KARNES CITY VOLUNTEER FIRE DEPARTMENT
STANDARD OPERATING PROCEDURES AND
RULES AND REGULATIONS

As adopted by members present at meeting on June 10, 2024

PURPOSE AND SCOPE

The operating procedures contained in this handbook have been established by the Membership of the Karnes City Volunteer Fire Department, Inc. It is the intent of these operating procedures to provide guidelines for department training and operations and to establish uniformity during operations. We understand that no two incidents are the same and that the procedures contained herein are established as a standardized guideline only, and that variances from these guidelines may be necessary on some incidents for a safe and effective operation.

Procedures established herein will be reviewed and accepted by a majority vote of the members of the department present at a regular meeting and shall then be reviewed periodically in order to keep them current. All revisions shall be submitted to the membership for review and will require acceptance by a majority vote of the members present during a regular meeting.

All members of the department will be expected to familiarize themselves with these operating procedures and apply them to training and operations. No member will be required to perform tasks for which they are not trained or physically able to accomplish within a reasonable margin of safety. If you feel you are unable to properly carry out a task assigned to you, inform the training officer, incident commander or officer in charge.

The most recent copy of these Standard Operating Procedures will be posted on the fire department website and members will be required to familiarize themselves with these procedures prior to being removed from probation and accepted as a full member of the department. Members will be required to sign an acceptance form stating that they have read, understand, and accept the Standard Operating Procedures and Rules and Regulations as a standardized guideline and agree to abide by them unless the act of following these guidelines will place themselves or others in danger of injury or death.

Compliance with these procedures is essential to providing as safe of an environment as possible to yourself and to your fellow firefighter.

INDEX

ACCOUNTABILITY

PURPOSE
The intent of this operating procedure is to provide a system for fire fighter accountability with which to account for all fire fighters on the scene of an incident. Use of this system will provide enhanced personal safety for fire fighters and will provide the Incident Command staff with an improved means to track and account for all personnel working the incident.

The Hot Zone will be defined as any area that requires SCBA, a charged line, protective clothing or where a fire fighter is at risk of being lost, trapped, or injured by the environment, or the structure. This would include entering a structure reported to be on fire, operating in close proximity to a structure with potential for collapse, a confined space or trench rescue, etc. The Cool Zone will be any other area of the fire ground outside of the Hot Zone or Rehab Area. See "Rehabilitation" for more information on Rehab Area.

TACTICAL
Accountability is a critical element in the safety of all fire fighters working on the fire ground. Each person involved in an incident whether at the task, tactical, or strategic level, must make a personal commitment to follow all policies and procedures regarding accountability.

Accountability involves a personal commitment to work within the safety system at all times and is a method of keeping an accurate roster of firefighters working within that system. The use of this system will provide for an accurate tracking and awareness of where firefighters are committed at an incident scene.

To enhance accountability and improve tracking of fire fighters at the incident scene, a three tag "ID TAG" system will be used. Each firefighter will carry "ID TAG's" with their name, equipment number, and department name etched on it. Depending on the nature, type, and complexity of the incident, incident command will determine the need to implement the accountability system and assign an accountability officer. The accountability officer may be a solely designated accountability officer or may serve a dual role such as a pump operator, sector officer, rehab officer, or other role as determined by command.

The first arriving officer will assign an Accountability Officer and announce their location in a follow-up report after the "on-scene report and assumption of Command". This report should include the accountability unit identification, their geographic side (i.e., north, south, etc.), and initiating the accountability system. EXAMPLE: 801 is on scene of a single-story wood frame residential occupancy with heavy smoke showing. Engine 7 will be attacking with a 1 1/2" line. 801 will be Incident Command. Engine 7 pump operator will be the Accountability Officer.

Each apparatus will be equipped with an ID TAG attachment ring, onto which one of the ID TAG's of each firefighter responding in that unit will be attached. Any firefighter arriving at the scene in a personally owned vehicle will upon their arrival attach one of their ID TAG's to the attachment ring of the apparatus that they are assigned to. The attachment ring will remain in the truck and will only be removed in case of an accountability issue, and then may only be removed at the request of the accountability officer or incident command.

Upon arrival at the scene of an incident where Incident Command has announced the implementation of the accountability system, firefighters entering the hot zone will hand over their second "ID TAG" to the accountability officer. The accountability officer will be responsible for attaching each tag to the STATUS BOARD in the proper location and identifying each sector in the hot zone. The Accountability Officer will be responsible for ensuring that the STATUS BOARD always reflects only currently assigned personnel and that they are posted on the appropriate section of the board. When a firefighter exits the Hot Zone and will not be immediately returning, the Accountability Officer must move their ID TAG to the appropriate section on the board or return the ID TAG to the firefighter.

An accountability STATUS BOARD will be provided in each apparatus for easy access of the Accountability Officer. As an incident escalates in size, and the number of firefighters at the scene increases, it may be necessary to increase the number of Accountability Officers. It may be necessary to have one Accountability Officer for each sector. Accountability Officers will report to Incident Command.

At any incident where the accountability system is activated, the system will be maintained until firefighters are released from the incident scene. A Personnel Accountability Report (PAR) will be required for the following situations:

- Any report of a missing or trapped fire fighter.
- Any change from offensive to defensive operations.
- Any sudden hazardous event, such as a flash over, backdraft, collapse, May Day, etc.
- At every 30 minutes of elapsed time.
- At a report of fire under control.
- Any time Command feels it is necessary.

Upon termination and release from an incident, each firefighter will ensure that their "ID TAG's" are returned to their proper location. Should any "ID TAG" be lost or damaged, it is the responsibility of each firefighter to report the loss or damage of their "ID TAG" to the Accountability Officer who will see that the "ID TAG" is repaired or replaced as soon as possible.

Accountability will work only with a strong personal commitment to the safety system. The following is a list of commitments necessary for an effective accountability system:

- Command will always be responsible for including accountability as a major element in strategy and attack planning and must consider and react to any barriers to effective accountability.
- Accountability Officers will always maintain an accurate tracking and awareness of firefighters assigned to them. This will require the Accountability Officer to be in their assigned area and maintain close supervision of firefighters assigned to them.
- All firefighters responding to an incident will attach one of their "ID TAG's" to the accountability attachment ring of the unit in which they are responding.
- Any firefighters arriving in a POV will upon arrival attach one of their ID TAG's to the attachment ring of the apparatus that they are assigned to.
- When working in the Hot Zone, all firefighter teams will go in together, stay together, and come out together. Operating teams at an incident with reduced visibility, or other increased risks, will require very tight togetherness. No free-lancing.

ACTIVE THREAT INCIDENTS

PURPOSE

It is the duty of the fire department to save lives and protect property to the best of our ability. An active threat incident has the potential to pose danger to the life, health, and safety to firefighters and to the public.

It is the mission of this department to assist in the stabilization of active threat incidents to the best of our ability with available resources, to the level trained, and as needed until such time additional resources arrive on scene, and to continue to assist as needed throughout the incident.

The purpose of this operating procedure is to give first responders the proper direction to maximize inter-agency cooperation with all responding agencies when addressing the five common challenges occurring in a multi-agency response to an active threat. The five common challenges consist of stopping the threat, integrating the response, staging resources, medical care, and transportation of the injured.

The adoption of this standard operating procedure is also an acceptance of the Karnes County Active Threat Committee Memorandum of Understanding (MOU) which is established to formalize relationships between the participating agencies for policy guidance, planning, training, public and medical relations, and funding.

SAFETY

At all times, safety of the emergency responders and the public will be paramount over all other incident considerations. All emergency responders at the scene will wear the proper personal protective equipment, as indicated by the incident. No emergency responder will attempt any mitigation procedure or rescue attempt that is above his or her level of training, or will put in jeopardy, his or her own, or any other persons, life, health, or safety.

The Accountability System will be utilized during each incident, and the system will be maintained until firefighters are released from the incident scene. See “Accountability” for more information.

TACTICAL

It must be understood that no two active threat incidents will be the same, nor will they be handled in the same manner. However, these standard operating procedures offer a guideline to be followed at all incidents until such time the size-up of a particular incident causes a change in these procedures.

Karnes County is composed of multiple emergency response agencies with varying degrees of training and tactics. During an active threat incident, all agencies will respond and work together and will utilize the current concepts and best practices recommended by Advanced Law Enforcement Rapid Response Training (ALERRT). All first responders will operate under an incident command system.

A common problem with an active threat incident is over-convergence or lack of organization with multiple first responders flooding the operational area. To prevent this, all responding agencies must practice good staging concepts to control resource utilization, accountability, and ingress/egress.

All responding agencies have the potential to be tasked with providing medical care at any stage or area of an active threat incident. A common system of mass casualty care must be practiced and applied with the following goals: Prevention of further casualties, Treatment of casualties, and Completion of the mission.

The successful transportation of injured persons in an active threat incident depends on the first responders properly addressing the four challenges of Stopping the threat, Integration, Staging, and Medical. Responders must have a clear understanding and the ability to establish Casualty collection points, Ambulance exchange points, and to Conduct simple triage.

ALARMS

PURPOSE
It is the intent of this operating procedure to provide guidelines for the response to and return from a fire department alarm.

TACTICAL
Fire department members will be dispatched by pager tones followed by a voice communication from the sheriff's office dispatcher. That same dispatch will be resent by edispatch to alert firefighters of an incident. The siren will only sound to alert firefighters and the public of a non-fire emergency incident. There may also, at the dispatcher's discretion, be other forms of notification such as pager only, siren only, or a phone call from the dispatcher to an officer, from the requesting agency to an officer, or phone calls from an officer to individual members of the fire department. Other notifications may also be sent in a group text when appropriate.

Upon receipt of an alarm, firefighters will respond directly to the fire station in a safe manner. Upon arrival at the fire station, a full complement of firefighters, if available, shall board one truck and get it enroute to the scene before beginning to board the next truck. The order of truck response shall be established in these operating procedures for various types of incidents. No firefighter will be allowed to ride to or return from an incident location on the tailboard, catwalk or other open area of an apparatus. Firefighters shall not respond directly to the incident scene unless the scene is in the direct path of the firefighter's response to the fire station.

If an alarm is canceled prior to arrival at the fire station, firefighters may continue to the fire station in a non-emergency manner to record their name for attendance or show their response on edispatch. If an alarm is canceled after apparatus is enroute, but prior to arrival at the scene, units shall immediately reduce their response to non-emergency and return to the fire station. The first out or a designated apparatus may continue to the scene in a non-emergency response to gather the information required for an incident report. When a call is canceled, the name of the person canceling the call shall be reported on the incident report along with the reason that the call was canceled.

The Fire Chief shall be notified any time an apparatus leaves the fire station on a call, where no alarm is sounded. This would include situations where a firefighter would be called at home for a minor incident.

We will respond to other fire department alarms for mutual aid, only when assistance has been requested. Apparatus should remain in the fire station until our department has been requested. Members may go to the fire station and remain on standby in the fire station but should not attempt to contact the initial responding fire department unless directed to do so by an officer. We respond to certain EMS calls when requested. Generally, this would be for motor vehicle accidents which may require traffic control, extrication, lighting, to assist in lifting patients, etc. The same response rules apply to a mutual aid call to assist another fire department.

After each incident, it is the responsibility of the firefighters on each apparatus to verify that all equipment is checked and readied for use and that the apparatus is placed back into service.

APPARATUS

RESCUE 1 - RESCUE/EQUIPMENT TRUCK

2004 Pierce/International 4400 2-door DT530 330 hp diesel engine Automatic transmission

The primary purpose of Rescue 1 is to transport equipment to the scene of rescue/extrication incidents, structure fires, or any other incident where this apparatus may be needed. This vehicle is designed to also be used for air supply, scene lighting, rehab services. This vehicle may be used to transport firefighters to an incident if needed. This unit will not be manned by more than 3 firefighters in route to the scene of an incident.

The following is a list of some of the major equipment carried on this apparatus:
Air bag set w/controller
Air chisel set
Air fill station/Cascade system
Air tools (impact wrenches and sockets)
Atmospheric Monitor (4-gas monitor)
Chain saw
Confined space rescue equipment and tripod w/winch and pulley
Cribbing and shoring material (lumber, plywood, step cribbing, and wood blocks)
Electric power generator and extension cords and lighting equipment
Extrication equipment (power unit, spreader, cutter, rams, chain kit w/chain boomer)
Fire extinguishers (CO2 and dry chemical)
First aid kit
Flashlights
Hand tools (ax, bolt cutter, brooms, shovels, sledge hammer, pry bars, pike pole, squeegee, etc.)
Ladders (2 - 24' extension ladders)
Rehab equipment (roll out canopy, misting/cooling fans, water coolers)
Rope rescue/rappelling equipment
SCBA and air cylinders
Stokes baskets and backboards
Tool box w/hand tools
Tow chains
Ventilation fans w/ducting
Water rescue equipment
Winch (9,000 lb. truck mounted/portable electric winch)

COMMAND VEHICLE

2014 Chevrolet Tahoe - 5.3L engine - 4WD - A/T

The primary purpose of the Command Truck is for the use of the officer in charge to respond to the scene of incidents to establish command prior to the arrival of other apparatus. This vehicle may be used to transport firefighters to an incident if needed. This unit will not be manned by more than 5 firefighters in route to the scene of an incident.

The following is a list of some of the major equipment carried on this apparatus:
Atmospheric monitor (4-gas Monitor)
Flashlights
Traffic safety vests

SUPPORT VEHICLE
2015 Chevrolet Silverado 2500 - 6.0L V8 engine - 4WD - A/T

The primary purpose of the Support Vehicle is to pull the Foam Trailer and to be used as a Ground Crew apparatus on wildland fires and is used to transport equipment to the scene of rescue/extrication incident, structure fire, or any other incident where this apparatus may be needed. This vehicle may be used to transport firefighters to an incident if needed. This unit will not be manned by more than 5 firefighters in route to the scene of an incident.

The following is a list of some of the major equipment carried on this apparatus:
Flashlights
Traffic safety vests
Ground cover firefighting tools

FOAM TRAILER
2012 Hallmark 12-foot tandem axle trailer

The primary purpose of the Foam Trailer is to carry Class B foam, spill cleanup material, and traffic control equipment to the scene of any incident where it may be needed. The foam trailer is only to be pulled by the Support Vehicle unless unforeseen circumstances prohibit this from being done.

