear with smoke exiting vents and eaves, initial search into the structure may indicate little to no smoke in the structure. This should be a primary indicator of an attic fire.
- Time is against you to locate best access and start fire attack operations before the fire moves down into the living spaces.

Considerations

1. Attic fires are usually ventilation limited, so limiting the number of openings above the fire will control fire growth and development
2. Suppression efforts in the attic are the most effective if the attic remains ventilation limited
3. If the fire entered the attic from the exterior, initial efforts should be to extinguish the source first and follow the path of travel into the attic space
4. Aggressive salvage of the occupancy's contents should be a high priority
5. Secure utilities
6. Utilize TIC for size-up, progress, and hot spots
7. Eve attack
 - a. Attack the fire through the soffit or bird block. This method applies water to the majority of the underside of the decking. Final extinguishment and overhaul completed by pulling ceiling from the inside
8. Bottom up attack
 - a. Attack the fire from the interior of the structure by making a small hole to allow for hose stream application. Choose an attack position that allows you to take advantage of building construction (such as a hall, it may provide wall to wall access), once the gasses are cooled and the fire is knocked down the hole can be expanded for complete extinguishment
9. Top down attack
 - a. Attack the fire from the exterior of the structure by making a small hole in the roof to allow for hose stream application and start the process of steam conversion. Once the gasses are cooled and the fire is knocked down open the roof up and investigate for complete extinguishment
10. Gable end attack
 - a. This attack method has limited effectiveness, but may provide initial knockdown if the fire is adjacent to the gable. You must follow up with either Bottom up or Top down methods for complete extinguishment

Basement Fire

Considerations:

- Crawlspace: Area below the lowest level of normal means of egress not suitable for normal human occupancy (usually you cannot stand up in one).
- Basement: A floor (or any floors) below the normal means of access and egress, if it is below the first floor, call it a basement.
- Multiple basement floors are named B1, B2, B3, etc. in the order you would descend down.

Life Safety:

- Descending down interior stairs into a basement fire places firefighters moving through the hottest lay of fire gases, and reduced visibility.
- Firefighters should descend feet first into the basement sounding the steps as they go.
- Sound with a tool when working over a basement or descending stairs.

Considerations

1. Communicate to all incoming units (and Command) that you have a fire in the basement.
2. Working above a basement fire is extremely dangerous, Crews must sound the floor aggressively *if* going interior
3. Secure utilities
4. Use a TIC to identify the seat of the fire
5. Identify early (if possible) whether the basement is finished or unfinished (an unfinished basement will have unprotected floor joist that may fail earlier
6. Walk-out basements: use the existing door as the entry point for fire attack
7. Lookout basements: consider exterior attack from existing openings for initial knockdown
8. Consider a window-to-door conversion at ground level on a room above the fire, cut an access hole in the floor for water application
9. Coordinate ventilation with fire attack, have additional exposure lines in place as soon as possible

Garage Fire

Considerations:

- Garages pose a danger to firefighter due to the amount of unknown stored materials , machinery, fuel load and potential unfinished walls and ceilings.

Considerations

1. Garage door failed
 - a. Advance the first attack line to the main body of the fire for knockdown
 - b. Advance secondary attack line inside of the residence
 - c. Remove any overhanging door panels

2. Garage door intact
 - a. Cut garage door
 - i. Consider small initial hole at the beginning large enough to water application to cool the fire while the rest of the cut is made
 - ii. Make a vertical cut approximately 1ft. in from the wall from top to bottom
 - iii. Make a horizontal cut as high up as possible across the entire door
 - iv. Make your last vertical cut down the opposite side of the first cut approximately 1ft. from the wall
 1. Hose team must be in place to protect cutting firefighter
 2. Second firefighter should manage the door pieces
 - v. Completely remove the garage door parts
 1. Secure the left-over overhead door portion so it cannot come down
 - vi. Advance the first attack line to the main body of the fire for knockdown
 - b. Advance secondary attack line inside of the residence

3. Extinguishment and Investigation
 - a. Consider positive pressure ventilation (PPV) to pressurize the house after confirming all fire is extinguished and not in any concealed spaces
 - b. Overhaul: Check for extension in void spaces and floors above and below
 - c. Salvage Assessment

Detached Garage / Shop / Shed

1. Consider exposure protection first
 - a. Initial actions should be from a defensive standpoint to keep the fire contained
 - b. Create openings in the walls, utilize doors and attack fire from outside working interior based on fire conditions and the condition of the building

Vehicle Fire

Considerations:

- Any vehicle that is movable on wheels (Car, truck, semi, RV, trailer, etc.).

Life Safety:

- All personnel in the hot zone need to be in full structural PPE on Air.
- Be concerned for explosions: Gas lines/ tank, hybrid or electric vehicle batteries, propane tanks, rolling drug labs, etc.
- Be concerned for projectiles (such as hydraulic struts) failing and leaving the vehicle.
- Aluminum (or other exotic metals) on fire may release a small “explosion” with water application.

Alternative fuel vehicles (Hybrid, electric, propane, natural gas, etc.):

- Present challenges on their own, attempt to identify the vehicle and look for firefighting information.
- Often have shutoff valves to isolate the fuel/power source.
- May have bright orange or other colored cables leading to power indicating DO NOT CUT.

Initial Considerations

1. Provide a size-up of incident considering:
 - a. Size and type of vehicle
 - b. Life safety concerns
 - c. Exposures that are or may become threatened
 - d. Look for indicators such as is the main fire in the engine compartment or the passenger compartment
2. Stage apparatus off of the corners of the vehicle (at 45° angles) if able 70 to 125 ft. away (based on attack lines being pulled)
 - a. If on an incline be concerned of the vehicle on fire rolling into an apparatus
3. Chock the vehicle tires as soon as possible (if needed)
4. Pull attack lines and advance lines up to the vehicle from the 45° angles
5. Gain access to the engine and passenger compartments
 - a. Consider rotary saw with “V” cuts for hoods and trunks
 - b. While cutting water needs to be applied to protect the cutter
6. Extinguish the fire and perform a detailed overhaul checking for hidden or smoldering fire

Secondary Considerations

7. Establish a water supply
 - a. Check with IC to charge the hydrant or keep the supply line dry

Wind Driven Fire

Considerations:

- A 10mph sustained wind can drastically affect fire behavior, producing blast furnace-like conditions.
- Apply water from the outside, and if possible, the upwind side of the structure.
- Use the wind to your advantage and advance from the upwind side if going interior attack.
- Interior condition can rapidly change if the flow path is changed or uncontrolled.
- Time is against the fire department during a wind driven fire.

Critical Thinking

- √ Understanding Wind Driven fires
 - √ Understand the wind driven structure fire pose a special hazard, failure to do so results in a lack of situational awareness and the inability to calculate and manage risk
 - √ Conduct 360° size-up. Consider the effect of the wind, determine is the structure is being pressurized from a fire vented location or will become pressurized (such as a window, door, roof, or structural failure occurs)
 - √ Winds that pressurize a structure fire can super-charge the fire, a wind driven fire situation must be transmitted to all responders on the incident
 - √ Vent points must be controlled and coordinated
 - √ Avoid at all costs advancing into an opening on the downward / unburned side, injury or death is likely should the flow path allow for a wind trap
 - √ Attack or perform a “quick hit” from the windward side to knockdown the main fire.
 - √ Enter from the upwind/burned side/pressurized side and sound floors/checking for overhead stability often during suppression and/or search operations

Initial Considerations

1. Utilize indicators to identify a potential wind driven fire (flags, debris in road, trees, etc.)
2. Communicate “Wind driven fire” over the radio to all crews
3. Complete a 360° size-up (or another if already into operations) checking for openings in the building and consideration for building stability and fire behavior
4. Control vent points
5. Position hose lines on the upwind side
6. Consider large diameter hose lines, ground monitors and master streams
7. Expand your incident with concern for fire spread to other exposures
 - a. Investigate exposures and surrounding buildings

Non-Hydranted Area Fire

Considerations:

- Used for single or multi- story, single or multi- family dwellings houses, townhomes, & apartments.
- Objectives are the same, tactics may vary slightly and adjust based on the scale.