The following is a list of some of the major equipment carried on this apparatus:
Class B foam (5 gallon and 55 gallon units)
Foam eductors and nozzles
Traffic safety cones and cone bars
Spill cleanup material and tools

TANKER 1
2014 International 7500 - DT570 9.3L diesel – A/T – 3000 gallon tank – 500 GPM pump

The primary purpose of this apparatus is to transport additional water to the scene of incidents as needed.

The following is a list of some of the major equipment carried on this apparatus:
Hoselines (1 each 1.5” x 200’ – 1 each 2.5” x 200’ – 500’of 5” hose)
3000 gallon folding tank
12-foot Folding ladder
Pike poles
Floating strainer
Suction Hoses

ENGINE 6 – RESERVE ENGINE
1997 International 4900 4-door DT530 300 hp diesel engine Automatic transmission
1250 GPM Pump 1000 gallon tank

The primary purpose of Engine 6 is for use as a reserve engine on any incident as needed.

The following is a list of some of the major equipment carried on this apparatus:
Deck gun and ground base -1000 GPM
Electric generator (5000 watt portable)
Extension cord reels w/cords
Fire extinguishers (CO2 and dry chemical)
Flashlights and Lighting equipment (portable and truck mounted)
Hand tools (ax, bolt cutter, shovels, pry bar, pike pole, etc.)
Hose (1500' - 5" hose, 700' - 2 1/2" hose, 1,000' -1 1/2" hose)
Ladders (12' folding, 14' roof, 35' extension)
SCBA and air cylinders
Suction hoses and strainer
Thermal Imager
Tow chain

ENGINE 7 – RURAL ENGINE
2009 Pierce Contender Custom Cab 4-door 350 hp diesel engine Automatic transmission
1500 GPM Pump 1000 gallon tank Class A foam system

The primary purpose of Engine 7 is for use on structure fire outside the city limits, and any call outside the city limits where an Engine is needed. This Engine is first out on all structure fires outside the city limits.

The following is a list of some of the major equipment carried on this apparatus:
AFFF foam and eductors
Atmospheric Monitor (4-gas Monitor)
Deck gun and ground base -1000 GPM
Electric generator (5000 watt portable)
Extension cord reels w/cords
Fire extinguishers (CO2 and dry chemical)
Flashlights and Lighting equipment (portable and truck mounted)
Hand tools (ax, bolt cutter, shovels, pry bar, pike pole, etc.)
Hose (1000' - 5" hose, 700' - 2 1/2" hose, 1,000' -1 1/2" hose)
Ladders (12' folding, 14' roof, 35' extension)
Positive pressure ventilation equipment
SCBA and air cylinders
Suction hoses and strainer
Thermal Imager
Tow chain

ENGINE 8 – CITY ENGINE
2022 Pierce Saber Custom Cab 4-door 380 hp Cummins L9 engine Automatic Transmission 1500 GPM Pump 1000 gallon tank Class A foam system

The primary purpose of Engine 8 is for use on structure fire inside the city limits. This Engine is first out on all structure fires inside the city limits.

The following is a list of some of the major equipment carried on this apparatus:
Deck gun and ground base -1000 GPM
Fire extinguishers (CO2 and dry chemical)
Flashlights and Lighting equipment
Hand tools (ax, bolt cutter, shovels, pry bar, pike pole, etc.)
Hose (1000' - 5" hose, 700' - 2 1/2" hose, 1,000' -1 1/2" hose)
Ladders (12' folding, 14' roof, 35' extension)
Positive pressure ventilation equipment
SCBA and air cylinders
Suction hoses and strainer
Thermal Imager

BRUSH 10 – BRUSH TRUCK
1996 International 4800 4WD DT466 210hp diesel A/T 350 GPM pump 1200 gallon tank

The primary purpose of Brush 10 is for grass fire fighting and for transporting water for structure fires. This apparatus is second out on all grass fires.

The following is a list of some of the major equipment carried on this apparatus:
Backpack pump can
Bee control kit
Booster hose reel (100' X 1" red line)
Fire extinguisher (Dry chemical)
Fire swatters
Flashlights
Hand tools (ax, bolt cutter, shovels, pry bar, pike pole, etc.)
Hose (150' - 1 1/2" pre-connect, 100’ - 1 1/2" and 100’ - 2 1/2" spare hose)
Ladder (20’ extension)
SCBA and air cylinders
Suction hose (2 - 10' X 3" with strainer)
Tow chain

BRUSH 12 – BRUSH TRUCK
2011 Freightliner M-2-106 Cummins ISC 8.3L Diesel A/T 350 GPM pump 1200 gallon tank

The primary purpose of Brush 12 is for grass fire fighting and for transporting water for structure fires. This apparatus is the first out on all grass fires.

The following is a list of some of the major equipment carried on this apparatus:
Booster hose reel (100' X 1" red line)
El Oso water fitting kit and valve wrenches
Fire swatters
Flashlights
Floating pump
Hand tools (ax, bolt cutter, shovels, pry bar, pike pole, etc.)
Folding water tank (2100 gallon)
Hose (2 each 150' - 1 1/2" pre-connect hoses, and 200' - 2 1/2" spare hose)
Ladders (12' folding and 20’ extension)
Suction hose (2 each 10' X 3" with floating strainer)
Tow chain

ATMOSPHERIC MONITORING

PURPOSE
It is the intent of this operating procedure to provide guidelines for determining when atmospheric monitoring is necessary at an incident scene, to provide guidelines for all personnel involved in making atmospheric measurements, and to establish the highest level of accuracy for atmospheric monitoring instruments. This will allow personnel to operate with the highest level of instrument accuracy and will ensure the highest level of safety for all personnel.

TACTICAL
It shall be necessary to provide for atmospheric monitoring prior to making entry into any of the following atmospheres:

- Contaminated or oxygen deficient atmospheres.
- Atmospheres which may suddenly become contaminated or oxygen deficient.
- Atmospheres which are suspected of being contaminated or oxygen deficient.
- Prior to removing SCBA and/or PPE at any incident scene where the atmosphere may be hazardous to firefighters on scene.

Atmospheric monitoring instruments shall be calibrated on a regular basis to ensure the instrument is in proper operating condition. Calibration of instruments shall be done according to manufacturer recommendations and a record of calibration performed on atmospheric monitoring instruments shall be maintained. Any time the instrument does not calibrate correctly, and you cannot resolve the problem, you shall not use the instrument, and you shall report the condition of the instrument to the appropriate person in charge and write the situation on the board.

When performing any atmospheric test, be sure to consider the following:

- The duration of the testing should be for at least the minimum response time of your test instrument as specified by the manufacturer.
- When testing involves vertical decent into the space where the atmosphere may be stratified, testing shall be done at every four (4) feet of descent and four (4) feet to each side of the area where the work will take place.

For confined space entry, the alarm settings must be:

- ***O2 low at 19.5%, and O2 enriched at 23.5%***
- Flammability alarm set at 10% LEL
- Toxicity carbon monoxide 35 ppm
- Hydrogen sulfide 10 ppm

Be aware that if O2 readings are below 12%, the LEL reading will not be accurate.

OXYGEN CONCENTRATION
Normal atmosphere has an oxygen level of approximately 20.9 percent. Any level below 19.5% is considered to be oxygen deficient and is hazardous to health. Any level above 23.5% is considered to be oxygen enriched. Although this is not a direct health hazard, it does increase the chance of a fire or explosion and must be avoided. Oxygen levels in the 15 to 19% ranges will decrease ability to work strenuously and impair coordination and the ability to self-rescue. In the 10 to 14% ranges, rescuers will have impaired or poor coordination, perception, and judgment. In the 6 to 10% ranges, rescuers will have mental failure, unconsciousness, and death.

UPPER AND LOWER EXPLOSIVE LIMITS

Different chemicals have different flammability ranges, and these ranges involve two points: the Lower Flammable Limit (LEL) and the Upper Flammable Limit (UEL). Any chemical found between these two points is in a flammable or explosive range, and only requires an ignition source to have combustion.

CARBON MONOXIDE

Toxic gases are commonly found in confined spaces. Some of the different toxic gases are chemical asphyxiants, some are irritants, and several share both characteristics. Carbon Monoxide is an odorless and colorless gas that is a chemical asphyxiant. The toxic gas robs the body of oxygen. Carbon Monoxide levels in the 200 to 600 ppm range will produce headache and discomfort in the rescuer. In the 1000 to 15000 ppm range, pounding of the heart, dull headache, dizziness, flashes before the eyes, ringing in the ears, nausea. A one-hour exposure at this level can be dangerous to life. In the 4000 ppm range, the rescuer will face rapid collapse, unconsciousness, and death in a few minutes.

HYDROGEN SULFIDE

Hydrogen Sulfide is a chemical asphyxiant. It is a colorless gas that has a distinct odor of rotten eggs and can cause death in a few minutes. A low concentration of Hydrogen Sulfide desensitizes the sense of smell, and high concentrations are flammable. The vapor density is heavier than air, causing it to be at the bottom of confined spaces. Hydrogen Sulfide in the 18 to 15 ppm range is an eye irritant. In the 75 to 150 ppm range is a slight eye and respiratory irritant. In the 150 to 300 ppm range H2S is a significant irritant. Concentrations in the 400 to 600 ppm range for one hour can cause unconsciousness and death. In the 1000 ppm range H2S can be fatal in minutes.

ATMOSPHERIC TEST EQUIPMENT

Atmospheric test instruments are very sensitive and accurate; however, the best test instruments can not protect your life if they are not functioning properly. Before using any atmospheric testing equipment:

- Examine the case, meter, and attachments for damage or defects.
- Check sampling hoses for obstructions, kinks, holes, or cracks.
- Determine if sampling hose is long enough to sample necessary area.
- Check to see if battery is installed and fully charged.
- Fully understand the operation of the instrument and its alarms.

CERTIFICATION PROGRAM

PURPOSE
It is the intent of this operating procedure to provide information on training sessions, documentation of training hours, and information on the certification of firefighters.

TACTICAL
All training sessions of the fire department shall be instructed in a manner that will give each member present the knowledge to define, identify, or demonstrate the objectives outlined in the State Firemen's and Fire Marshal's Association of Texas (SFFMA) Certification Program.

All training sessions will be instructed by persons holding, or under the direct supervision of person(s) holding, at least a Level I Instructors Certification, and/or be approved by the Certification Coordinator and/or the Fire Chief. The instructor must have adequate knowledge of the subject area to be covered.

In no case shall fire scene experience or response to any other type of incident count as training and be credited toward the Certification Program.

Participation in courses outside the fire department will be acceptable for credit in the Certification Program, provided the course is instructed under the guidelines of the Certification Program and approved for credit by the Volunteer Certification Board and/or the Certification Coordinator and the Fire Chief.

It is the duty of the Certification Coordinator to see that all training hours received are reported and to see that these hours are posted toward the appropriate section and level of training in the Certification Program.

Decisions of the Certification Coordinator and Fire Chief are final, provided that they meet the guidelines of the Certification Program.

The Certification Coordinator shall, prior to the end of each year, be responsible to see that training hours are reported to the SFFMA for each member as needed.

Upon completion of the hours required for Firefighter I, Firefighter II, or Master Certification, the Certification Coordinator shall submit an application for Certification to the SFFMA and upon successful completion of an approved examination and skills testing, an appropriate certificate of certification will be issued.

For more information on the Certification Program, contact the Certification Coordinator or consult the SFFMA website.

The guidelines and minimum requirements, established by the SFFMA Certification Program board, are subject to change without notice of, or approval by, the membership of the department.

COMMUNICATIONS

PURPOSE
It is the intent of this operating procedure to provide guidance on proper communications.

TACTICAL
Fire department members will be dispatched by pager tones followed by a voice communication from the sheriff's office dispatcher. That same dispatch will be resent by edispatch to alert firefighters of an incident. The paging system will serve as our primary means of dispatch and the edispatch shall serve as a backup to the paging system. Pagers shall not be monitored in public locations.

The siren will only sound to alert firefighters and the public of a non-fire emergency incident. There may also, at the dispatcher's discretion, be other forms of notification such as pager only, siren only, or a phone call from the dispatcher to an officer, from the requesting agency to an officer, or phone calls from an officer to individual members of the fire department. Other notifications may also be sent in a group text when appropriate.

Two-way radios in each apparatus and officer's vehicle are for fire department use only. Fire ground communication shall be kept strictly to the communications necessary for the incident at hand. Unnecessary communications shall be controlled.

Prior to pulling out of the fire station, apparatus drivers shall verify that their radio is turned on, the volume is turned up, and that the radio is in the scan mode and ready for communication.

All apparatus operators shall report their response times to the sheriff's office dispatcher. When possible, one unit may report times for all applicable units. Example, "All units will be clear of the scene" or "Brush 10 and Brush 12 will be back in the station".

Enroute	Apparatus leaves the fire station enroute to an incident.
On-Scene	Apparatus arrives at the scene of an incident.
Clear of the Scene	Call is completed and apparatus leaves the scene to return to the station.
Back in the Station	Apparatus is back in the fire station ready for another call.

Before beginning to communicate on a radio, identify the apparatus or the call number of the person that you wish to contact followed by your apparatus or call number. If Brush 10 wanted to contact Brush 12, the proper identification would be as follows: "Brush 12 – Brush10".

Portable two-way radios are issued to command officers under the supervision of the Fire Chief. Officers carrying these units shall bring them when responding to an alarm. Radios will be made available, upon request, to the incident commander or operations officers.

These portable radios are for fire ground use only and are not to be carried and/or monitored in public locations or used by officers to record their individual times. Only the Fire Chief or other incident commander, in the absence of the Fire Chief will report times and verify the incident information prior to arriving at the station.

Clear concise language will be used for all communication purposes. It is important for members to be familiar with the basic 10-code as other emergency providers may be using it.

Two-way radios used by the department are programmed with multiple communications channels. The primary channels for communication will be as follows:

Karnes County Fire/EMS Channel. This is the primary frequency used for communications with the dispatcher while enroute to an incident, at the scene, and upon return to the station. Communications on this channel will be limited to only that which is necessary for the incident at hand. During incidents where large amounts of communications are required on scene, the incident commander may require units to go to "VFIRE 21" for fire ground communications.

VFIRE 21. This channel is a state-wide fire ground and fire mutual aid channel that will be used for fire ground communications and for communications between units responding to and returning from alarms. All responding units, after notifying dispatch of on scene, will move to VFRIE 21 for on scene operations.

There are numerous other channels of communication that are identified on the radio face panel that may be utilized during an incident, including for surrounding counties. The incident commander will determine the working channel of an incident.

Pagers and radios used in a manner not consistent with department policy may be reissued to other members.

During alarms, training sessions, meetings, or other fire department related activities, all radio or non-radio communications shall be clear and concise and shall be in English for all members to understand. In accordance with FCC regulations all radio communications shall be in English.

The department will use the following unit numbers:

800 - Fire station base station
801 - Fire Chief
802 - Assistant Fire Chief
803 - Captain
804 – Lieutenant
809 - Fire Marshal
Brush 10 - IH 4X4 Brush Truck
Brush 12 – Freightliner 4X4 Brush Truck
Command – Command Unit
Engine 6 - Reserve Engine
Engine 7 - Rural Engine
Engine 8 – City Engine
Rescue 1 - Rescue/equipment vehicle
Support 1 – Support pickup
Tanker 1 – 3000 gallon water transport truck
Foam 1 – Foam/Equipment Trailer (no Radio equipment)

Firefighters' individual member numbers will only be used when not assigned to an apparatus. Example "827". Any time a firefighter is assigned to a particular apparatus they will use the number of the apparatus. This is to let others know what units are enroute. If a firefighter should use their own member number while responding in an apparatus instead of the apparatus number (example: "827 is enroute" instead of "Brush 12 is enroute) other firefighters may not know what truck is enroute to the scene.

Incident command shall be established at all incidents. The incident commander will identify his call number, the incident identifier and command post location. In most cases, communications with the dispatcher or other officials on the scene will be through the incident commander. Calls which are obviously not yours should be answered only by the incident commander if available. This is not intended to inhibit fire ground communications, but rather to enhance the chain of command.

The radio message "May-Day" will be used by firefighters to report their status as being lost, trapped, or injured and needing rescue. Any member may use "May-Day" to report a lost firefighter. Any report of "May-Day" will receive priority radio traffic. The term "May-Day" will be reserved only to report lost, trapped, or injured firefighters. The term "emergency traffic" will be used to report all other emergencies. The orange button on radios is an emergency button that will emit emergency notification tones over the radio and will hold the microphone open for a short period of time for emergency communication needs. See "May-Day" for more information.

It shall be the responsibility of the Incident Commander or Officer in Charge to designate the appropriate fire ground channel(s) for each incident. Separate channels shall be assigned for firefighters on an interior attack or within the hot zone of an incident as determined necessary by the Incident Commander or Officer in Charge.

Portable radios may malfunction if they become overheated. It is a good general rule to follow for interior crews to swap portable radios with an outside crew member when coming out of a structure for an air cylinder swap. This will give the interior firefighter a cooler radio with less chance of malfunctioning and the radio that was swapped will have an opportunity to cool down.

CONCEALED SPACES

PURPOSE
It is the intent of this operating procedure to provide guidance in the overhaul and extinguishment of fires in concealed spaces.

TACTICAL
At any incident where the interior finish has been damaged by fire, the walls and/or ceiling will need to be opened to determine if the fire has extended into concealed structural spaces. Firefighters will be assigned to check for extension above and around the fire area. Walls, framed out spaces, pipe chases, and other vertical avenues of fire travel will be thoroughly examined to determine the extent of fire travel.

Overhaul should initially be limited to that action required insuring complete extinguishment. It may be necessary to interrupt the overhaul process to perform an investigation of the fire cause and origin. When performing overhaul operations, personnel must wear protective clothing and SCBA.

Both the incident commander and crew leaders must anticipate fire extension into concealed spaces and take action to confine the fire. When there is any doubt regarding the involvement of a concealed space, open it up quickly. If extension is found, quickly move ahead of the fire travel and open up the area. Confinement and extinguishment are based on getting ahead of the fire.

A thermal imaging camera may be used to assist in locating fires in concealed spaces. See “Thermal Imaging” for more information.

CONFINED SPACE INCIDENTS

PURPOSE

The intent of this operating procedure is to establish guidelines for the handling of incidents in which firefighters will be working in a confined space. A confined space is any enclosed area with a restricted access due to the configuration of the space. A confined space may have a toxic, explosive, or oxygen-deficient atmosphere and may involve injured persons, persons asphyxiated or overcome by toxic substances, cave-ins or fires occurring within the space. Any time this department is called to an incident, in which firefighters will be working in a confined space, the firefighters will enter the area only after all possible hazards have been identified.

TACTICAL

PHASE I – ARRIVE ON-SCENE. TAKE COMMAND. SIZE-UP.

I. THE PRIMARY ASSESSMENT
   A. Command should attempt to secure a responsible party or a witness to determine exactly what happened.
   B. An immediate assessment of the hazards present to rescuers should be done.
   C. If no witness is present, look for clues at the scene that may indicate what happened.
   D. An assessment of the victim(s) should be done.
   E. Command should determine how many victims have been affected.
   F. Command should determine how long the victims have been down, the mechanism of injury, and the survivability profile of the victim.
   G. Command must quickly determine whether the operation will be a rescue or a recovery.
   H. Establish communications with the victim as soon as possible.
   I. Locate the confined space permit and all other information about the space.

II. THE SECONDARY ASSESSMENT
   A. The Confined Space
      1. Command should determine the type of confined space.
      2. Determine the type of products stored in the space.
      3. Identify what known hazards are present; mechanical, electrical, etc.
      4. Identify the location and number of victims affected.
      5. Diagram of confined space, including entry and egress locations.
      6. Determine the structural stability of the confined space.
      7. Conduct a hazardous material size-up.
   B. On-Scene Personnel and Equipment
      1. Command should determine if there are an adequate number of trained personnel on scene to do the rescue/recovery.
      2. Command should consider the effect of temperature extremes on personnel, and consider early rotation of personnel operating on scene.
      3. Command should consider if the proper equipment is on-scene to complete the operation. This includes, but is not limited to:
         a. Atmospheric monitoring equipment.
         b. Explosion proof lighting.
         c. Explosion proof communications.
         d. Supplied air breathing apparatus or remote air and cascade system.
         e. Victim removal systems/equipment.
         f. Ventilation equipment with necessary duct work.

PHASE II – PRE-ENTRY OPERATIONS.

I. MAKE THE INCIDENT AREA SAFE
   A. Establish a perimeter. The size of the perimeter should be dictated by the atmospheric conditions, wind direction, structural stability, etc.
   B. Stop all unnecessary traffic in the area.
   C. Assure that vehicles parked downwind from incident are not running.
   D. Establish ventilation to area if necessary.
   E. Assign Safety and/or Rehab Sectors.
   F. Activate Accountability System and appoint Accountability Officer.

II. MAKE THE RESCUE AREA SAFE
   A. Command shall assign a Hazard Sector to determine exactly what hazards and products are within the confined space.
   B. The Hazard Sector shall do atmospheric testing in the space to determine oxygen level, flammability, and toxicity. Based on readings, the Hazard Sector shall advise Command of the proper level of personal protective equipment. Any instruments used to monitor the confined space shall have:
      1. An audio-alarm.
      2. Be calibrated to 10% of the LEL of the calibrated gas.
      3. Have the audio-alarm set at:
         - O2 low at 19.5%, and O2 enriched at 23.5%
         - flammability alarm set at 10% LEL
         - toxicity carbon monoxide 35 ppm
         - hydrogen sulfide 10 ppm
      4. Any O2 readings below 12%, Command should recognize that the LEL reading will not be accurate.
      5. Hazard Sector shall give Command atmosphere readings every 5 minutes.
   C. The Hazard and Ventilation Sectors are extremely important parts of a confined space operation and shall be staffed by personnel with a thorough knowledge of atmospheric monitoring and ventilation technique.
   D. Utilities, including electrical, gas, and water should be secured and locked/tagged out. If it is not possible to lock/tag out, the Safety Sector shall post a guard to assure that the utilities are not turned on during the operation.
   E. Any product that is in or flowing in the confined space must be secured and blanked off if possible. The space may need to be drained of any product prior to entry.
   F. Any manufacturing or processing equipment must be shut down prior to entry. If possible, all equipment should be locked/tagged out and brought to a zero energy state.
   G. The structural stability of the confined space should be evaluated. If there is a potential for collapse, measures must be taken to assure the structural stability of the space.

III. VENTILATION
   A. Assign a Ventilation Sector to establish the proper ventilation of the confined space.
   B. The Ventilation Sector should consult with the Safety Sector and Hazard Sector to determine the proper type of ventilation for the space.
   C. The Ventilation Sector must consider the effects on the atmosphere that positive or negative pressure ventilation will have (i.e., increase or decrease flammability of atmosphere). It could require both positive and negative ventilation (pushing and pulling). This will be based on the vapor density or molecular weight of the product.

D. The Ventilation Sector may consider negative pressure ventilation if there is only one entry point. Atmospheric monitoring will be required to ensure a non-explosive environment is present in the exhausted vapor area. The Ventilation Sector must also consider the effects the exhaust is having on the operation.

PHASE III – ENTRY OPERATIONS. VICTIM REMOVAL.

I. SELECTION OF PERSONNEL
   A. The proper personnel shall be selected to make entry into the confined space. A minimum of two persons shall be assigned to make entry. All personnel on the entry team shall have vital signs taken and recorded prior to entry, if time permits.
   B. Command shall assign a Rescue Sector. The Rescue Sector shall provide a minimum 2:1 ratio of personnel outside the confined space to support personnel inside. This shall include a standby rescue team with a 1:1 ratio to provide immediate assistance to personnel in the confined space.
   C. All entry and back-up personnel shall be properly trained in confined space rescue procedures and capable of carrying out the rescue/recovery.
   D. An Extrication Sector shall be assigned to conduct the entry into the confined space.
   E. A thermal imaging device may be used to assist in locating victims in a confined space.

II. SELECTION OF PERSONAL PROTECTIVE EQUIPMENT
   A. The proper level of personal protective equipment shall be worn by all entry and back-up personnel. This shall include helmet, gloves, proper footwear, goggles, turnouts or appropriate clothing, and a rescue harness.
   B. All entry and back-up personnel shall wear SCBA into the confined space and shall not remove their SCBA while in the confined space.
   C. Firefighters may remove their SCBA tank from their back in order to maneuver through a tight space so long as they keep their facemask in place and remain on air.
   D. Entry personnel shall have a rescue harness on prior to entry and shall use personal air monitoring devices that monitor flammability and O2 as a minimum.

III. COMMUNICATION AND LIGHTING
   A. If the confined space has a flammable atmosphere, entry personnel should have intrinsically safe communication equipment. If this equipment is not available, the Extrication Sector may decide to use a tag line for communication or a message relay person. Remember that these are hazardous atmospheres until proven otherwise.
   B. If the entry team is entering a dark confined space, ensure that the proper type of lighting is used. If explosion proof lighting is not available, then cyalume type lights must be used by the entry team.
   C. If an incident escalates to the point that the safety of personnel may be in jeopardy and it is necessary to immediately evacuate the confined space, an IMMEDIATE RETREAT signal consisting of the high/low audible signal from a siren followed by short blasts of the air horn will be sounded until the space is evacuated. This is an immediate evacuation of personnel only and all equipment shall be left behind.

IV. ORIENTATION OF CONFINED SPACE
   A. Prior to entry into the confined space, the Extrication Sector, with the help of the responsible party, should obtain a blueprint or diagram of the space. All entry and backup personnel should be made aware of the layout of the space to be entered.

B. All entry and back-up personnel, Command and Safety shall be made aware of the action plan and the back-up plan prior to entry.
C. Rescuer tag lines may or may not be appropriate in the confined space, depending on the specific layout. It could be an entanglement hazard.

V. VICTIM REMOVAL EQUIPMENT
A. If possible, the entry team should bring a supply of breathable air for the victim.
B. Pure oxygen shall not be used in a confined space that has a potentially flammable atmosphere. Rescuers should not remove their breathing apparatus and give it to the victim.

VI. ASSESSING CONDITION OF VICTIM
A. Upon reaching the victim, entry personnel should do an immediate primary survey of the victim. If appropriate, treatment should be started immediately. If necessary contact EMS personnel for suggested treatment options.
B. A quick but thorough secondary assessment of the victim should be done. If time permits, entry personnel should attempt to treat serious injuries prior to removal.
C. If indicated, complete C-spine precautions should be administered.
D. Encouraged to wear the appropriate breathing apparatus, if conscious.
E. After treatment of immediate life-threatening injuries, the victim(s) should be packaged for removal from the space. This may include using a backboard, stokes basket, sked board, or some other similar device designed for extrication.
F. Prior to removal from the space, the entry team should secure any loose webbing, buckles, straps, or any other device that may hinder the extrication process.

VII. VICTIM REMOVAL SYSTEM
A. Prior to removal of the victim, the entry team should determine the appropriate method of extrication. This may include a vertical or horizontal haul system constructed of ropes, pulleys, and other hardware, with a minimum of a 2:1 mechanical advantage.
B. As a general rule, entry personnel should never allow the victim between the rescuer and the point of egress.

VIII. TRANSFER TO TREATMENT SECTOR
A. Immediately after reaching the point of egress, entry personnel shall transfer the victim to treatment personnel.
B. ALS level examination should be conducted on the victim.
C. If the victim is contaminated from product inside the space, a Decontamination Sector shall be set up and used prior to transport of victim.

PHASE IV. TERMINATION.

I. PREPARATION FOR TERMINATION
A. Personnel accountability.
B. Remove tools and equipment used for rescue/recovery.
C. If entry personnel and/or equipment have been contaminated during the rescue/recovery, proper decontamination procedures shall be followed.
D. Secure the scene. Prior to turning the property back over to the responsible party, one final reading of atmospheres shall be taken and recorded.

DEFINITIONS

ACCOUNTABILITY: A system whereby the incident commander can better track emergency service personnel on the scene at all times in order to know who went into a scene or structure and who came out.

ACTIVE SHOOTER: Active shooter is a term used to describe the perpetrator of an ongoing mass shooting. The term is primarily used to characterize shooters who are targeting victims indiscriminately and at a large scale, who oftentimes, will either commit suicide or intend to be killed by police.

ACTIVE THREAT: An active threat is defined as any incident which by its deliberate nature creates an immediate threat or presents an imminent danger.

AFFF (AQUEOUS FILM FORMING FOAM): An extinguishing agent and vapor suppressant used to extinguish Class C, combustible liquid fires, because it floats on the surface of the liquid involved in the fire. Foam is effective in extinguishing and preventing fires in the following ways: **Smothering:** Preventing air and flammable vapors from combining.
Separating: Intervening between the fuel and the fire.
Cooling: Lowering the temperature of the fuel and adjacent surfaces.
Suppressing: Preventing the release of flammable vapors.