Initial Considerations

1. Establish size-up and IC *per* Structure Fire Command Protocol
2. Stage first engine appropriately for fire attack and distance for supply lines
 - a. Consider dropping a “dry tail” and laying into the scene
 - b. If able, “sweep” the road of your supply line to one side to allow for other vehicles to access closer to the fire
3. Consider staging of additional engine for tender fill
 - a. Leave enough room to set up porta-tank operations and allow for tender dump, with drafting and relay pumping from the nurse engine to fire attack engine

Secondary Considerations

4. Initial fire attack may be from exterior application with minimal water usage
 - a. Interior operations should not happen until:
 - i. 2in/2out or a RIC team is in place
 - ii. A dependable and adequate water supply is established
5. Consider tender operations on a separate working channel with a supervisor
6. Establish a tender shuttle, calculating that water supply is keeping up with water demand for fire attack
 - a. Tender flow rate= Tender tank size (gallons) -10% / (Travel time + handling time)
 - i. Travel time in minutes (round up): 0.65+Distance (miles)
 - ii. Handling time= Fill site time +dump site time

Hydrant Water Supply

Considerations:

- A reliable water supply must be established for fighting fires.
- The first 100ft. of the large diameter supply lines on the engines is x2 50ft. sticks allowing for a breakdown if the entire 10ft. is not needed.
- The truck is situated with 100ft (x2 50ft sticks) on each side in a side load configuration for hand-pulling to a close hydrant or engine if needed.

Hydrant Operations

1. Driver will stop with the tailboard just past the hydrant valve stem
2. Hydrant FF will
 - a. Dismount the apparatus with portable radio
 - b. Select the hydrant bag and the supply line
3. Secure the supply line to the hydrant via one of the methods
 - a. Place the webbing loop over the hydrant
 - b. Hydrant wrap
 - c. Kneel Method
4. Hydrant FF will notify the driver to proceed or “lay-in” to the fire
 - a. Via Radio communication, hand or light signals
 - b. Driver and Hydrant FF should work together to “sweep” the road keeping the supply line to one side or the other allowing additional incoming apparatus to get closer to the scene
5. Hydrant FF is clear to start hooking he hydrant after the first coupling has dropped
6. Hook the hydrant
 - a. Attach the Storz adapter to the main large diameter discharge
 - b. Attach 2.5” ball valves to each 2.5” discharge (“triple porting” the hydrant)
7. Notify Apparatus engineer that “hydrant is ready”
8. Wait for Engineer to call for charging the hydrant
9. Opening the hydrant
 - a. Rotate the valve stem slowly until it stops (roughly 13turns)
 - b. Turn back ½ to 1 turn
10. Hydrant FF will then return to the apparatus, check in with their officer, and retrieve needed gear and PPE for assignment

Overhaul & Salvage

Considerations:

- Overhaul: Operations conducted after the main body of the fire has been extinguished.
- Salvage: Diminishing further damage by property conservation.
- Structural stability must be continually evaluated during salvage and overall operations.

Overhaul Considerations

11. All personnel conducting overhaul will treat the incident as IDLH
 - a. Structural PPE with and SCBA on air
 - b. Overhaul crews will work in a minimum crew of 2
12. Overhaul operations include:
 - a. Searching for and extinguishing hidden or remaining fire
 - b. Placing building content in a safe conditions
 - c. Determine the cause of fire
 - d. Recognizing and preserving evidence of arson
13. A charged hose line needs to remain available for immediate deployment
14. Use of TICs greatly assists crews searching for fire
15. If contents can or need to be removed from the structure coordinate with a crew outside and remove the contents to a location for further extinguishing
16. Detecting hidden fires
 - a. Remove *as necessary* floors/ walls/ ceilings to check for extension
 - b. Utilize: Sight, Touch, Sound, and Equipment
17. All personnel who have participated in overhaul will follow the *DECON* protocol

Salvage Considerations

1. Salvage operations begin upon arrival and continue until the scene is terminated
 - a. Salvage crews will work in a minimum crew of 2
2. Salvage may include:
 - a. Removing small items: Using rubble bag, salvage bin
 - b. Protecting floors: Rug runners or tarps
 - c. Water cleanup: Water vacuum and squeegees
 - d. Water diversion /collection:
 - i. Tarps made into chutes, cutting holes in floors, tarping over items, salvage covers placed into a catchall for small amounts of water

Forcible Entry

Considerations:

- Techniques used to gain access into a compartment, structure, facility, or site when normal means of entry is locked, blocked, or an emergency dictates faster entry.
- Always remember the first rule of forcible entry: Try before you pry
- There is no substitute to planning and learning different types construction and methods to defeat systems. Firefighters must use their knowledge and their tools on scene to gain entry.

Initial Considerations

1. Always use the right tool the forcible entry operation you are attempting
 2. Mechanical advantage and good body mechanics work in your favor
 3. Utilize the method that is quickest and safest for the situation (a saw may be faster and easier than the irons if it is readily available), remember once you gain entry you still have work to do on the other side
 4. Man-door options:
 - a. Force the lock
 - b. Remove hinge pins
 - c. Force the door [Gap, Set, Force]
 - d. Pry the door from the jamb
 5. Overhead or Garage doors (with rotary saws)
 - a. Make a vertical cut approximately 1ft. in from the wall from top to bottom
 - b. Make a horizontal cut as high up as possible across the entire door
 - c. Make your last vertical cut down the opposite side of the first cut approximately 1ft. from the wall
 - i. Hose team must be in place to protect cutting firefighter
 - ii. Second firefighter should manage the door pieces
 - d. Completely remove the garage door parts
 - e. Secure the left-over overhead door portion so it cannot come down
 6. Access to Property
 - a. Utilize necessary equipment to make access through fences, brush, etc. to make a hole large enough for safe access and operations
- Two firefighters using tools for prying/ striking voice commands:
 - HIT: FF1 with prying tool will say “hit”, FF2 with Striking tool will provide 1 hit
 - Drive: FF1 with prying tool will say “Drive”, FF2 with Striking tool will provide hit repeatedly until told to stop or they see they’ve made progress
 - Stop: Firefighter using striking tool will stop striking

Structural Search and Rescue

Considerations:

- **Primary Search:**
A rapid, thorough search performed before or during suppression operations checking known or likely locations of victims throughout the structure.
- **Secondary Search:**
A slow, methodical search made by a separate crew from the primary search conducted after initial suppression operations have begun to ensure no occupants were overlooked.
- Firefighters must be concerned with disorientation inside a commercial structure.
- Victims often seek shelter or are commonly found:
 - Behind the door. No matter what type of search, always check the vicinity of the exit doors
 - Beds: On top, underneath, around them
 - Furniture / Stairs: Behind or around them
 - Cabinets / Closets
 - Showers / Bathtubs

Life Safety:

- Always sound the space in front of where you will be walking/ crawling/ working.
- Listen, feel, and watch for changing conditions in the environment that may dictate a withdrawal.
- Close or maintain control of doors during search to protect unaffected areas and limit flow paths.
- Rooms heated to 162°F (72° C) at the floor level is not a survivable space for victims.
- Searching a structure with “heavy contents” AKA a Hoarder Home with traditional search techniques will not work, follow the *Heavy Content Protocol*.