AFFF/ATC (ALCOHOL TYPE CONCENTRATE): A type of AFFF used on polar solvents such as alcohol, acetone, lacquer thinner, ketones, esters, and acids.

AIR BAG SYSTEM: An inflatable envelope type device that may be inserted between the ground and an object and then inflated to lift the object. It can also be used to separate objects. Depending on the size of the bag, it may have lifting capabilities in excess of 25 tons.

AIR CHISEL: An air powered chisel type cutting device used to cut open light weight sheet metal such as that used on auto or bus bodies or metal buildings.

ALARM: Any signal indicating the need for emergency fire service response.

ALTERNATIVE FUEL VEHICLE: A motor vehicle that runs on alternative fuel rather than traditional petroleum fuels. The term also refers to any technology powering an engine that does not solely involve petroleum.

APPARATUS: Any fire department emergency vehicle or group of vehicles used in fire suppression or other emergency situations.

APPLIANCE: A generic term applied to any nozzle, wye, siamese, deluge monitor or other piece of hardware used in conjunction with fire hose for the purpose of delivering water.

ATMOSPHERIC MONITOR: A device used to monitor the condition of the environment in which emergency service personnel work. This is especially useful for confined spaces and incidents involving flammable or combustible liquids.

ATTACK LINES: Hose lines or fire streams used to attack, contain, or prevent the spread of fire.

ATTACK PUMPER: The pumper that is positioned at the fire scene and is directly supplying attack lines.

BACKBOARD: A device used to restrict the movement of victims suspected of having any injuries that would require a victim to be transported without movement of the injured area.

BACKDRAFT: An explosion caused by an extremely rapid ignition and burning of heated gases within a confined area, usually after a sudden inrush of air, as when a door is opened. The degree of explosive force depends on such variables as the amount and speed of air that reaches the fire area and the amount of gaseous fuel present.

BIOLOGICAL AGENT: Biological materials that are capable of causing disease or long-term damage to the human body.

BLEVE: An acronym for BOILING LIQUID EXPANDING VAPOR EXPLOSION.

BLOODBORNE PATHOGEN: Pathogenic microorganisms that are present in human blood, and can cause disease in humans. These include, but are not limited to: Hepatitis B, Hepatitis C, HIV, and Syphilis.

BODY FLUIDS: Fluids produced by the body including, but not limited to, blood, semen, mucous, feces, urine, vaginal secretions, breast milk, amniotic fluid, cerebrospinal fluid, synivial fluid, and pericardial fluid.

BODY SUBSTANCE ISOLATION: A concept practiced by response personnel whereby blood and other body fluids are considered a risk for transmission of blood borne diseases.

BOOSTER HOSE: A small diameter hose, usually of ¾" or 1" in diameter used to extinguish small fires. This type of hose is usually of a non-collapsible constriction and stored on a reel.

BOOSTER TANK: The water tank on a fire apparatus that holds a certain amount of water.

BUNKER GEAR: The protective clothing used to protect a firefighter from the products of fire. (Example: boots, coat, gloves, goggles, helmet, hood, pants)

CARABINER: A D-shaped appliance used during rope rescue incidents that can be quickly hinged open or locked closes.

CASCADE SYSTEM: A group of large breathing air cylinders connected and equipped with proper fittings to replenish SCBA cylinders.

CENTRIFUGAL PUMP: A pump with one of more impellers that utilizes centrifugal force to move the water.

CERTIFICATION PROGRAM: A training accreditation program designed to raise the level of competence of volunteer fire fighting and prevention personnel by establishing minimum standards of training. The certification program is administered by the SFFMA.

CHAIN OF COMMAND: The order of the command structure of the department that is used at the scene of an emergency incident. The chain of command begins with the highest-ranking officer on scene and progresses to the lowest.

CHEMICAL AGENT: Any solid, liquid, or gas that can cause harm to the human body through respiration, ingestion, skin absorption, or contact.

CHEMTREC: A contact that can be utilized 24 hours a day for chemical information during emergency situations. The phone number for CHEMTREC is 1-800-424-9300

CNG: Compressed natural gas.

CO2: Carbon dioxide

CODE 1: Non-emergency response to an incident, no light or siren.

CODE 3: Emergency response to an incident in which apparatus must display overhead flashing lights and an audible alarm (siren).

COMBINATION ATTACK: The integration of a direct and indirect attack to achieve confinement and extinguishment of a fire.

COMMAND: A term referring to the person or persons ultimately responsible for the management and control of an incident also referred to as incident commander.

COMMUNICATION: A system of relaying information among emergency personnel involved in an incident.

COMPOUND GAUGE: A gauge connected to the intake side of the pump that is capable of measuring positive or negative intake pressure.

CONFINED SPACE: Any enclosed area with a somewhat restricted access and the potential to have a toxic, explosive or oxygen-deficient atmosphere.

CONVECTION: Heat travel through a heat circulating medium, the most common being air.

COOL ZONE: A term used to define an area of operation during an emergency situation such as a hazardous material incident. An area with no contamination or other hazards, usually the location of the incident command post, staging area, and media access point.

CRIBBING: Varying lengths of hardwood blocks used to stabilize objects, particularly vehicles during extrication incidents.

CRITICAL INCIDENT STRESS (CIS): Critical incident stress refers to the range of physical and psychological symptoms that might be experienced by someone as a result of being involved in a traumatic critical incident. Critical incident stress is simply the body's normal reaction to an abnormal event.

CRITICAL INCIDENT STRESS DEBRIEFING (CSID): Critical Incident Stress Debriefing is a process through which a facilitator helps a group of people work through their response to a highly stressful or traumatic event. CISD is a form of crisis intervention aimed at reducing the traumatic impact of an event by fostering a connection between people who went through the same experience, increasing effective coping, and trauma education after the stressful event.

DEFENSIVE ATTACK: Exterior fire attack with emphasis on exposure protection.

DIRECT ATTACK: The application of water directly to burning fuel to achieve extinguishment.

DRAFTING OPERATION: The process of drawing water from a static source into a pump that is above the level of the water supply.

DRAIN VALVE: A valve on pump discharges that facilitates the removal of pressure from a hose line after the discharge has been closed.

ELECTRIC VEHICLE: A vehicle that uses one or more electric motors for propulsion. It can be powered by a collector system, with electricity from extravehicular sources, or it can be powered autonomously by a battery or by converting fuel to electricity using a generator or fuel cells.

EMERGENCY RESPONDER: Any person who response to the scene of an emergency incident for the purpose of controlling the incident.

EMS: Emergency Medical Service.

PUMPER: A piece of fire apparatus with a permanently mounted fire pump with a rated discharge capacity of 500 GPM or greater and whose primary responsibility is to pump water.

ETIOLOGIC AGENT: Any substance which may contain live disease bacteria or has the potential to spread disease.

EQUIPMENT: The portable tools or appliances carried on the fire apparatus but not permanently attached to or part of the apparatus.

EXPLOSIVE ATMOSPHERE: Any atmosphere that contains a mixture of fuel to air that falls within the explosive limits for that particular material.

EXPOSURE: A structure or separate part of the fire ground to which the fire could spread.

EXPOSURE INCIDENT: Specific contact of blood or other potentially infectious material with the eyes, mouth or other mucous membranes, non-intact skin, or parenteral contact.

EXTENSION RAM: A hydraulic tool designed specifically for straight pushing operations that may extend as far as 60 inches.

EXTRICATION: The act of removing a victim from an area or enclosure that they would not otherwise be able to remove themselves.

EXTRICATION TOOLS: The tools or equipment used to remove trapped victims from an enclosed area, as in a vehicle accident where a person is pinned in the vehicle. These tools include but are not limited to a spreader, cutter, rams, power unit and hoses.

FATIGUE: An exhaustion of strength caused by prolonged exertion.

FIGURE 8: A double ring-shaped appliance with two ears that is used during rope rescue incidents to control the speed of a person or object descending a rope.

FIRE ATTACK: An act of extinguishing a fire either by a direct or an indirect attack method.

FIRE DEPARTMENT CONNECTION: The point at which the fire department can connect into a sprinkler or standpipe system to boost the water flow in the system.

FIRE DOOR: A door, usually of metal, made to restrict the passage of fire through an opening.

FIRE FLOW: The flow of water in gallons per minute required for the protection of exposures and the confinement and extinguishment of a fire.

FIRE STOP: Solid material such as wood blocks, placed within a wall void to retard or prevent the spread of fire through the void.

FIRE STREAM: An unbroken stream of water applied to a fire for the purpose of controlling and extinguishing a fire.

FIREWALL: A wall designed to withstand severe fire exposure and to act as an absolute barrier against the spread of fire.

FLASHOVER: The condition of fire in an enclosed space in which the entire atmosphere within the space becomes so hot that it suddenly becomes totally engulfed in flames.

FLOATING PUMP: A pump with a motor and flotation device attached that is capable of floating in a body of water and drafting water out of that body of water and moving it through a hose to a desired location.

FOAM EDUCTOR: A proportioning device that meters a preset amount of foam concentrate into a water stream to make a foam solution. Most eductors are capable of metering foam in a range from 1 to 6 percent.

FOAM TUBE: A tube type aeration device that is placed on the discharge end of a nozzle that introduces air into the water/foam solution to form the finished foam-extinguishing agent.

FOLDING TANK: A collapsible storage tank used during a relay or shuttle operation to hold water from water tanks or hydrants. The water can then be used to supply attack pumpers.

FORCIBLE ENTRY: Gaining entry into a secured structure or area by the use of force from pry bars, axes, power tools or any other method when normal avenues of entry are not available due to locked doors or other barriers.

FRICTION LOSS: The loss of pressure created by the turbulence of the water moving against the interior walls of the hose.

GATE VALVE: A control valve for a hose, pump outlet, or a large caliber valve.

GPM: Gallons per minute. (As related to the flow of water)

GOGGLES: An item of firefighter protection that protects the firefighter's eyes from dust, dirt, water, the products of combustion, and many other dangers.

GROUND COVER FIRE: Fires involving weeds, grass, field crops, brush, forest, and similar vegetation. Also referred to as wildland fire.

HARD SUCTION HOSE: A flexible length of hose, reinforced with a steel core to prevent collapsing. This type of hose is connected between a fire pump and a water supply source (usually a static supply) and must be used when drafting.

HAZARD AREA: The established area from which bystanders and unneeded rescue workers are prohibited.

HAZARDOUS MATERIAL: Substances or materials in quantities or forms that may pose an unreasonable risk to health, safety or property when stored, transported or used in commerce.

HELMET: An item of protective clothing used to protect the firefighters head and neck from falling debris, hot embers, weather and water.

HOOD: An item of protective clothing used to protect a firefighter's face, neck, ears, and surrounding area from the products of combustion. The hood is to be placed over a firefighter's head, prior to putting on their helmet.

HOOLIGAN TOOL: A prying tool with a claw at one end and a spike or point at a right angle to a wedge at the other end.

HOSELINE: Hose and appliances used to fight a fire.

HOT ZONE: A term used to define an area of operation during an emergency situation such as a hazardous material incident. This is an area with limited access, usually the location of the spill or contaminated area.

HYBRID VEHICLE: A hybrid vehicle uses more than one means of energy, combining a petrol or diesel engine with an electric motor, and the two systems work with each other to move the vehicle. This allows the car to burn less gasoline, achieving better fuel efficiency than a traditional engine that solely uses fuel does. Electric power serves to boost the performance of the engine.

HYDROGEN SULFIDE GAS (H2S): A colorless, extremely poisonous, gaseous compound having a characteristic odor of rotten eggs. It is commonly found in oil production in our area.

IMMEDIATE RETREAT SIGNAL: A signal to indicate that firefighters are in imminent danger and that they need to immediately evacuate the space, structure or area leaving behind all equipment in order to make a fast retreat. In this department a high/low audible signal from a siren followed by two short blast of an air horn will be sounded until the space, structure or area is evacuated.

IMMEDIATELY DANGEROUS TO LIFE OR HEALTH (IDLH): Any condition that poses an immediate or delayed threat to life, or that would cause irreversible adverse health effects.

INCIDENT COMMAND SYSTEM: (ICS) A management system of procedures for controlling personnel, facilities, equipment, and communications from one or more agencies to manage an incident in an effective and efficient manner, with all working toward a common goal under the leadership of an incident commander.

INCIDENT COMMANDER: The person ultimately responsible for the management and control of an incident.

INDIRECT ATTACK: The application of water in overhead areas of an enclosed space to control rollover and prevent horizontal extension.

INFECTIOUS DISEASE: Any disease due to the entrance into, and growth in the body of microorganisms, such as AIDS or Hepatitis.

INTERIOR ATTACK: An attack made on a fire in a structure, from the interior of that structure.

KNOCKDOWN: The blackening down of a working fire.

LIFE SAFETY ROPE (LIFELINE): Rope approved for life safety uses.

LIFE SAFETY VEST (LIFE JACKET): A life preserver in the form of a jacket that is used during any type of water related rescue, recovery, or incident.

LOWER EXPLOSIVE LIMIT (LEL): The lowest percentage of a mixture of air and a flammable or explosive vapor that will support combustion. The LEL is measured in a percentage of vapor to air mixture. A mixture below the lower explosive limit for a particular chemical will be too lean and will not support combustion.

LPG: Liquefied Petroleum Gas. Example: Propane or Butane

LNG: Liquefied Natural Gas.

LUNAR: LUNAR" is an acronym used during a May-Day or other emergency situation that stands for "Location, Unit, Name, Air Supply, and Resources" needed for your rescue. This is a great resource when you are trapped in a collapse or if you are in need of assistance during an incident.

MASS CASUALTY INCIDENT: An incident in which emergency medical services resources, such as personnel and equipment, are overwhelmed by the number and severity of casualties.

MASTER STREAM NOZZLE: A nozzle capable of flowing in excess of 350 GPM.

MISTING COOLING FAN: A 10-gallon water cooler that has either water of ice water inside and has a fan mounted on top of the cooler. When the fan is turned on, the water is siphoned out of the cooler and misted into the air stream produced by the fan. This provides a cooling effect for emergency service personnel during rehab.

MUTUAL AID: A pre-arranged plan whereby one of more fire departments will assist another department in the control of an incident.

NFPA: National Fire Protection Association

NOZZLE: An appliance which attaches to a fire hose which is used to control the application of water onto a fire.

NOZZLE PRESSURE: The velocity pressure at which water is discharged from the nozzle.

NOZZLE REACTION: The water discharge counter-force directed back against the people or device holding a nozzle.

OFFENSIVE ATTACK: Fire attack with emphasis on stopping the progress of the fire in the area of origin.

OVERHAUL: The process by which firefighters check and search a fire area after extinguishment for any potential smoldering fire, hot embers, etc, so as to be certain that the fire will not start again. Overhaul includes, but is not limited to, opening of concealed spaces to insure that all hidden fire has been extinguished and manually separating the burned from the unburned material to permit final extinguishment.

OXYGEN-DEFICIENT ATMOSPHERE: Any atmosphere containing less than 19.5% oxygen by volume. Normally, atmospheric air contains 21 % oxygen.

OXYGEN ENRICHED ATMOSPHERE: Any atmosphere containing more that 23.5% oxygen.

PAGER: A device used to alert firefighters of emergency situation requiring their services. Pagers emit an audible alarm followed by verbal information on the incident type and location.

PARTS PER MILLION (PPM): A unit of measurement of the amount of one product in a mixture with another. In the fire service it is used as a measurement of a certain type of chemical in mixture with the air to determine if the mixture is immediately dangerous to life and health.

PASS (PERSONAL ALERT SAFETY SYSTEM): A personal alert safety device that can be manually activated, or will self-activate if emergency service personnel are in need of immediate assistance. PASS devices are normally integrated into, or attached to a self-contained breathing apparatus. When activated they will emit an audible and visual to summon aid in the event a firefighter or other emergency responder becomes disabled.

PIKE POLE: A sharp prong and hook of steel on a wood, metal, fiberglass, or plastic handle used for pulling, dragging, and probing. Pike poles can be of varying length, usually between 3 feet to 12 feet long. They may have a straight handle of may have a D-handle on the end for better gripping.

PORTA-POWER: A manually operated hydraulic tool that has been adapted from the auto body business to the rescue service for prying, pushing, and pulling.

POSITIVE PRESSURE VENTILATION: The system of using high-pressure ventilation fans to remove the products of combustion from a structure.

POSITIVE PRESSURE VENTILATION FANS: High-pressure gasoline or electric powered fans used to remove the products of combustion during ventilation operations.

POWER CONE: The pattern of a fire fighting nozzle where the water discharges in a pattern between a straight stream and a full fog pattern, usually about a 30-degree pattern.

POWER TAKE-OFF PUMP: (PTO PUMP) A small pump driven off the transmission of an apparatus which is used to pressurize the 3/4" or 1" booster lines.

PRECONNECT HOSE: Hose connected to the outlet of the pump before a fire, to expedite hose operations and fire fighting operations.

PREFIRE PLAN: Report consisting of information about a building and activity in the building. It usually includes drawings of the site and the building, as well as information about building features, hazards and other facts that are of importance in case of a fire or other emergency.

PRESSURE GAUGE: A gauge that registers the pump discharge pressure.

PRIME: To remove all air from a pump in preparation for receiving water.

PROTECTIVE CLOTHING: A general term used for the equipment worn by firefighters such as coat, pants, helmet, gloves, hood, and boots to protect them from the products of combustion.

PUMP AND ROLL: The ability of an apparatus to pump water while the vehicle is in motion, usually through the use of a PTO pump or an auxiliary pump.

RADIATED REAT: Heat movement in a11 directions in the form of energy waves.

RAPID INTERVENTION TEAM: A crew of firefighters at the scene of a working fire that are designated as an emergency response team readied for entry in case any of the firefighters working on the incident scene should need immediate assistance. Examples of emergencies could include, but are not limited to, structural collapse, lost or disoriented firefighters, flashover or backdraft situations, downed firefighter, and any other situation that may render a firefighter in need of immediate assistance.

RELIEF VALVE: A pump valve designed to reduce hazardous conditions caused by excessive pressures.

RIT PACK: A bag that contains the equipment needed for a Rapid Intervention Team to provide proper immediate assistance to firefighters in distress. Some of the equipment included in the pack includes a rapid intervention regulator with spare cylinder, mask, RIT fill hose, and shoreline hose. Also included is a rope, thermal imaging camera, etc.

SALVAGE: The process by which firefighters attempt to save property from damage of water, smoke or heat by removing property from a fire area or by doing anything possible, such as covering property with salvage covers to prevent water damage in a fire area.

SALVAGE COVER: The covers used during salvage operations to protect property from water, smoke or fire damage.

SCBA: Self -Contained Breathing Apparatus is a device worn by the firefighter which offers respiratory protection from toxic gases, smoke, and super heated air.

SCUBA: Self-Contained Underwater Breathing Apparatus is for underwater use only and is not to be confused with SCBA which is not for use in or under water.

SEARCH AND RESCUE OPERATION: A fire ground evolution consisting of an organized search of a fire building to determine whether any people are still in the building and to remove those that are found.

SFFMA (State Firefighters and Fire Marshals Association of Texas): A statewide organization dedicated to serving the needs of the firefighters of Texas. The SFFMA administers the Volunteer Firefighters Certification Program.

SHORING MATERIAL: Lumber, plywood, step cribbing, and wood blocks used for stabilization in rescue situations. Some incidents that require the use of shoring materials are vehicle extrication incidents, trench rescue incidents, structural collapse incidents, etc.

SIAMESE: A hose appliance used to combine two hose lines into one. A siamese generally has two female inlets and one male outlet.

SIZE-UP: The mental evaluation made by a firefighter, enabling the determination of a course of action, to control an incident. The evaluation includes such factors as time of day, location, exposures, nature of occupancy, life hazard, type of property involved, nature and extent of fire, weather, water supply, manpower, and fire fighting capabilities.

SOFT SUCTION HOSE: A large diameter, collapsible piece of hose used to connect a fire pump to a pressurized water supply source.

SPANNER WRENCH: A small tool primarily used to tighten or loosen hose couplings, but that may also be used as a prying tool or a gas key.

SPOTTING: Positioning the apparatus in a location that provides the utmost efficiency in operating on the fire ground.

STAGING AREA: The process by which uncommitted units responding to a fire of other emergency incident are stopped at a location away from the fire scene to await their assignment.

STANDARD OPERATING PROCEDURES (SOP's): The standard method in which a fire department carries out routine functions.

STEAM CONVERSION: The physical changing of water from a liquid to a gaseous form. Water expands in size 1,700 times when it converts to steam.

STOKES BASKET: A basket-type litter suitable for transporting victims from locations where a standard litter would not be easily secured.

SUCTION HOSE: A non-collapsible hose used to draft water out of a water source such as a folding tank, stock tank, water trough, creek, dry hydrant, etc.

SWIFT WATER: Any moving body of water that a person must be rescued from.

TACTICS: The method of employing equipment and personnel to obtain optimum results.

THERMAL COLUMN: The updraft of heated air, fire gases, and smoke directly above the involved fire area.

THERMAL IMAGING CAMERA: All objects have a certain temperature and emit waves of thermal energy called infrared radiation. The hotter the object, the more energy waves are emitted. A thermal imaging device translates these energy waves into a view-able image to display a black and white "picture" of a scene. On the screen of a thermal imager, hottest objects show as white, coolest objects show as black, and features of other objects show as varying shades of gray. The "thermal picture" enables firefighters to see through smoke, find fires, identify victims, etc.

TRIPOD: A device used with an attached winch or block and tackle to provide a structure to enable a vertical lift to be made from below grade areas, such as from a manhole or underground utility vault.

TURNOUT: A name given to bunker gear or protective clothing.

UNBURNED SIDE: The part of the structure, vehicle or area that the fire has not reached.

UPPER EXPLOSIVE LIMIT (UEL): The highest percentage of a mixture of air and a flammable or explosive vapor whereby it will support combustion. The UEL is measured in a percentage of vapor to air mixture. A mixture above the upper explosive limit for a particular chemical will be too rich and will not support combustion.

VENTILATION: The planned and systematic release and removal of heated air, smoke and gases from a structure and the replacement of these products of combustion with a supply of cooler, cleaner air.

WARM ZONE: A term used to define an area of operation during an emergency situation such as a hazardous material incident. This is a normally a contamination reduction area outside of the Hot Zone where decontamination normally takes place.

WARNING DEVICES: Any audible or visual devices added to an emergency vehicle in order to gain the attention of drivers of other vehicles on the road. Warning devices may include flashing lights, sirens, horns or bells.

WILDLAND FIRE: Fires involving weeds, grass, field crops, brush, forest, and similar vegetation. Also referred to as ground cover fire.

WILDLAND GEAR: Protective clothing worn during a wildland fire, usually consisting of coveralls, or a shirt and pant combination made of heavy fire-retardant material. Wildland gear should also include a helmet with goggles, boots, and respiratory protection.

WYE: A hose appliance that divides one hose line into two hose lines of equal or smaller size.

DEPARTMENT PROPERTY

PURPOSE
It is the intent of this operating procedure to establish guidelines for the use, care maintenance and replacement of fire department equipment or property.

TACTICAL
Should any item of fire department property which has been issued to a member be lost, damaged, or worn out, it shall be reported to the Fire Chief or officer in charge, for replacement, if it cannot be repaired by the member who the property is issued to.

MISUSE OF EQUIPMENT
Any time equipment is borrowed from the fire station, it shall not be misused or abused. Also, keep in mind that there are laws that govern the personal use of government property. DON'T ABUSE THE PRIVILEGE.

BBQ PIT
Members may borrow the fire department BBQ pit at any time that they wish so long as another member has not already reserved the pit for the same date and time.

Members wishing to reserve the BBQ pit for a certain date may do so by writing their name and the date they wish to use the BBQ pit on the board in the meeting room. The BBQ pit will be reserved on a first come first serve basis.

Members using the BBQ pit shall, before returning it to the station, clean the BBQ pit and return it in good condition. The BBQ pit shall be returned as soon as possible after the member is completed with it so that the next person may use it.

PROTECTIVE CLOTHING
Structural protective clothing and Wildland/Rescue protective clothing will be issued to members upon their entrance into the fire department and completion of entry requirements. It is the responsibility of each member to care for his or her gear in a manner that will provide the maximum protection to the member and to extend the life of the equipment.

Refer to PROTECTIVE CLOTHING for more information on care and maintenance of your protective clothing.

FIRE STATION AND TRAINING FACILITY
It is the duty of members at the fire station in the training facility to clean up after themselves. This includes carrying out the garbage, cleaning up plates, cups, soda water cans, or any other items that should not be left inside or outside of the facility. CLEAN UP AFTER YOURSELF.

NO SMOKING. Smoking is not allowed in the fire station, in fire apparatus, or on training facility grounds.

Refreshments kept in the fire station and/or at the training facility are intended for training sessions, meeting nights, work nights and for refreshments for extended incidents, and are not to be consumed by members at the fire station visiting or watching television.

The fire station and the training facility may be used by members of the department for personal gatherings by submitting a request for use. The fire station and/or training facility may be used for gatherings by other organizations or individuals by submitting a written request for use. Organizations utilizing the apparatus bays shall have access to the bay closest to the restrooms only unless prior arrangements are made.

It shall be the responsibility of the member using the fire station or the training facility to clean the facility upon the completion of the gathering. All garbage will be removed from the fire station and/or training facility after each use.

There will be no gatherings or parties that will be of a nature that will be discrediting to the department as a whole or to an individual member of the department. There will be no public display of alcoholic beverages.

Prior to leaving the fire station or training facility, members are to check that the lights, air conditioner and heater are turned off and that the doors are closed properly and locked.

The firefighter signing off on the application to use the fire station or training facility will be responsible to see that the facility is cleaned properly upon completion of the gathering.

PAGERS

Upon entrance into the fire department and completion of entry requirements, members will be issued a pager to alert them of alarms. Pagers are to be carried by firefighters any time they are available to respond to an alarm, so long as there is not a danger of damage to the pager due to the environment. Damage may be caused by dusty or wet locations, dropping from elevated areas, hazardous or explosive environments, etc.

Broken pager cases, inoperative pagers or other problems shall be reported as soon as possible so that they may be repaired for optimum performance.

TABLES AND CHAIRS

Members may borrow the fire department tables and chairs at any time they wish so long as another member has not already reserved them for the same date and time.

Members wishing to reserve tables and chairs for a certain date may do so by writing their name and the date they wish to use them on the board in the meeting room. Members must also verify that the station or training facility is not reserved for use by another individual or group. The tables and chairs will be reserved on a first come first serve basis.

It will be necessary to contact another member of the department to check out the tables and chairs before they are removed from the fire station. The member checking out the tables and chairs shall check the board in the meeting room to be sure that another member has not already reserved them before they are released.

The member releasing the tables and chairs shall record on the board in the meeting room who has borrowed the tables and chairs and the number borrowed. The same member who releases the tables and chairs shall be responsible to check the tables and chairs back in when they are returned, making sure that they are all returned and are in good condition.

Members using tables and chairs shall, before returning them to the station, clean them and return them in good condition. They shall be returned as soon as possible after the member is completed with them so that the next person may use them.

TRAINING MEDIA

Members may borrow training media from the department at any time. All training media must be checked out and back in by another member of the department. The member utilizing the media and the media being utilized shall be recorded on the board in the meeting room.

UNIFORMS

Each member will be issued a uniform shirt and badge upon entrance into the fire department and completion of entry requirements. Refer to UNIFORMS for rules and regulations and care and maintenance instructions on this subject.

OTHER DEPARTMENT PROPERTY

Other department property that is issued to or borrowed by the members shall be cared for properly and returned in good condition in a manner fitting the property.

Some other fire department property and equipment may be borrowed from the fire station if the Fire Chief, Assistant Fire Chief, Captain or Lieutenant are notified and they authorize the equipment to be used. It will be up to the individual officer to determine if they will authorize a particular piece of equipment to be used.

EMERGENCY VEHICLE OPERATIONS

PURPOSE
It is the intent of this operating procedure to promote an attitude toward safety while enroute to the station, from the station to the incident and upon returning to the station from the incident. Through the enactment of this policy, the members of this department agree to adopt and will practice safe driving practices and safe intersection operating procedures during all responses.

TACTICAL
Defensive driving is essential both enroute to the station, to the incident, and upon returning to the station from the incident. Drivers should be aware of road conditions and their own limitations. REMEMBER, our job is to save lives and property and a safe and timely arrival is crucial to our purpose.

Emergency vehicle operators enroute to an alarm must obey the emergency vehicle laws of the State of Texas and must operate vehicles in a safe manner and with due regard for the safety of others. Drivers will not assume right-of-way. Be aware of the safety of pedestrians, other motorists, crew members and your equipment.