Search Methods

- **General Methods:**
 - Choose left or right search pattern and follow them throughout the structure
 - Announce your search pattern to IC
 - Team leader should provide periodic updates to IC of location and status
 - Start your search on the fire floor as close to the fire as possible (the most dangerous area) and work back towards the exit following your hose-line
 - Close doors to rooms after they have been searched
 - Position hose team(s) to protect searchers
 - Move based on conditions: walk if you can walk, crawl if you need to crawl, consider moving one knee up, one knee down, to sweep the floor in front of you
- **Marking:**
 - Generally during fire operations marking doors may not happen during initial searches or searches on the fire floor. If marking is to be used (hotels, apartments, large buildings with consistent floor layouts of many rooms/ occupancies utilize a variant of the USAR marking system:
 - 1 slash (/) when the team enters, second slash (X) when team exits

Structural Search and Rescue (cont.)

Search Types

- Orientated Search: An efficient way for a team to search rooms/ structures
 - Team leader choose an anchor point (usually at the doorway) and stays anchored and maintains contact (voice, touch, rope, light, TIC, etc.) with the rest of the team
 - After searching the team returns to the leader and they move to the next room
 - If a victim is found, immediately work to remove that victim (check the rest of the room for a second victim), identify to IC where the team left off to coordinate continuing the search should a new team come in to assist/ takeover

- Wide Area Search: Used in a large structures or complex areas
 - Secure the search rope to a fixed object at the egress point
 - Lead member will maintain control of the end of the rope and pay out rope as the team moves through the structure
 - Secondary searcher(s) may use a “tag line” to secure themselves to the main line (I.E.: hose strap, 2nd search rope, webbing) allowing them to move further off the rope system for searching
 - The team leader remains in the back to stay oriented, provide navigation and directions (utilizing a TIC)
 - A hose team should be deployed simultaneously with the search team to provide protection

- VEIS (Vent, Enter, Isolate, and Search)
 - Intended to provide a rapid search of individual room(s) that can be accessed from an exterior window
 - This is credible rescue tactic if victims are trapped in a survivable area of the structure and the regular means of egress is blocked or hampered.
 - Rooms on fire or show signs of backdraft or flashover are not to be searched
 - VEIS shall never be done without the consent from Incident Command, and should only be attempted by a trained competent crew after a 360^o size-up is performed
 - ONLY search areas that appear to be survivable and unlikely to have fire extension
 - Vent window from ground or ladder. Observe smoke/fire conditions inside
 - FF 1 enters the room (sound floor!), FF 2 remains at the entry point staying in verbal communication (utilize TIC if available)
 - FF 1 will immediately move and close the room door
 - FF1 will perform a rapid primary search and exit the room
 - If a victim is found, Notify IC and remove through window

Ventilation

Considerations:

- Ventilation is a planned, systematic, and coordinated removal of heated air, smoke, gas, and other airborne contaminants from a structure.
- Ventilation without coordination will lead to flashover conditions

Life Safety:

- Ventilation should be delayed until hose-lines are charged and ready
- Keeping a fire ventilation limited until ready to fight the fire will keep fire spread minimized
- Never direct a fog stream into a horizontal exhaust opening when interior attack crews are inside the structure because it will force heat, smoke, and steam towards them

Ventilation Terms

- Horizontal Ventilation: Ventilation on the sides of a building
- Vertical Ventilation: Ventilation involves creating openings in a floor or roof
- Natural Ventilation: Opening up a building and using natural air flow
 - Door control is a form of natural ventilation
- Mechanical Ventilation: Accomplished using fans, blowers, and smoke ejectors to create negative or positive pressure
- Hydraulic Ventilation: Using a fog nozzle pattern from inside through an exhaust opening
- Negative pressure: Artificially lowering the pressure inside the structure so that fresh air outside moves in more quickly
- Positive Pressure: Artificially raising the pressure inside the structure so that smoke and fuel gases move toward lower-pressure openings more quickly

Ventilation

- Attempt to vent closest to the fire if making an opening.
- Window-to-Door conversions may be useful for ventilation as well as an entrance/ egress for firefighters
- Whenever conducting horizontal ventilation check flow paths to ensure you are not changing the fire conditions inside the structure to a worse state
- Openings on the low pressure side (downwind side) of the structure should be made first to create an exhaust point. Openings on the high pressure side (upwind side) are then made to permit fresh air to enter forcing the smoke toward the exhaust opening(s)

Vertical Ventilation

Vertical Ventilation

Life Safety:

- Anytime firefighters are placed on a roof a secondary means of egress must be identified, typically through the use of additional ladders placed in a location the members can escape to if needed.
 - Work in groups of two, but limit it to the necessary number for the task to get accomplished.
 - Always “sound” and check in front of you checking for roof stability.
 - Be on air, get on the roof, complete your task, and get off the roof.
 - At any time while assigned to the roof if conditions deteriorate to unstable, notify IC and evacuate the roof immediately to the closest escape option
- Trench Cut: Creates a defensible line ahead of the fires spread in a large occupancy
 - Easiest to make utilizing the 7-9-8 cuts repeatedly
 - Inspection hole(s): Used to help determine location of the fire and construction features
 - Kerf cut: a single cut in the roof checking for smoke or flames
 - Triangle cut: A larger inspection hole to better visibility
 - Vertical ventilation is typically done over or as close to the fire as able
 - Utilize already installed openings, ducting, exhaust, etc. on the structure for signs of fire conditions

Flat Roof Ventilation

1. Cut a rectangle opening large enough for the fire below
2. Utilize the 7-9-8 cut
3. Overlap all cuts and keep firefighters out of the “weak” spots and cut areas
4. Work between trusses or “roll” over them with the saw to maintain structural integrity
5. Work your way towards an escape route whenever possible
6. A firefighter with a long tool must available to pull the louvered openings

Pitched Roof Ventilation

1. Always cut from the safety of a ladder
2. Overlap all cuts, start with the top cut and the side cut furthest from the ladder
3. Roll cuts over trusses and work your way down off the roof
4. A firefighter with a long tool must available to pull the louvered openings

MAYDAY

Considerations:

- The term “MAYDAY” is used whenever a firefighter is in immediate danger.
- When in doubt call a MAYDAY, it can always be cancelled when the situation resolves itself.
- Do not underestimate the time and personnel required to rescue a downed firefighter. Locating, carrying, and removing a downed firefighter can require multiple RICs working together or in rotation over an extended time period.

Situations that may dictate a MAYDAY emergency are (but not limited too):

- Air Emergencies
- Lost Crewmember / Disorientated
- Entanglement
- Rapid fire development
- Structural Collapse/ Trapped

Initial Considerations

1. If you think you (or a member of your team) is in immediate danger, declare a MAYDAY
 - ✓ L Location (where are you, or known last location)
 - ✓ U Unit (apparatus or assignment)
 - ✓ N Name (Identify yourself or the firefighter needing help)
 - ✓ A Assignment and Air supply
 - ✓ R Resources needed
2. Activate your PASS Alarm, attempt to start self-rescue *if able*
3. IC will acknowledge the MAYDAY Signal
 - a. All other operations on the fireground will move to another working channel
 - b. IC, SAFETY, and RIC will stay on the channel the mayday was declared on with the crew involved
 - c. All firefighters without an assignment will report to RESOURCE for assignment
 - d. All firefighter engaged in fire suppression will stay on assignment
 - e. All operations not involved in the Rescue will switch to a different working channel

*Note: A backup hose team may be in the best position / moment of opportunity to help, if so, notify IC immediately and await instructions
4. Rapid Intervention Crew (RIC) will respond and start rescue operations
5. A Personal Accountability report (PAR) will be made by the Incident Command Post
6. Declare the next higher alarm
7. Additional RIC crew(s) to be established
8. Ambulance crew staged for medical evaluation

RAPID INTERVENTION CREW (RIC)

Considerations:

- Do not underestimate the time and personnel required to rescue a downed firefighter. Locating, carrying, and removing a downed firefighter can require multiple RICs working together or in rotation over an extended time period.
- IC may utilize multiple Rapid Intervention Crews on larger incidents based on the structure (multiple floors) and complexity of the incident. The initial RIC will be “RIC 1” any additional crews formed will follow suit (I.e.: RIC 2, RIC 3, etc.)
- Once RIC is activated consider larger teams (Minimum 4-6) as your secondary and tertiary crews.

RIC Tools & Equipment:

- There is not a standard equipment list used by RIC crews, selection will be based on the type of building, type of fire conditions, and hazards represented. It is up to the RIC Leader to decide the best use of tools and equipment using the acronym AWARE: Air, Water, A Radio, and Extrication

Life Safety:

- RIC selection should be of experienced firefighters capable of “On the Fly” decision making and problem solving in event of a downed firefighter during structural fire operations

Considerations

1. IC will establish a RIC as early on in the incident after 2in/2out has been established and enough crews are on the fireground to conduct operations
2. RIC Leader will assemble their crew
 - a. Passports and shields turned into the Incident Command Post
 - b. Tools and equipment planned/ needed placed in a cache
 - i. At a minimum an Irons set and the RIC Bag will be in the cache
 - c. RIC Hoseline identified (if left uncharged ensure Engineer is aware of the line)
3. RIC Leader will perform a 360° walk around of the structure, report finding to ICP
4. RIC members will be on the fireground performing ACTIVE RIC duties, ready to grab their staged tools, equipment, and hose-line immediately
 - a. Soften up the building
 - b. Secure utilities
 - c. Place ladders where needed or expected
 - d. Identify and track interior crews
 - e. Apply water via exterior application
 - f. Provide updates to IC on building conditions
5. Once Activated for a rescue
 - a. RIC leader will choose the best access point and location
 - b. Provide IC with updates and victim Assessment
 - c. Provide instructions / needs on Extrication plan

Wildland Urban Interface

Considerations:

- Wildland fire imminently threatening structures.
- The mindset should be to fight the fire while simultaneously providing structural defense.

Initial Considerations

1. Consider while enroute:
 - a. Fuels in the area
 - b. Current weather and forecasted weather through the next 3 hours
 - c. Topography and winds
 - d. Exposures and types with estimated number of civilians in the area
 - e. Water supply needs
 - f. Access and escape routes (including evacuation routes for civilians)
2. Approaching the scene consider:
 - a. Fire behavior
 - b. Access
 - c. Escape routes
 - d. Communications
 - e. Lookouts
 - f. Safety zones
3. Provide size up to include:
 - a. Estimated area
 - b. Number of structures threatened
 - c. Resources needed that are NOT already on the assignment
4. Establish Incident Command (IC), name the incident and establish the ICP location
 - a. Identify working channel(s)
 - b. Consult current IRPG for briefing checklist
5. If there is an imminent threat to homes, notify dispatch
 - a. Request law enforcement to assist with evacuations
 - b. PIO for notifications
 - c. *If applicable:* Utilize a crew to start going door-to door, highest threats first

Operations

6. Divide the fire into Divisions and Groups *if* indicated
7. Communicate to all crews safety zones and escape routes
8. Establish a lookout
9. Fight fire per *Wildland* protocol
10. Structural Group Supervisor to establish needs and actions for structure prep and defense

Wildland

Considerations:

- An out of control outside fire not currently threatening structures.
- REDNET is the default ODF working channel for Initial Attack (IA) throughout the state and is a viable option for a working channel.

Initial Considerations

1. Consider while enroute:
 - a. Fuels in the area
 - b. Current weather and forecasted weather through the next 3 hours
 - c. Topography and winds
 - d. Water supply needs
2. Approaching the scene consider:
 - a. Fire behavior
 - b. Access
 - c. Escape routes
 - d. Communications
 - e. Lookouts
 - f. Safety zones
3. Provide size up to include:
 - a. Estimated size of area
 - b. Resources needed that are NOT already on the assignment
4. Establish Incident Command (IC), name the incident and establish the ICP location
 - a. Identify working channels
 - b. Consult current IRPG for briefing checklist

Operations

5. Divide the fire into Divisions and Groups *if* indicated
6. Communicate to all crews **safety zones** and **escape routes**
7. Establish a LOOKOUT
8. Fight fire aggressively, providing for safety
9. Options for fire attack, following current NWCG standards
 - a. Direct Attack including line building, hose advancement, progressive hose lays
 - b. Indirect Attack including line building, utilize natural and manmade barriers
 - c. Mobile Attack (Pump and Roll): Anchor, Flank, Pinch
10. Establish staging location for incoming units
11. Establish water supply and fill sites for engines

**Seaside Fire & Rescue
Operations Protocols
RESCUE**

<i>Page</i>	<i>Protocol</i>
E-1	Rescue Terms
E-2	Rescue Signals
E-3	Water Rescue General Concerns
E-4	Ocean Rescue
E-5	Ocean Rescue (with Lifeguards)
E-6	Swift Water Rescue
E-7	Rope Rescue
E-9	Confined Space Rescue
E-11	Trench Rescue
E-13	Structural Collapse
E-16	Motor Vehicle Collisions
E-17	Aircraft Crash / Rescue
E-18	Elevator Emergencies
E-19	Overland Search & Rescue
E-20	Active Shooter
E-21	Patient Extrication using the Aerial

Rescue Terms

Considerations:

- This list is not all inclusive, only covering basic awareness level terms.

Rescuer Positions

- Rescue Group Supervisor: Person in charge of the technical rescue group
- Rescue team Safety: Person in charge of technical rescue group safety aspects
- Attendant or Edge Attendant: Person at the entrance or at the edge of the hot zone
- Rigging Officer: Person in charge of planning and implementing the rigging system
- Rescuer: Technical rescuer working in the hot zone
- Air Officer: Person overall in charge of air needs: Supply, monitoring, ventilation
- RIC / Backup Team: Designated rescuer(s) ready to go to assist or provide rescue

Water terms

- River Right: The bank on the right side as you are looking downstream
- River Left: The bank on the left side of the river as you are looking downstream
- Upstream: looking up (from where the water is flowing from)
- Downstream: look down (where the water is flowing)
- Strainer: Dangerous river blockage that allows water to pass through but “catches” debris/people
- Bow: Front of a boat
- Stern: Rear of a boat
- Port: Left side of a boat looking from back (stern) to front (bow)
- Starboard: Right side of a boat looking from back (stern) to front (bow)

Rope terms

- Main line: The primary rope being used for the system
- Belay line or safety line: the secondary rope in the system used as a safety
- Safety check: A rescuer not involved with building the system double checks the work
- Stop: Everyone stop what you're doing!

Trench terms

- Edge protection: Material placed along the edge to disperse weight
- Spoil Pile: The collection of dirt placed along a trench of excavation
- Panel: 3/4in plywood with 2” x12” nailed along the center for strength (top to bottom)
- Bridge or plank: Piece of wood or metal used to span a trench
- Safety (or tag) line: Rope (lifeline) attached to rescuers while working from a ladder
- Strut: Structural component designed to resist longitudinal compression (side to side)
- Whaler: Horizontal members of shoring system placed parallel to excavation wall

Rescue Signals

Considerations:

- Make hand signals as exaggerated as possible away from the body so they are clear.