Personnel driving an emergency vehicle to an incident are not required to wear structural protective clothing while driving to the scene but must immediately, or as soon as possible, upon exiting the vehicle at the scene, don their full protective clothing ensemble. The protective clothing shall remain on until the termination of the incident unless conditions require the removal of the protective clothing, or the removal is authorized by the Officer in Charge.

This only applies to structural protective clothing and shall not be interpreted to affect the wearing of wildland/rescue protective clothing while driving to the scene of an incident. It shall also be acceptable for firefighters involved in a water shuttle operation to wear wildland/rescue protective clothing, unless conditions require the wearing of structural protective clothing as determined by the Officer in Charge.

New members on probation shall respond to all alarms in a non-emergency manner and shall abide by all non-emergency vehicle traffic laws of the State of Texas. This includes responding to the fire station and/or to the scene of the alarm in privately owned vehicles (POV). New members on probation will not be allowed to drive a fire department vehicle in an emergency situation, unless ordered to do so by the highest-ranking officer present, and then will abide by all non-emergency vehicle traffic laws of the State of Texas.

INTERSECTION PRACTICES
Intersections are the locations responsible for the largest percentage of major collisions involving emergency service vehicles. Even with the use of warning devices, intersections pose a serious threat to the safety of both emergency service personnel as well as the general public.

Controlled Intersections are any intersection controlled by a stop sign, yield sign, or a yellow or red traffic light, and these intersections require exercising due diligence at these devices by the emergency driver. In addition to operating the vehicle with due diligence, these additional steps must be followed:

- Do not rely on warning devices to clear traffic.
- Scan the intersection for possible hazards such as pedestrians, vehicles traveling at high speeds, or making right turns on red, or any other possible options of other drivers.
- Begin to slow down well before reaching the intersection, cover the brake pedal with the driver's foot, and then continue to scan all directions for hazards.
- Change the siren cadence not less than 200 feet from the intersection.
- Scan intersections for driver options such as passing on the right, passing on the left, waiting for traffic to clear, etc. Avoid using the opposing lane of traffic if at all possible.
- If all traffic in all lanes cannot be accounted for, the driver should bring the vehicle to a complete stop.
- Establish eye contact with the driver of another vehicle, and have your partner communicate that all is clear. Reconfirm that all other vehicles are stopped.
- Account for traffic one lane at a time, treating each lane as a separate intersection.

Uncontrolled Intersections are any intersections that do not offer a traffic control device such as a stop sign, a yield sign, or traffic signal in the direction of travel of the emergency vehicle, or where a traffic control signal is green upon the approach of the emergency vehicle. At uncontrolled intersections, all emergency vehicle drivers should do the following:

- Scan the intersection for possible hazards such as pedestrians, vehicles traveling at high speeds, or making right turns on red, or any other possible options of other drivers.
- Begin to slow down well before reaching the intersection, cover the brake pedal with the driver's foot, then continue to scan all directions for hazards.
- Change the siren cadence not less than 200 feet from the intersection.
- Avoid using the opposing lane of traffic if at all possible.

Emergency vehicle drivers should always be prepared to stop. If another vehicle operator fails to yield right of way to an emergency vehicle, the emergency vehicle driver cannot force the right of way, nor can they assume the right of way. The emergency vehicle does not have the right of way until the other vehicle yields.

Privately Owned Vehicles are relied upon heavily by this department as a means for emergency responders to respond to emergency calls, either to the station or to the scene. While this is essential to our organization's ability to react to emergencies, there are inherent risks associated with the operation of private vehicles by emergency responders responding to emergency calls.

In order to reduce the risks of injury and death to emergency responders and to the public at large, emergency responders shall in their private vehicles follow these safe operating practices:

- When responding in private vehicles, emergency responders must obey the emergency vehicle laws of the State of Texas and must operate vehicles in a safe manner and with due regard for the safety of others.
- Emergency lights and siren shall not be abused by emergency responders.
- Firefighters must follow procedures for "at the scene parking" of private vehicles.
- Individual firefighters must maintain personal auto liability insurance with appropriate liability limits that protect not only the volunteer, but also this department.
- Members shall turn in a copy of their vehicle liability insurance policy annually, and it shall be submitted on or before the annual meeting of this department in February.
- Any member whose license is suspended shall be prohibited from driving department vehicles. This includes emergency and non-emergency driving.

Members may display emergency lighting on their personal vehicles so long as these lights are used strictly for emergency situations and their use is not abused. Abuse of emergency lights will not be tolerated. New members on probation may not display emergency lighting on their personal vehicles.

All firefighter responding must understand that first and foremost, they must arrive at the emergency scene or the station safely, in order to be of any help to the public. REMEMBER, if you don't make it to the scene, you will not be able to do anyone any good.

Driver and Officer/Co-Driver Responsibilities for the safe operation of an emergency vehicle depends heavily of the competency of the driver and the added resources and direction of the front seat officer/co-driver. All drivers shall attempt to maintain control of the vehicle in such a manner as to provide the maximum level of safety for both their passengers and the general public. Emergency vehicle drivers should be aware that the civilian vehicle operators might not react in the manner that is expected or felt to be appropriate. An attempt should be made to have options available when passing or overtaking vehicles. If another vehicle operator fails to yield the right of way to an emergency vehicle, the emergency vehicle driver cannot force the right of way, nor can they assume the right of way. The emergency vehicle does not have the right of way until the other vehicle yields.

Emergency vehicle drivers have the following responsibilities:

A. Drivers of emergency vehicles shall be directly responsible for the safe and prudent operation of the vehicle under all conditions.
B. The driver's first priority shall be for the safe arrival of the emergency vehicle and personnel at the emergency scene.
C. Drivers shall not move emergency vehicles until all personnel on the vehicle are seated and secured with seat belts in approved riding positions.
D. No firefighter will be allowed to ride to or return from an incident location on the tailboard, catwalk or other open area of an apparatus.
E. While enroute to an emergency incident, vehicles will display emergency lighting and sound an audible alarm.
F. During emergency response, drivers of an emergency vehicle shall bring the vehicle to a complete stop for any of the following:
    1. When directed by a law enforcement officer.
    2. At red traffic lights and stop signs, as due diligence dictates.
    3. At blind intersections or when other intersection hazards are present.
    4. When the driver cannot account for all lanes of traffic in an intersection.
    5. When encountering a stopped school bus with red flashing warning lights.
G. During non-emergency travel, drivers of emergency vehicles shall obey all traffic control signals and signs and all laws and rules set forth by state or local jurisdiction.
H. The driver shall be aware of their rate of closure on other vehicles and pedestrians.
I. Fire apparatus is heavy and firefighters must be aware of the extended braking distances required, and shall not overdrive the required braking distance.
J. A safe following distance is to be established and maintained, allowing 1 second of following distance for every 10 feet of vehicle length for speeds under 40 mph. For speeds over 40 mph, add 1 additional second for every 10 mph over 40 mph.

Whether an officer or not, the individual riding in the front passenger's seat of an emergency vehicle takes on the role of co-driver. While not in physical operation of the vehicle, the co-driver provides an additional set of eyes and ears for the driver and shall also be responsible for making certain that the driver operates the vehicle in a safe manner. If the driver is negligent in the operation of the vehicle and causes injury and/or property damage, the co-driver may also be found to be jointly negligent.

All members of this department will be required to turn in a copy of their vehicle liability insurance policy and copy of their driving record annually, and it shall be submitted on or before the annual meeting of this department in February.

Officer/Co-Driver Responsibilities are as follows:

- Shall ensure that all personnel are seated, and secured with seat belts, in approved riding positions, prior to movement of the emergency vehicle.
- Shall ensure that the driver is operating the vehicle in a safe and prudent manner during response, in accordance with departmental policy and state statutes.
- Shall issue verbal warnings about road and physical hazards to the driver.
- Shall direct the driver to cease any unsafe driving, such as excessive speed or unsafe intersection practices.
- Shall be responsible to operate the radio and communications equipment during response.
- Shall operate the audio and visual warning devices.
- Shall check map book to assist the driver in determining the safest and most direct route to the emergency scene.
- Shall assist the driver in intersection crossing and safe backing.
- Shall report the times for the apparatus in which you are responding.

EXTRICATION

PURPOSE
It is the intent of this operating procedure to provide guidance in the proper handling of extrication incidents.

RESPONSE
Inside City Limits
1st out: Rescue 1 with a minimum of 2 and preferably 3 firefighters trained in extrication.
2nd out: City Engine with a minimum of 2 and preferably 3 firefighters.

Outside City Limits/Inside Our Call Area
1st out: Rescue 1 with a minimum of 2 and preferably 3 firefighters trained in extrication.
2nd out: Rural Engine with a minimum of 2 and preferably 3 firefighters.

Outside City Limits/Outside Our Call Area
1st out: Rescue 1 with 3 firefighters trained in extrication, if possible.
2nd out: Rural Engine with a minimum of 2 and preferably 3 firefighters.

TACTICAL
The Karnes City Volunteer Fire Department, Inc. will respond to extrication calls within the Karnes County area or within reasonable areas outside Karnes County as requested.

Any time this department is dispatched to an extrication incident, the first out vehicle will be the rescue/equipment truck Rescue 1. This vehicle will be manned by a minimum of two and preferably three firefighters who are trained in extrication operations. A second truck will always be required at the scene to protect in case of fire and if necessary, for traffic control.

If the incident is outside of our call area, or if this department should be short of personnel, at the discretion of the officer in charge, another department will be dispatched to provide fire protection, and if necessary, traffic control.

Upon arrival at the scene the incident commander or officer in charge will immediately check out the nature of the incident and determine the best course of action. Firefighters will first remove the cutter and spreader and prepare them for use. This may be followed by preparing any other required extrication tools as determined by the incident commander.

The incident commander, or officer in charge, shall notify the setup team of which extrication tools are needed, and if shoring materials, air bags, or other equipment will be necessary.

Firefighters who operate these tools shall be in good physical condition and free of back injury, as these tools are very heavy.

All persons involved in the extrication will, as a minimum, wear a full set of rescue/wildland protective clothing and a helmet with goggles, or a helmet with the face shield down along with gloves and any other necessary protective equipment.

On hot days it may be necessary for firefighters to rotate operations and remove protective clothing and cool down. See “Heat Stress Management” for more information.

When operating at a scene of an incident with vehicle traffic moving in the area, position apparatus to protect the firefighters from injury from being struck by passing motorists. Traffic vests are available in every apparatus and are to be worn for better visibility of firefighters working at the scene.

When necessary, protection from infectious disease will be worn. Gloves, aprons, eye protection and disposable bags are available in the apparatus. See “Infectious Disease Control” for more information.

The Accountability System will be utilized during each incident, and the system will be maintained until firefighters are released from the incident scene. See “Accountability” for more information.

FIRE ATTACK

PURPOSE
It is the intent of this operating procedure to provide guidance in the selection and placement of hose lines for fire attack in both offensive and defensive operations at fire incidents.

TACTICAL
The total flow from hose lines deployed for fire attack must exceed the required fire flow for the anticipated level of involvement. Selection of hose lines for fire attack will provide the maximum flow rate that is possible with the available staffing and based on the fire flow required for potential conditions.

The following is a list of considerations for proper placement of hose lines for fire attack:

1 - To saves lives imminently threatened by fire.
2 – To protect exterior exposures that present a potential life exposure.
3 - Protect property presently involved or imminently threatened by fire.
4 – To confine and extinguish the fire.
5 - To check extension above the fire.
6 - To protect exterior exposures that do not present a potential life threat.
7 - To check fire extension below the fire line.

Hose lines shall be placed for attack from the unburned side of the structure unless it is necessary to attack from the burned side to provide for the life safety of exposed persons (firefighter or civilian) or if access to the unburned side is unavailable or will be delayed.

No member shall initiate an exterior attack on a structure fire while an interior attack team is in operation.

Use a straight stream or power cone pattern for interior fire attack. When overhead extension is anticipated, open overhead concealed spaces to check for fire involvement before entry into a room.

If fire attack has no impact on the volume of fire within 30 seconds, advise the incident commander that increased flow is required.

The Accountability System will be utilized during each incident, and the system will be maintained until firefighters are released from the incident scene. See “Accountability” for more information.

Any time firefighters are on air inside a structure, and the potential for any hazards that could endanger a firefighter’s life are present, or any other situation whereby a Rapid Intervention Team (RIT) is needed, the most readily available firefighting team will assume the responsibilities of the RIT team. A RIT pack will be immediately available and positioned for quick access for the RIT team. See “Rapid Intervention” for more information.

Incident Command shall appoint a Safety Officer at any incident of special hazard presenting an unusual risk to fire fighters, customers, or the general public. See “Safety Officer/Sector” for more information.

Before entering a structure involved in fire, for rescue purposes, firefighters must first consider the odds of survivability of any victims. Firefighters must consider the conditions present in the "compartment" or area of fire, or other conditions affecting survival.

A significant fire in a residence with floor level dense smoke under pressure throughout the building likely means that victims could not survive. A very cautious and calculated rescue and fire control operation would be warranted.

Whereas a fire in a rear bedroom of a house, with light smoke throughout the house, may allow a survivable environment if a search and rescue effort is initiated quickly, a well-involved building would likely represent a zero-survivability profile. Similar conditions in an abandoned building would indicate little survivability and little property to be saved, and members should avoid an offensive fire attack.

The Thermal Imaging Camera (TIC) may provide valuable information during size-up, which can assist the Incident Commander in determining the strategy and formulating the incident action plan. Early identification of tactical needs and priorities can prove beneficial in placing initial and subsequent attack lines. When a company officer or incident commander arrives on the scene, one of the first challenges is to identify the location of the fire. A TIC can save a great deal of time by helping to pinpoint a concentration of heat within a particular area of the building, especially in large commercial or multi-story structures. An incident commander, armed with this knowledge, can better direct firefighters regarding their point of entry and plan of attack, so as to optimize their resources.

Even before firefighters enter a burning structure, the incident commander or company officer can accomplish a great deal from the exterior with the aid of thermal imaging technology. Some factors that can be assessed from the outside include finding the seat of the fire, observing changing or spreading conditions, identifying critical building construction features and identifying conditions that could threaten structural integrity. A sector officer will also benefit from this information in assessing the operational objectives, progress, and needs. See "Thermal Imaging" for more information.

When operating at a scene of an incident with vehicle traffic moving in the area, position apparatus to protect the firefighters from injury from being struck by passing motorists. Traffic vests are available in every apparatus and are to be worn for better visibility of firefighters working at the scene.

FIRE SCENE PRESERVATION

PURPOSE
It is the intent of this operating procedure to provide guidance for the preservation of the fire scene and for crowd control.