Hand Signals

- Hand taps head: Yes or I'm okay
- Hand straight up, fingers extended: Yes, or I'm okay
- Thumbs up: Ready for pickup or hoisting
- 1 hand waving side to side above head: Assistance needed
- 1 hand straight up, other overhead touching elbow making an "L": Need a litter/ stokes
- Raised arm, open palm pushing away: Back away, not ready for pickup yet *or* unsafe
- Make a fist, then grasp it with other arm and pull away: Disconnect from system
 - Other rescuer will repeat signal to confirm
- Both arms above head forming an "X": I have lost sight of victim *or* they have submerged
- 1 arm pointing: I am going in this direction, or you need to move in this direction
- Arm straight out, elbow bent down, hand moving in circular: Lower, or lowering system
- Arm up, tapping head and repeating: Raise, or raising system
- Arm up, making a fist: Stop

Flagging Signals

- 2 flags straight up: Move further out
- 2 flags down: Move closer to shore
- 1 flag pointing: Move toward that direction (other flag may be up, down, or hidden)
- Flags held horizontal: Remain stationary
- Crossed flags above head: Remain stationary
- Slow waving of flags above head down to hips: Return to shore
- 1 flag pointing, the other above head pointed straight up circling: Boat go pick up swimmer
- 1 flag hidden behind back, other drops slowly from above head to ground: Acknowledged or YES
- 1 flag hidden behind back, other waving quickly side to side above head: Unclear, repeat message

Other Signals

Strobe on red: Normal Operation Strobe on White: Emergency

1 Whistle blast: Stop and look at me
 2 Whistle blasts: Upstream
 3 Whistle blasts: Downstream
 3 Whistle blasts repeated: Help, Emergency

Red Chemlight: Rescuer
 Green Chemlight: Equipment, bags and Trails
 Blue Chemlight: Rescue System
 Yellow Chemlight: Victim or other (pre-briefed)

Water Rescue General Concerns

Considerations:

- Treat every Water Rescue like a structure fire: Continue to send units until situation is under control
- Apparatus should always face the ocean with emergency lights on.
- Radio Channels: Dispatch (Green RPT), Beach Ops (Tac 9), Water rescuers (WR 17) USCG (22A).
- An ambulance should never be canceled until patient assessment has been complete after someone has been in a water rescue event.
- Consider the use of Life Flight early.
- Trained rescue swimmers with PPE may proceed direct to scene in a department vehicle and assess for immediate entry.

Background Information:

- Dispatch will provide staging location to Medix, will activate Coast Guard.
- If Law enforcement is needed IC may need to request their response.
- The Coast Guard will not go on standby, either notify them or launch them.

Safety

- Under NO Circumstance will any personnel enter the water if they are not trained and current as a water rescuer with Seaside Fire & Rescue
- Turnouts and Structural helmets are not allowed in the Warm or Hot Zones
- Never tie a rope to someone entering a swift water environment (use correct equipment)
- Always have a back-up responding to an ocean rescue (Boat, RWC, Helicopter, Etc.)

Personal Protective Equipment (PPE)

- Lifejackets (PFDs) are not required for a sandy, gentle sloping beach
- PFDs are required to be worn within 10feet of water, or accidental entry is possible for:
 - Any river
 - Any rock formation (Jetties, Piers, Coves, Cliffs (unless secured in a rope system))
 - When Command (IC) or Safety Dictates it
- Throw-ropes should be carried by a member for each apparatus during any river response
- All Water Rescue personnel shall dress in appropriate PPE for the environmental conditions
- Water Rescuers may elect to not wear a PFD in Surf and Surface environments (for sub-surface swimming and searching) only after command is notified
 - Rescue Swimmer PFDs should be worn by surf technicians Fall/Winter/Spring, or if the surf is greater than 6feet

Ocean Rescue (Off season / No Lifeguards)

Life Safety: Options for rescuers in the ocean descending order based on a risk assessment

- **Row:** Boat based rescue
- **Go:** A swimmer enters the water on their own or uses a “Live-Bait” swimming rescue
- Only a Trained Rescuer may enter to effect a “Go” rescue based on the type of incident
- **Helo:** Utilizing the USCG helicopter for search and rescue

Initial Response

1. Duty Vehicle / Officer proceed to location to establish command and size-up
 - a. Identify “Point Last Scene”
 - i. Locate and Interview witnesses
 - ii. Number of victims in the water or missing, age, time in water
 - iii. Descriptions of victims and clothing colors and type
2. Identify the need for, and best access points for boats and land units
3. Establish communications
4. Establish zones and scene perimeter
5. If you can establish visual and/or verbal communication with a victim, keep it!

Secondary Actions

6. Review *Water Rescue General Concerns* Protocol
7. Additional units continue to respond in duty vehicles and beach vehicles to assist with:
 - a. Command, Communications, Lookouts, Flagging, Loading RWCs
8. Establish a Safety officer
9. Establish a Rescue Group Supervisor
10. Continue to support in water personnel with backup/RIC until all units are out of the water

Incident

11. Form a Primary and Secondary rescue plan and brief crews
12. Treat any patients per appropriate medical or trauma protocols
13. Transfer any patients to staged ambulance

Ocean Rescue (Lifeguards on Duty)

Life Safety: Options for rescuers in the ocean descending order based on a risk assessment

- **Row:** Boat based rescue
- **Go:** A swimmer enters the water on their own or uses a “Live-Bait” swimming rescue
- Only a Trained Rescuer may enter to effect a “Go” rescue based on the type of incident
- **Helo:** Utilizing the USCG helicopter for search and rescue

Initial Response

1. Lifeguards will proceed direct to scene
2. Equipped RWC operators may proceed direct to ocean and launch the staged RWC
3. Duty Vehicle / Officer proceed to location to establish command and size-up
 - a. Attempt to get a hand-off report from Lifeguards (Face-to-face or radio)
 - b. Identify “Point Last Scene”
 - i. Locate and interview witnesses
 - ii. Number of victims in the water or missing, age, time in water
 - iii. Descriptions of victims and clothing colors and type
4. Identify best access points for boats and land units
5. Establish communications
6. Establish zones and scene perimeter
7. If you can establish visual and/or verbal communication with a victim, Keep it!

Secondary Actions

8. Review *Water Rescue General Concerns* Protocol
9. Additional units continue to respond in duty vehicles and beach vehicles to assist with:
 - a. Command, Communications, Lookouts, Flagging , Loading RWCs
10. Establish a Safety officer
11. Establish a Rescue Group Supervisor
12. Continue to support in water personnel with backup/RIC until all units are out of the water

Incident

13. Form a Primary and Secondary rescue plan and brief crews
14. Treat any patients per appropriate medical or trauma protocols
15. Transfer any patients to staged ambulance

Swift Water Rescue

Life Safety: Options for rescuers in descending order based on a risk assessment

- **Reach:** Extend an object to the victim for them to grab
- **Throw:** Use a throw rope bag to contact the victim
- **Row:** Boat based rescue
- **Go:** A swimmer enters the water on their own or uses a “Live-Bait” swimming rescue
Only a Trained Rescuer may enter to effect a “Go” rescue based on the type of incident

Initial Response

1. Duty Vehicle / Officer proceed to location to establish command and size-up
 - a. Identify “Point Last Scene”
 - i. Locate and interview witnesses
 - ii. Number of victims in the water or missing, age, time in water
 - iii. Descriptions of victims and clothing colors and type
2. Identify best access points for boat, and land units
3. Establish communications
4. Establish zones and scene perimeter
5. If you can establish visual and/or verbal communication with a victim, Keep it!

Secondary Actions

6. Consider additional units making access on opposite side of the river
7. Hasty Searches along banks if victims have not been located yet
8. Establish a Downstream Safety (with throw rope)
9. Establish a Safety officer
10. Establish a Rescue Group Supervisor
11. Consider Law enforcement of Clatsop County Dive Rescue if necessary
12. Consider US Coast Guard for aerial search

Incident

13. Form a Primary and Secondary rescue plan and brief crews
14. Treat any patients per appropriate medical or trauma protocols
15. Transfer any patients to staged ambulance

Rope Rescue

Considerations:

- Treat technical rescues like a structure fire: Continue to send units until situation is under control.
- No high angle rope rescue should be attempted without a rope operations or technician on scene.
- Consider early activation of the County High Angle Rescue Team (HART) or mutual aid if more personnel will be needed at the scene.
- Never cancel an ambulance until all victims and rescue personnel are clear of the hot zone.

Minimum PPE:

- Helmet, Gloves, Eye and Foot Protection.
- Fall Protection for any rescuers in the warm and hot zone.

Initial Response

1. Size up of the situation and establish Incident Command
 - a. Topography, victim location and status, access routes
2. Follow-up report
 - a. Additional findings and needs for additional response
3. Identify witnesses
4. Establish communications
5. Establish zones and scene perimeter

Secondary Actions

6. Identify if this is a “Low Angle rescue” or High Angle rescue.
7. Identify and establish anchor points
8. Establish and identify edge lines
9. Consider Reach and Treat (RAT) if victims need immediate assistance before raising systems are in place.
10. Identify and remove or “safe” hazards
11. Establish a Safety officer
12. Establish a Rescue Group Supervisor

Incident

13. Utilize *High Angle Rope Rescue Considerations*
14. IC and Rescue Group Supervisor will brief all crews on scene with the rescue plan
15. Always attempt to have redundant safety systems in place, provide for a 10:1 safety factor
16. Perform rescue, providing for safety

High Angle Rope Rescue Considerations

Size-up

- Assessment
 - Secure witnesses and Reporting Party (RP)
 - Determine location, number, and condition of victims
 - Identify and assess hazards to rescuers (Rock fall, Terrain, etc.)
 - Choose Rescue or Recovery mode
 - Terrain
 - Non-technical (<40°)
 - Technical (>40°)
 - Assess need for additional personnel and equipment

Pre-Rescue Operations

- Establish rescue area and zones
 - Perimeter control and Personal Protective Equipment
 - Safety officer
 - Accountability system in place
- Essential personnel only in rescue area
- Correct equipment and victim packaging
- Provide briefing

Rescue Operations

- Deploy personnel
 - Insertion may be one or a combination of:
 - Hiking, climbing, helicopter, vehicle, lowering system
- Extrication of victim and rescuers
 - System set-up correctly, redundant, safety checked
- Transfer patients to the appropriate medical care

Termination

- Accountability for all personnel and equipment
- Turnover scene to appropriate Responsible party

Confined Space Rescue

Considerations:

- Treat technical rescues like a structure fire: Continue to send units until situation is under control.
- No personnel other than a trained CSR shall enter a permitted confined space.
- Air monitoring shall start immediately and be continuous as crews advance to the opening.

Minimum PPE:

- Helmet, Gloves, Eye and Foot Protection.
- Fall Protection for any rescuers in the warm and hot zone.
- SCBA or Breathing system for rescuers in any IDLH or possible IDLH atmosphere.

Initial Response

1. Size up of the situation and establish Incident Command
 - a. Identify and secure responsible party immediately
2. Follow-up report
 - a. Additional findings and needs for additional response
 - b. Number, possible location and conditions (if known) of victims
3. Identify witnesses
4. Establish communications
5. Establish zones and scene perimeter
 - a. Identify all openings and establish security at these openings to deny entry
 - b. Identify all potential electric and mechanical energy sources

Secondary Actions

6. Secure Utilities
7. Establish lock-out tag out of all possible electrical and/or mechanical energy sources
8. Establish a Safety officer
9. Establish a rescue group supervisor
10. Air monitoring shall begin as soon as practical

Incident

11. Utilize *Rope Rescue & Confined Technical* considerations as necessary
12. IC and Rescue Group Supervisor will brief all crews on scene with the rescue plan
13. Attendants shall be in place prior to any rescuers entering the hot zone
14. Perform Rrescue, providing for safety

Confined Space Rescue Considerations

Size-up

- Primary Assessment
 - Secure witnesses, competent person, and/or Reporting Party (RP)
 - Determine location, number, and condition of victims
 - Attempt voice contact with victims
 - Choose Rescue or Recovery mode
 - Assess need for additional personnel and equipment
 - Secure Confined Space Entry permit and review (for the work that was being done)
- Secondary Assessment
 - Type of space, structural stability and diagram (or make one)
 - Possible and/or Actual Hazardous Materials / products in space
 - Identify hazards (atmospheric, mechanical, electrical)
 - Is non-entry retrieval possible? *If* yes, perform it as soon as possible
 - Atmospheric monitoring in place?
 - How long has the victim been down or missing? Rescue or Recovery

Pre-Entry Operations

- Initiate Fire Department Confined Space Rescue (CSR) Permit
- Establish Rescue Area and zones
 - Perimeter control and Personal Protective Equipment
 - Safety officer
 - Accountability system in place
- Essential Rescue Personnel and equipment only in rescue area
 - Equipment: PPE, communications, lighting, air monitoring, harness, air system
 - Rigging Team: rope, systems, equipment, patient packaging
 - Air Supply: Primary and back up air, manifold works
 - Rescue teams: Primary and backup teams ready and safety checked
- Provide Briefing

Rescue Operations

- Deploy Rescue Personnel and execute rescue plan
- Extrication of victim and rescuers

Termination

- Accountability for all personnel and equipment, DECON *if* needed
- Turnover scene to appropriate Responsible party, CALL OSHA

Trench Rescue

Considerations:

- Treat Technical Rescues like a structure fire: Continue to send units until situation is under control.
- Apparatus shall be staged no closer than 200 feet from excavation. Shut down any running engine.
- Leave all equipment on scene on position found and have engines shut down.
- No personnel shall enter a trench /exaction until approved by the IC.

Minimum PPE:

- Helmet, Gloves, Eye and Foot Protection.
- Fall Protection for any rescuers in the hot zone.
- SCBA or Breathing system for rescuers in any IDLH or possible IDLH atmosphere.

Initial Response

1. Size up of the situation and establish Incident Command
 - a. Identify and secure responsible party immediately
2. Follow-up report
 - a. Additional findings and needs for additional response
 - b. Number of, possible location, and conditions (if known) of victims
3. Identify witnesses
4. Establish communications
5. Establish zones and scene perimeter
 - a. Send two personnel for recon of the incident
 - i. Always approach from the narrowest part, preferable the trench head
 - ii. If able, give victims a tool they may be able to use to start self-extrication
 - iii. If safe to do so anything onsite may be used and placed as a makeshift temporary barrier to assist in protection from secondary collapse
 - iv. If safe to do so and victims are able, place a ladder for them to self-extricate

Secondary Actions

6. Establish a Safety officer
7. Establish a Rescue Group Supervisor
8. Air monitoring to eliminate the need for breathing air system
9. Spoil removal and edge protection

Incident

10. Utilize Trench Rescue considerations protocol
11. IC and Rescue Group Supervisor will brief all crews on scene with the rescue plan
12. Perform rescue, providing for safety

Trench Rescue Considerations

Size-up

- Primary assessment
 - Secure witnesses, competent person, and/or Reporting Party (RP)
 - Identify immediate hazards
 - Determine location, number, and condition of victims
 - Is this operation: Rescue or Recovery
- Secondary assessment
 - Shut down all equipment and engines within 500 feet
 - Trench Collapse Yes *or* No
 - Assess need for additional personnel and equipment
 - Considerations:
 - Ventilation, shoring, retrieval system, vacuum truck

Pre-Entry Operations

- Establish rescue area and zones
 - Perimeter control and Personal Protective Equipment
 - Safety Officer
 - Accountability system in place
- Essential Rescue Personnel and equipment only in rescue area

Rescue Operations

- Make Trench lip safe: Spoil pile, approach from ends, ground pads and a bridge
- Make Trench safe
 - Access ladders: No more than 12' from rescuers, first ladder within 10' of victim
 - Protective systems
 - Excavate dirt
- Victim assessment and treatment
 - Treatment in trench, consider *Crush Injuries* protocol
 - Victim packaging and removal out of the trench

Termination

- Accountability for all personnel and equipment, DECON *if* needed
- Turnover scene to appropriate Responsible Party, CALL OSHA

Structural Collapse

Considerations:

- Treat Technical Rescues like a structure fire: Continue to send units until situation is under control.
- Do Not Enter the Structure until approved by the IC.