TACTICAL
The fire scene should be treated as a crime scene, until it has been established that no crime has been committed.

Unauthorized personnel will not be allowed on the fire ground. The incident commander will determine authorization. If help with crowd control is desired, contact local law enforcement through the dispatcher.

All valuables and personal property removed from the fire scene will be turned over to an officer and inventory noted.

If criminal activities are suspected, or victims are found, the scene will be preserved for investigation, to the maximum extent possible.

Containment of the fire will take priority over preservation of the scene.

The department may at its discretion close streets and/or designate areas closed to civilians. Such actions should be considered for the purpose of firefighter safety and in order to preserve the scene.

If it becomes necessary to maintain command of the scene, use legal means available to the department. The fire department may enter and maintain control of the scene with no other authority except for the need to provide emergency service. This authority should be used, but not abused by the department.

FORCIBLE ENTRY

PURPOSE
It is the intent of this operating procedure to provide guidance for performing skillful forcible entry in order to save lives, reduce property damage, and to enhance public relations.

TACTICAL
Forcible entry will be required when a building is locked, openings are blocked, or normal entry is not otherwise provided.

Check all available usable avenues of entry prior to using forcible entry.

Pre-planning will aid in determining the best method of entry, should forcible entry be required. Building construction, type of locks, windows, air conditioning units, and structural weakness should be noted on a pre-plan.

An effective forcible entry operation will provide speedy access into a building's interior with a minimum amount of damage.

Expensive doors may need to be battered open to provide the shortest and fastest route for access to a victim, and life safety must always come before property damage considerations. Keep in mind also that unnecessary damage during forcible entry violates one of the primary missions of the firefighter, "PROTECTION OF PROPERTY".

GENERAL RULES AND INFORMATION

PURPOSE
It is the intent of this operating procedure to provide each member with a list of any rules, procedures, or information that may not be listed elsewhere in the Constitution, the By-Laws or the Standard Operating Procedures and Rules and Regulations manual of this department.

TACTICAL
Excessive and continual horseplay during meetings, practices, alarms, or other fire department functions will not be tolerated. Members will show respect to the President, officer in charge, training instructor, or other person in charge of a fire department function.

GENERAL
Members will be credited for attendance at meetings and practices in their absence if they are absent due to other fire department related functions. Example: Attending outside training, or representing the fire department at another function, etc. Members absent due to other fire department related functions will not be credited for training hours missed or for absence from alarms. Members must attend at least one hour of a practice session to be eligible for credit for training hours and/or attendance.

When parking at the fire station, refrain from blocking the fire station apparatus door. Also refrain from taking up the parking of any local merchant that may be open for business at that time.

Members representing this department at banquets, conventions, training seminars, or any other activity shall act in a manner that will show good character and will not bring disgrace to this department. Members attending training seminars will be required to bring the information they receive back to the department and share their knowledge with the membership.

Retirement awards for members retiring from this department shall be handled on an individual basis for each retiree, based on the members' attendance, involvement, years of service, and any other information that is pertinent in determining the appropriate type and value of retirement award.

INSURANCE
The department accident insurance policy covers all volunteer members of the department and any non-member bystanders who have been activated by the Fire Chief or other official of the department for an emergency. Members are covered traveling to, during, and returning from an alarm, fire drill, or while participating in or attending as a volunteer member of the department at any approved and/or supervised activity of the department.

For more information on accident insurance benefits, workers compensation benefits, death benefits, or any other benefits available, or provided, refer to the departments current policies. Benefits are subject to change without notice to or approval of the membership.

Members injured during a covered activity of the department shall report the injury to the officer in charge as soon as possible after the injury occurs, and shall as soon as possible after the incident, complete a Casualty Report. Delayed effects of an incident shall be reported as soon as possible after the effects occur, but not more than 30 days after the incident. Workers compensation requires reporting within 72 hours.

MASCOTS

The number of mascots elected each year shall be such that each child of an Active member of the department shall serve as mascot for one year while they are between the ages of 7 and 10. If no children of Active members meet the requirements, then other family members between the ages of 7 and 10 may be elected as mascot. Upon election, mascots shall be given a fire department shirt to show our appreciation for their service to the department.

It shall be the duty of the parents of the mascots to see that the fire apparatus is clean and ready for use when entered into a parade or other function and to see that arrangements for drivers of the apparatus have been made.

MEMBER PROPERTY

Once a new member is voted into the department on probation, and upon completion of their entry requirements, they will be issued the following property: protective clothing, pager, uniform shirt(s), badge, name bar, accountability tags, T-shirt, etc., and will be provided access to the Constitution, the By-Laws, and the Standard Operating Procedures and Rules and Regulations Manual of the department.

Once the initial property is issued to members, they may purchase additional items such as caps, shirts, patches, emblems, etc. as needed.

The membership of this Department has pre-approved the purchase of items necessary for the operation of the department. See “SOP Pre-Authorized Purchases” list in this section.

The membership of this Department has given pre-approval to the Chief and/or Assistant Chief for the purchase of rescue equipment and/or supplies as necessary for the operation of the department, in an amount not to exceed $500.00.

The membership of this Department has given pre-approval to the Chief to apply for Texas Forest Service grants as necessary for the successful operation of the department. If grants are awarded, a request for the necessary cost-share shall be submitted for approval at a meeting.

Any member wishing to be issued an extra set of protective clothing shall submit a request in writing as to why they feel it would be in the best interest of the department to fulfill this request and the length of time they feel the protective clothing should be in their possession. Requests shall be reviewed and acted upon by the Chief, Assistant Chief, Captain, and Lieutenant.

In case of illness, injury, or death of an active, retired, or honorary member of this Department or one of their family members, the following may be used as a guideline for department participation:

Minor Illness or Injury	No response necessary
Moderate Illness or Injury	Send a card
Serious Illness or Injury	Send a card or flowers
Death of an Active or Honorary Member or their family member	Send flowers or plant Attend funeral
Death of an Active or Honorary Member	Attend funeral in dress uniform Participate in funeral at request of family
Line of Duty Death (with approval of family)	Fallen Firefighters Funeral participation Request Fallen Firefighters Benefits
Death of Member of other Department	Attend funeral

Family members will be recognized by one of the following relationships to the member: spouse, child, step-child, grand child, parent, brother, sister.

Other forms of honor or participation may be appropriate as determined by the members or the Board of Directors. The Board of Directors, or a person appointed by the Board of Directors will determine the level of involvement in participation in funerals such as number of personnel or number of apparatus.

2024 SOP PRE-AUTHORIZED PURCHASES

Accountability Tags
Awards Banquet Decorations (750.00 Limit)
Awards Banquet Meal
Awards Banquet Venue Rental
Appreciation Decals
Badges & Insignia
Bottled Water
Brush/Weed Killer
Caps
Check Blanks
Cleaning Supplies
Christmas Party Meal/Expenses
Emblems
Envelopes
Fire Prevention Supplies
Fire Prevention Week Meals
Fire Poster Awards
Firefighter Awards
Firefighter Expense
Foam
Fuel
Funeral Memorials
GFFMA Dues
Halloween Decorations (300.00 Limit)
Income Tax Filing Fees
MDA Collection Reimbursement
Meals at Extended Calls
Meals for Training Classes
Morning Badge Covers
Name Bars
Patches
Propane
Rehab Supplies
Secretary of State Form 802 Fees
Service Awards
SFFMA Dues
Soda water
Stamps
Support/Donor Decals
Thank You Cards
Ties
Training Tuition
T-shirts
Uniform Shirts
Wildland Boots – (125.00 Limit)

HAZARDOUS MATERIAL INCIDENTS

PURPOSE

It is the duty of the fire department to save lives and protect property to the best of our ability. It is hazardous materials incidents that could pose the greatest danger to life, health, property, and the environment. This threat to life and health not only includes the emergency responders but may also extend to the public in general.

It is the mission of this department to contain and stabilize a hazardous material incident to the best of our ability with available resources, until such time the proper authorities require the owner of the product to properly dispose of the materials.

TACTICAL

It must be understood that no two hazardous materials incidents will be the same, nor will they be handled in exactly the same manner. However, these standard operating procedures offer a guideline to be followed at all incidents until such time the size-up of a particular incident causes a change in these procedures.

SAFETY

At all times, safety of the emergency responders and the general public will be paramount over all other incident considerations. All emergency responders at the scene will wear the proper personal protective equipment, as indicated by the incident, at all times. No emergency responder will attempt any mitigation procedure or rescue attempt that is above his or her level of training, or will put in jeopardy, his or her own, or any other persons, life, health or safety.

The Incident Command shall appoint a safety officer/sector at every incident to ensure all operations are conducted in the safest possible manner. It will be the responsibility of Command to establish an incident action plan that includes a safety plan for the incident. This safety plan must be communicated to the Safety Sector Officer and other sector officers. Command may request the Safety Sector Officer to develop and recommend an appropriate safety plan.

The Safety Sector reports directly to command and has full authority to terminate, suspend, or alter any unsafe condition or action. The Safety Sector/Section intervention at scene operations involves three approaches. First is for life threatening situations; the second is for non-life-threatening situations; and the third approach occurs in the on-going incident planning process. See “Safety Officer/Sector” for more information.

The Accountability System will be utilized during each incident, and the system will be maintained until firefighters are released from the incident scene. See “Accountability” for more information.

On all incidents, the atmosphere shall be checked with an atmospheric monitor prior to entry, and it shall be continually monitored for change until the operation is complete. Once the incident commander establishes the control zones, no unauthorized person shall enter the control zone. The incident commander will issue the authorization. All persons entering the scene will have a minimum of awareness level training. See “Atmospheric Monitoring” for more information.

During a hazardous material incident, times shall be recorded each time an individual operation begins and ceases. The least number of personnel possible, to mitigate the incident, will be allowed inside the hot zone, with the minimum number being two persons.

No responder shall enter the hot zone unless the proper personal protective equipment as indicated by the chemical or hazard is available and worn. No responder shall enter the hot zone unless they have a back up person located in the warm zone with the same level of personal protective equipment. Any time the potential for any hazards that could endanger a firefighter's life are present, a Rapid Intervention Team (RIT) will be on scene and solely dedicated to providing emergency services to the crew. See "Rapid Intervention" for more information.

All ignition sources shall be eliminated before an approach is made to the incident site. This will include, but is not limited to, smoking, radios, sparking tools, and the apparatus itself.

If an incident escalates to the point that the safety of personnel may be in jeopardy and it is necessary to immediately evacuate the space, structure or area, an IMMEDIATE RETREAT signal consisting of an audible signal from a siren accompanied by three (3) short blasts of an air horn will be sounded until the space, structure or area is evacuated. This is an immediate evacuation of personnel only and all equipment shall be left behind.

It shall be understood that a "do nothing" decision may be the safest and the only decision to be made on some incidents.

APPARATUS DISPATCH AND APPROACH

Upon notification of a hazardous materials incident by dispatch, all available equipment as dictated by the incident and the number of personnel responding shall be dispatched to the scene.

Before leaving the fire station, the officer in charge shall gather as much information as possible, as to the chemical involved and the weather conditions, and communicate to other responding apparatus.

The incident commander or the highest-ranking member on the first responding unit is responsible for the gathering and communicating incident data, such as, weather conditions and routes to take for a safe approach. All responding personnel and apparatus shall make an approach to the incident site from an upwind and uphill direction. No responder shall drive any apparatus through any vapor cloud or on any spilled material.

All responding personnel and apparatus shall approach no closer than necessary to perform initial size-up. Equipment and personnel shall move no closer, until a complete size-up and hazard assessment has been completed. Upon completion of size-up and hazard assessment, the incident commander shall order placement of apparatus. This placement shall be upwind, uphill and facing out and as far away as possible, while close enough to safely complete the operation.

All incoming emergency units or resources shall report to the staging area designated by incident command and wait there until the incident commander gives placement orders.

INCIDENT COMMAND

The highest-ranking officer first arriving on scene shall assume all duties and responsibilities of the incident commander. Should the first arriving fire apparatus not contain a fire officer, or there is no fire officer on scene, the highest ranking member of the first arriving apparatus shall assume all duties and responsibilities of the incident commander until such time a fire officer arrives on the scene. The incident command system shall be placed into effect immediately.

The incident commander shall pass his authority to a higher ranking fire officer upon their arrival. Should the command be passed, the relieved officer shall provide the assuming incident commander the following information:

A - The chemical or chemicals involved.
B - The properties and hazards of chemicals involved.
C - All weather data collected.
D - The location and assignment of all apparatus on scene.
E - A list of all resources enroute.
F - A list of all agencies notified, including utilities, state, federal, company, etc.
G - Progression of the incident to the time of the assuming incident commanders arrival.
H - If an evacuation notice has been issued or should be issued.
I - Any other information needed to effectively assume command.

The incident commander shall immediately establish an incident command post and broadcast to all units on the scene and any incoming units the new incident command information. The incident command post shall be re-established, if necessary, well outside any contamination area. The incident command post shall be established upwind and uphill from the incident. The incident command post shall be marked as such with some visible means of identification. The incident commander shall immediately appoint a safety officer.

The incident commander or safety officer shall immediately establish incident control zones and shall designate as follows:

A - HOT ZONE:	Location of spill or contaminated area. Area of limited access.
B - WARM ZONE:	Contamination reduction area. Outside contaminated area. Location of decontamination.
C - COOL ZONE:	No contamination possibility. Location of incident command post, staging area and media access point.

COMMUNICATION

Once the incident command post is established, all unnecessary communications over the radio shall cease, leaving only emergency traffic. All information pertaining to the incident shall be transmitted to and from the incident command post and the incident commander. Upon the order "Clear the air" by the incident commander or the safety officer, all radio transmissions shall immediately stop, unless there is a threat to life safety.

It shall be the responsibility of the Incident Commander or Officer in Charge to designate the appropriate fire ground channel(s) for each incident. Separate channels shall be assigned for firefighters on an interior attack or within the hot zone of an incident as determined necessary by the Incident Commander or Officer in Charge.

All use of 10-code shall no longer be used and shall be replaced by clear, concise text. All instructions transmitted by the incident commander or safety officer shall be repeated to the sender to ensure accuracy and understanding of instructions. The incident commander shall appoint a communications officer to monitor, regulate and record emergency radio traffic. The incident command post shall establish radio contact with other units on the scene. If responders enter the hot zone, they must be in contact with a safety officer on a dedicated frequency.

All transmissions of chemical names shall be done in the following manner:
THE SENDER:

A - Pronounce the name if you are sure of its pronunciation.
B - Spell the name very slowly and carefully. Remember, one letter can mean all the difference.
C - Repeat the spelling.