General Rescue Plan:

- Survey the incident and determine resource needs.
- Immediate rescue of victims that can be reached without rescuer entry.
- Void search/ rescue/ locate and remove visible from inside structure once stabilization has been achieved.
- General debris search: Comb through debris until and “All Clear” decision is made.

Initial Response

1. Initially stage 500 feet from debris pile and give Size-up of the situation
2. Establish Incident Command
3. Gather and direct ambulatory victims to an area outside the collapse zone
4. Designate Triage and Treatment areas as soon as possible
 - Designate a Triage Officer as soon as practical
 - Designate a Treatment Area Officer as practical
5. Initiate MCI Protocols
6. Further Size-up and request for needs (personnel), consider:
 - Attempt 360° degree visual inspection
 - Type of building construction
 - Extent of collapse
 - Number of visible victims
 - Utilities and types
 - Contact building officials
7. Establish zones and scene perimeter

Secondary Actions

8. Establish a Safety officer
9. Establish a Rescue Group Supervisor
10. Air monitoring to eliminate the need for breathing air system
11. Secure utilities
12. Identify staging for additional responding units
13. Utilize *Structural Collapse Considerations*

Structural Collapse Considerations

Size-up

- Primary Assessment
 - Secure witnesses and Reporting party (RP)
 - Determine location, number, and condition of victims
 - Determine location and number of buildings involved
 - Choose Rescue or Recovery mode
- Secondary Assessment
 - Type of occupancies
 - Building construction type
 - Identify and assess hazards
 - Assess need for additional resources (Engineers, dogs, surgical team, etc.)
 - Assess the need for Equipment (Heavy equipment, vacuum truck, shoring lumber)

Pre-Rescue Operations

- Establish working areas and corridor
- Rescue Area
 - Perimeter control and Personal Protective Equipment
 - Safety officer
 - Victim staging & treatment areas
 - Accountability system in place with Accountability Officer
- Essential Personnel only in rescue area
- Establish Triage Teams
- Establish Action plan for building search and rescue
- Provide briefing

Rescue Operations

- Building stabilization and removal
- Remove surface victims
- Implement plan for buried victims

Termination

- Accountability for all personnel and equipment
- Turnover scene to appropriate Responsible Party

Structural Collapse Checklist (Cont.)

Assessment

- Recon entire site and obtain building plans or draw based on information
 - Probable location of voids
 - Best accesses
- Prioritize site and make a risk management profile
 - Structural engineer or building official may be needed for consultation
 - Determine shoring needs
 - Review what overhead hazards can be shored, secured or removed

Search

- Initial Search. Always search from safe stable areas into more unstable areas
 - Visual searching as well as Call-out / Listening searches
 - Horizontal openings are most dangerous, search with care
 - Utilize cameras, and lights when able
- Advanced Search.
 - Use of dogs if available
 - Explore vertical shafts and openings
 - Re-prioritize site search location based on potential for live victims

Access

- Rescue team
- Shoring
- Cutting and debris removal team

Extricate

- Package and extricate victims as expeditiously as possible, based on:
 - Medical assessment / Condition
 - Safety of crews
 - Consideration of the stability of the area

Motor Vehicle Collisions

Considerations:

- Any incident involving a motor vehicle (car vs. car, car vs. pedestrian, etc.).
- The fire department is responsible for more than just patient evaluation; other duties include, but are not limited to: Scene stabilization, cleanup, mitigation of hazards, initial traffic control.

Life Safety:

- Make your scene a safe place to work
- Stabilize vehicles: (chocks, straps, struts, etc.)
- Eliminate power sources
- Safety check: expose vehicle components before cutting

Initial Response

1. Follow *Highway Response Protocol* for scene management
2. Stage with room to work the scene, leave space for the ambulance
 - a. Consider access to extrication and medical equipment on apparatus.
3. Establish Incident Command, provide a size-up
 - a. Number of vehicles, patients, and number of ambulances (ground or air) needed
4. Follow the *Roadways Emergencies Protocol*

Secondary Actions

5. 360° walk around of the incident
6. If the incident is large enough or going to be:
 - a. Call for additional resources
 - b. Establish Safety Officer, Rescue Group Supervisor, Operations
7. Identify Staging for additional responding units
8. Form a Plan A and a Plan B for the extrication

Incident

9. Stage Extrication equipment ready for use on the hot/warm zone border
10. Extrication leader is responsible to direct cutting, stabilization, lifting, etc.
11. Provide protection to patients and responders prior to cutting windshields
12. Re-evaluate patient status continually during extrication
13. Treat any patients per appropriate medical or trauma protocols

Aircraft Crash / Rescue

Considerations:

- Bodies or portions of bodies should be left where found and marked.

Life Safety:

- Never approach an aircraft until all parts stop moving! (Propellers, blades, hydraulics, etc.)
- Approach upwind and uphill if able, SCBAs should be worn if any smoke is visible
- Treat an aircraft crash similar to an auto crash, consider: fire, explosion, stability
- Many exotic metals are in aircraft parts

Initial Response

1. Stage uphill and upwind (if able), avoid parking on wreckage or landing impact areas
2. Perform a 360° and provide a size-up, considering:
 - a. Size, type, and condition of aircraft
 - b. Access and staging of incoming units
 - c. Condition and estimated number of injured
3. Consider activating MCI protocols
4. Consider activating Mutual Aid alarm assignment for aircraft crash/rescue

Secondary Actions

5. Establish a Safety officer
6. Establish staging for all incoming units
7. Establish a Medical Command (if there are multiple patients)
8. Activate a PIO, public notification if necessary
9. Utilize Public Works for perimeter control (notification, barriers, cones, signs, etc.)
10. Activate a Hazmat Response if needed through OERS
11. Notify the FAA

Incident

12. Assist walking wounded first
 - a. Extricate savable victims next
13. Rescue attempts should be made through doors, window exits or existing breaks in fuselage before attempting forcible entry
14. If able and needed, shut down aircraft controls
15. Control fire with foam, do not break foam blankets
16. Cover spilled fuel that is NOT on fire

Elevator Emergencies

Considerations:

- Many times a “Stuck in the Elevator” incident is not a true emergency, always ascertain if the person is having a medical emergency, many times “just talking” to a person can calm them down.

Life Safety:

- Never enter a hoist-way or place any part of your body in a potential pinch point without power to the carriage being secured.

Initial Response

1. Establish Command and obtain a working channel
2. Assemble tools, minimum: Irons, elevator key bag, flashlight, wedges, roof hook
3. Grab apparatus lock-box keys (check if there is a firefighter elevator key present in box)
4. Make contact with elevator occupants; determine if there is an immediate need to removal or if they can wait for more non-invasive means
5. Locate responsible party and gain information of incident
6. Consider contacting elevator technician or an ETA

Secondary Actions

7. Assign crew to the floor/ floor below the carriage, someone to the floor above *if needed*
8. Assign someone to the elevator control room, maintain communications
 - a. Cycle power or find out if building responsible has tried cycling power
 - b. Attempt to use firefighter elevator key to bring down elevator carriage *if an option*
 - c. Secure power if this doesn't not work

Incident

9. Utilize appropriate key to open hoist way door, and wedge open
10. Open Elevator car doors
11. Assist occupants out of the car
 - a. Consider chair, ladder, etc. as needed if car is not aligned with floor
12. If elevator is unstable, consider securing car with halligan, high-lift jack, etc.)
13. Entrance or extrication through the top hatch into a car (if present) should only be used to access a victim in extreme emergencies should medical care be needed prior to extrication
14. Secure exterior hoistway doors after rescue, if they do not stay closed consider caution tape
15. Do not turn elevator power back on, this is the building management's responsibility
 - a. The responsible party should be advised to follow up with an elevator technician prior to returning the elevator to normal service

Overland Search & Rescue

Equipment:

- All vehicles are equipped with a Chemlight/Headland bag. Each crew will bring their bag, this allows for extras chemlights and headlamps for other responding personnel on scene.
- Reach and Treat Trauma Bag will be carried by at least one crew.
- Other medical equipment will only be taken based on needs of the response.
- All members should have a backpack or wildland pack (remove shelter), with adequate water, snacks, and a jacket/overcoat.
- Helmets (wildland or tech rescue for those issued them) shall be worn in tree canopies.
- Each crew will carry a portable radio.

Considerations:

- Seaside Fire personnel are not responsible for medical care on mutual aid requests for SAR.

Initial Response

1. Duty Officer will make phone contact or respond to Seaside 911 and obtain information
 - a. Location, Number of victims, & phone number(s)
 - b. Medical needs
2. All other responding personnel will respond to 3100, gather gear and equipment, establish crew, and await assignments from Duty officer or Chief Officer
 - a. Generally crews will respond as crews of two (2)
3. Dispatch notify CCSO On-Duty Sergeant and give Duty Officer phone contact information
4. Establish Incident Command, communications frequencies (radio, phone, messaging, etc.)

Secondary Actions

5. Establish staging point or access points for all incoming units
6. Consider needs for:
 - a. Medical transport staging: (Ground or air ambulance)
 - Ambulance crews should not leave their vehicles without briefing with the IC
 - b. USCG helicopter for hoisting
 - c. Mutual Aid for additional searching

Incident

7. Hasty Search First
 - a. Drive or walk accessible areas first (roads, paths, trails, along rivers, etc.)
8. Identify search and searcher locations on map to incident command (IPADs: Avanza, Enroutepro, Active, Google maps, Etc.)
9. Additional searching as necessary starting from last point known

Active Shooter

Considerations:

- These types of situations are dynamic and chaotic with radio frequencies tied up initially.
- Defined as incidents where one or more individuals actively engage in killing or attempting to kill people in a populated area.
- Approximately 70% of active shooter events occur in commercial/educational environments.
- Approximately 60% of these types of events end prior to police arrival.
- Approximately 40% of attackers in these events carry additional weapons.
- Many of these incidents may be lengthy based on law enforcement needed to set up a perimeter and clear the scene.

Life Safety:

- The number one goal is firefighter safety, followed by safety and treatment of law enforcement, followed by the safety and treatment of individuals involved through scene stabilization.

Initial Response

1. Stage away from the incident, preferably out of direct line of sight
2. Assign and prepare crews for rapid assessments, triage, and treatment
 - a. Fire crews should be placed in teams of two
 - b. Crews should utilize RATT packs (Reach and Treat Trauma)
3. Establish Incident Command, communications frequencies (radio, phone, messaging, etc.)
 - a. Initial response for Law Enforcement may not have any command structure
 - b. Fire IC will establish a joint ICP with Law enforcement at the earliest point possible
4. Plan for locations of triage and treatment areas for patients
5. Assign locations for ambulance staging
6. Establish staging point or access points for all incoming units
7. Consider mutual aid based on size of the incident or number of potential patients

Incident

8. If the plan is to enter the scene prior to being declared “safe” (100% no further dangers)
 - a. A team of two fire personnel should respond with a crew of at least two law enforcement officers
 - Fire personnel should always have law enforcement protection into and out of the hot zone
9. Assess and treat victims as you come to them
 - a. Treat per Triage protocols
 - b. Consider initial movement for victims and patients may be inside the hot zone to a location under law enforcement protection
10. Move victims / patients out of the hot zone to the appropriate staging locations

Patient Extrication using the Aerial

Life Safety:

- Any use of aerial for patient extrication is a dangerous operation, multiple safety checks and evaluations must take place throughout the maneuver.
- Safety spotters must be in place.
- At a minimum the Aerial operator, rescue team leader (making commands), and a roof responder must be in communication utilizing headsets.

Options

- Three options are available for rescue using the aerial ladder:
 - Aerial Artificial high point
 - Stokes Slide
 - Lowering system using the aerial as the high point

Aerial Artificial High Point

Life Safety:

- This system is extremely dangerous due to concerns for overweighting the ladder load limits and resultant forces causing stress on the aerial device.
- This system often times take longer to setup with multiple adjustments throughout the set-up.
- Patient only system, do not let a responder travel with the stokes basket.
- Only to be performed with a rope technician on scene or a rope operations trained in this maneuver.

Used to raise and lower loads

1. Position the truck as close to the building as possible with the ladder at maximum elevation and maximum extension for maximum strength
2. Ensure the load comes up and down as straight as possible with changes of direction pulleys to minimize resultant force stress on the tip
3. Provide for a 10:1 safety margin, attempt calculations ladder tip load ladder
4. All raising and lowering systems should be built on the ground

Stokes Slide

Best application is on a 2 to 5 story building

1. Position so the ladder is 90° to the truck and coming out of the building or off the roof.
2. Place a roof ladder at the base of the turntable and run it down to the ground
3. Lower the stokes down the aerial with a responder at the bottom and the top (if able)
4. If time/situation permits: Place an anchor strap (or tie webbing) on the top run and deploy the stokes down the aerial utilizing an lowering system (preferable an MPD)

Patient Extrication using the Aerial (cont.)

Lowering system using the ladder as a highpoint

Life Safety:

- This system is not designed to raise a load! This system is only for lowering.
- Continuous monitoring must be done to ensure the rope system components do not contact the ladder or the master-stream.
- Patient only system, do not let a responder travel with the stokes basket.

Best Application is on a 3 to 7 story building

1. Position the truck close to the building (a corner is best)
2. Utilize the ladder as needed to get personnel and equipment up to the roof
 - a. Minimum equipment at roof: Stokes basket with lifting harness, rope and hardware to act as a trail line
3. Un-bed the ladder and attach two (2) equal length anchor straps (one to each hook eye with general carabineers. Raise ladder up until the operator can adjust the master-stream straight out and up
4. Attach a tri-link (Delta link) to the bottom of both straps with a swivel pulley
5. Run a rope through the pulley and keep both ends on the top of the trailer as the ladder is raised and extended.
6. Attach an anchor strap to the large cross member of at the base of the bed section, attach an MPD and run the rope through it.
7. The aerial operator will extend and raise the ladder until the tip is directly over the spot where the patient will be lifted off the roof (move the patient close to the edge)
8. Roof team will attach the stokes to the rope end
9. Aerial operator will extend and raise simultaneously to prevent dragging the stokes while clearing the building, roof team will assist in stabilization of stokes
 - a. Person minding the MPD must be able to safely reach the MPD
10. Aerial operator will swing the load clear of the building
11. MPD will then lowering the patient to the ground
12. Disconnect system and utilize the ladder (as needed) to extricate the roof team