THE RECEIVER:

A - Pronounce the name heard.
B - Spell the name slowly and carefully.
C - Repeat the spelling

THE SENDER:

A - Acknowledge the correctness of the spelling or repeat the first three steps.

If chemical formulas are transmitted, extra care must be made for accuracy, making sure the formula is transmitted exactly as written, breaking it up into elements.

EXAMPLE: Formula is C6H4 (CH3)2
Transmitted as C6 H4 Parentheses CH3 End parentheses 2
OR: Formula is CH3-OH
Transmitted as CH3 dash OH

The receiver shall repeat the formula back to the sender to check for accuracy.

The emergency dispatch center will be responsible for the placing of calls to state and federal regulatory agencies and maintaining telephone contact with CHEMTREC at 1-800-424-9300. The incident commander is responsible for seeing that the calls are made by the dispatch center.

The radio message "May-Day" will be used by firefighters to report their status as being lost, trapped, or injured and needing assistance. Any member may use "May-Day" to report a lost firefighter. Any report of "May-Day" will receive priority radio traffic. The term "May-Day" will be reserved only to report lost, trapped, or injured firefighters. The term "emergency traffic" will be used to report all other emergencies. The orange button on radios is an emergency button that will emit emergency notification tones over the radio and will hold the microphone open for a short period of time for emergency communication needs. See “May-Day” for more information.

INCIDENT TERMINATION

The termination procedures shall consist of two separate and distinct functions, documenting the sequence of events and a post incident analysis or debriefing. All termination procedures shall be completed within 36 hours after the incident has been mitigated. The incident commander shall be responsible for all termination procedures.

The documentation of the incident shall be a written report, written by a joint effort of the incident commander and the safety officer. The documentation shall be in narrative form and include a sequence of events of the incident, including safety, operations, exposure of personnel, and a post incident analysis.

The post incident analysis shall be conducted within 36 hours of the incident and shall be attended by all agencies and personnel that were on the scene and shall be an analysis of the operations, paying special attention to "Things that went right" and "Things that went wrong" and "What we need to do in the future".

HEAT STRESS MANAGEMENT

PURPOSE

It is the intent of this operating procedure is to establish guidelines and responsibilities for minimizing the effects of heat stress to department members. The following practices are to be implemented whenever the atmospheric temperature of an incident location exceeds 90 degrees.

TACTICAL

It shall be the responsibility of each FIREFIGHTER to:

- Observe appropriate work/rest cycles and assignment to rehab after a firefighter has consumed two bottles of air. Firefighters shall remain in rehab for a minimum of 20 minutes. See "Rehabilitation" for more information.
- Re-hydrate on a regular basis at the fire scene. Minimize coffee, tea, and cola products.
- Inform officer in charge of any ill effects to heat.

It shall be the responsibility of COMMAND to:

- Establish a Rehab Sector on all working fires.
- Assign a Safety Officer on all working incidents.
- Assign firefighters to Rehab Sector as needed or requested and allow firefighters to remain in rehab for a minimum of 20 minutes.
- Utilize the practice of first company in, first company out, routine.
- Request additional resources as necessary to provide proper work/rest cycles for firefighters.
- Request EMS personnel to monitor firefighters at the scene of working fires.

If EMS personnel determine that a firefighter's vital signs are dangerously abnormal due to heat stress or any other cause, the firefighter shall be removed from action and placed in rehab until their vital signs have returned to normal and the firefighter can be safely placed back into action.

HIGH ANGLE RESCUE

PURPOSE
It is the intent of this operating procedure to provide guidance in safely handling high angle rescue incidents.

TACTICAL
The highest-ranking officer arriving on the scene of a high angle rescue incident shall assume all duties and responsibilities of the incident commander and shall place the incident command system into effect immediately.

Incident Command shall appoint a safety officer/sector at every incident to ensure all operations are conducted in the safest possible manner. It will be the responsibility of Command to establish a strategy action plan that includes a safety plan for the incident. This safety plan must be communicated to the Safety Sector Officer and other sector officers. Command may request the Safety Sector Officer to develop and recommend an appropriate safety plan.

The Safety Sector reports directly to command and has full authority to terminate, suspend, or alter any unsafe condition or action. The Safety Sector/Section intervention at scene operations involves three approaches. First is for life threatening situations; the second is for non-life-threatening situations; and the third approach occurs in the on-going incident planning process. See “Safety Officer/Sector” for more information.

Any time this department responds to a high angle rescue incident, the safety of the emergency responder and the public will be paramount over all other incident considerations. No emergency responder will make any rescue attempts which will put in jeopardy their own of any other person’s life, health or safety.

No member shall attempt a rope rescue unless they have been trained in the proper use of ropes and knots and have a general knowledge of rescue systems and operations. No member will be required to perform tasks for which they are not trained or physically able to accomplish within a reasonable margin of safety. If you feel you are not able to properly carry out a task assigned to you, inform the incident commander or officer in charge.

The Accountability System will be utilized during each incident, and the system will be maintained until firefighters are released from the incident scene. See “Accountability” for more information.

When operating at a scene of an incident with vehicle traffic moving in the area, position apparatus whereas to protect the firefighters from injury from being struck by passing motorists. Traffic vests are available in every apparatus and are to be worn for better visibility of firefighters working at the scene.

INCIDENT COMMAND SYSTEM

PURPOSE
It is the intent of this operating procedure to provide guidance for the establishment of a chain of command during all incidents.

TACTICAL
The officer in charge initially will be the Chief or the highest-ranking officer on the first responding unit. Any senior officer arriving on the scene may at their discretion, assume the position of incident commander in the absence of the Chief. Likewise, the ranking officer may choose to appoint a new incident commander other than himself or herself, based on individual knowledge, training, and leadership skills.

Each operation shall also have a supervisor who will maintain communications with the incident commander. The person responsible for communications on each operation or apparatus will supervise unless otherwise directed by a ranking officer or the incident commander.

Firefighters and fire ground command officers shall be identifiable on the fire ground by wearing the following color helmets:

The Fire Chief and the Assistant Chief shall wear white helmets.
The Captain and the Lieutenant shall wear red helmets.
Firefighters shall wear black or yellow helmets.

The incident commander will have final authority in the selection of supervisors and communications officers and will consider rank, training, experience, and the ability to maintain control under pressure when making the selection.

It shall be the responsibility of the Incident Commander or Officer in Charge to designate the appropriate fire ground channel(s) for each incident. Separate channels shall be assigned for firefighters on an interior attack or within the hot zone of an incident as determined necessary by the Incident Commander or Officer in Charge.

The Accountability System will be utilized during each incident, and the system will be maintained until firefighters are released from the incident scene. See “Accountability” for more information.

Incident Command shall appoint a safety officer/sector at every incident to ensure all operations are conducted in the safest possible manner. It will be the responsibility of Command to establish a strategy action plan that includes a safety plan for the incident. This safety plan must be communicated to the Safety Sector Officer and other sector officers. Command may request the Safety Sector Officer to develop and recommend an appropriate safety plan.

The Safety Sector reports directly to command and has full authority to terminate, suspend, or alter any unsafe condition or action. The Safety Sector/Section intervention at scene operations involves three approaches. First is for life threatening situations; the second is for non-life-threatening situations; and the third approach occurs in the on-going incident planning process. See “Safety Officer/Sector” for more information.

INFECTIOUS DISEASE CONTROL

PURPOSE
It is the intent of this operating procedure to provide guidance in protecting firefighters from infectious diseases such as AIDS, hepatitis or any other infectious disease.

TACTICAL
Hepatitis and Human Immunodeficiency Virus (HIV), as well as many other infectious diseases are transmitted through the blood and other body fluids such as saliva, urine, etc. Many times, firefighters may be exposed to these diseases during rescue operations, especially during vehicle accident incidents, or during an incident while assisting EMS personnel in patient care.

Special personal protective equipment is available and shall be worn any time there is a possibility of exposure to these diseases. The protective kits contain gloves, aprons, eye protection and a bag to dispose of any contaminated material after an incident.

You will not know if the person you are working with is infected. ALWAYS WEAR PROTECTION. Remember, at this time there is no cure for AIDS or Hepatitis.

If there is any possibility that a firefighter may have been exposed to an infectious disease during an incident, it shall be reported to the incident commander or officer in charge as soon as possible after the exposure.

This information shall be documented in the Chief's files for future reference.

Many health care workers in America become infected with Hepatitis B every year. PROTECT YOURSELF.

LADDERS

PURPOSE
It is the intent of this operating procedure to provide guidance in proper use of fire ground ladders.

TACTICAL
Once a ground ladder is placed in service at the fire scene, one person shall be assigned at the base of the ladder to stabilize the ladder and keep track of each firefighter that goes up and down the ladder. They shall make sure that all firefighters that went up are back down before the ladder is moved.

If a roof ladder is used to get onto a roof, it shall not be taken onto the roof to use as a roof ladder. Two ladders must be used, one to go up and down, and one to use on the roof.

When a roof ladder is used on the roof of a structure fire, firefighters shall not step off the edge of the ladder unless they can be sure about the stability of the roof, as they may fall through the roof. Firefighters shall also be aware of the possibility of slipping off the roof. Wood shingle roofs are especially slick when they become wet.

Always be aware of overhead obstructions, especially electrical wires when handling ground ladders.

Ladders used on the fire ground shall be cleaned and thoroughly inspected for heat or stress damage before being placed back in service.

LOST OR TRAPPED FIREFIGHTER BASIC SURVIVAL

PURPOSE

The nature of fire fighting places firefighters at risk of becoming lost or trapped. The toxic environment in which we work provides only a narrow window of survivability. Survival depends on a mix of predictable, self-survival actions by the lost firefighter and the incident commander. It is the intent of this operating procedure to provide guidelines for the survival of firefighters who may become lost or trapped, and to assist incident commanders in properly handling the safe retrieval of the firefighter.

TACTICAL

The #1 Basic Self-Survival responsibility is “DO NOT GET LOST, TRAPPED, OR RUN OUT OF AIR”. The rescue of trapped or lost fire fighters in a burning building is especially time sensitive because we work in a hazardous environment with a limited air supply. The following measures will help to insure survival:

- Minimum crew size is two, and crew members must remain together.
- Crews must have an assignment and must be working under the direct supervision of a Sector Officer or Command.
- Crews will follow Air Management guidelines.

Firefighters who find themselves lost or trapped must immediately use "May Day" to announce their situation while they continue to attempt to find their way out. Firefighters should not delay notification of distress. Notifications should occur as soon as a firefighter thinks he or she is in trouble. The longer you wait to tell somebody you are in trouble, the more you jeopardize yourself and the rescuers’ lives.

The radio message "May-Day" will be used by firefighters to report their status as being lost, trapped, or injured and needing assistance. Any member may use "May-Day" to report a lost firefighter. Any report of "May-Day" will receive priority radio traffic. The term "May-Day" will be reserved only to report lost, trapped, or injured firefighters. The term "emergency traffic" will be used to report all other emergencies. The orange button on radios is an emergency button that will emit emergency notification tones over the radio and will hold the microphone open for a short period of time for emergency communication needs. See “May-Day” for more information.

Lost firefighters should give Command information as to who they are, how many fire fighters, where they were operating, where they think they are, sounds of nearby activities, such as a ventilation saw, or any other information that might direct rescue crews to their location.

Any time a Rapid Intervention Team (RIT) is needed, the most readily available firefighting team will assume the responsibilities of the RIT team. A RIT pack will be immediately available and positioned for quick access for the RIT team. See “Rapid Intervention” for more information.

If a lost firefighter cannot contact Command, dispatch, or any other units on the assigned radio channel, the firefighter should go to another channel to attempt contact and declare an emergency. It is important to find any channel that works. Once communication is established, remain on that channel and messages will be relayed to Command.

As soon as a firefighter recognizes that he/she is lost or trapped, the PASS device must be manually activated to sound an audible tone. The device must remain on until rescued. If the device interferes with the lost firefighters communicating critical radio messages to incident commander or rescuers, the device may be turned off temporarily. Once messages are complete, the device must again be manually activated. Firefighters that separate from each other make it difficult for rescuers to find all of the firefighters. Firefighters that stay intact as a crew enhance the chance of all being rescued, and this allows for an easier and more efficient extrication.

Firefighters should stay with the hoseline or lifeline and follow it out whenever possible. All firefighters must remember that the male couplings lead toward the nozzle/fire, and the female side of the couplings toward the pump/safety. The hoseline should always be treated as a safety line to the outside. Where lifeline ropes are in use, follow the lifeline to the exterior.

A lost firefighter should always attempt to get out of the building by whatever means possible. Where doors, windows, or other egress is not available, firefighters should next attempt to reach an exterior wall. Once at the wall he/she will be able to search for doorways, windows, and hallways that generally lead to the outside. Rescuers will first search hallways, around walls, and around windows and doors, before sweeping large interior areas. For this reason, firefighters must avoid collapsing in the middle of open spaces. Getting to hallways, doors, or windows will increase the chances of being rescued early. Breaching walls for escape or fresh air can aid in survivability. These actions also provide predictable activities that will aid rescuers.

When the firefighter cannot find a way out, but there is a safe area away from the fire that the firefighter can retreat to, the firefighter should take advantage of this location. Command and the rescuers should then be advised of the location by whatever means possible.

If a lost or trapped firefighter finds it necessary to issue a May-Day the firefighter shall give a “LUNAR” report which is used during a May-Day or other emergency situation. LUNAR stands for “Location, Unit, Name, Air Supply, and Resources” which are needed for your rescue. This is a great resource when you are trapped in a collapse or if you are in need of assistance during an incident.

A conscious effort must be made by the lost or trapped firefighter to control breathing. Unnecessary talking or physical activity must be ceased, unless absolutely needed for survival. Firefighters must control and pace their physical exertion activities in order to extend their SCBA air supply.

If a firefighter cannot get out, he/she should assume a horizontal position on the floor that maximizes the audible effects of the PASS device. The firefighter should attempt to take this position at an exterior wall, doorway, or hallway that maximizes quick discovery by rescue crews.

If assuming a position to await rescuers, firefighters should attempt to direct a flashlight toward the ceiling. This will enhance the rescuer's ability to see the light and locate the downed firefighter. If able, the firefighter should attempt tapping noises to assist rescuers in locating them.

Company officers or sector officers who are unable to locate a crew or firefighters assigned to them, must immediately notify command and use "MAY-DAY" to notify all personnel operating on the fire ground. When possible, the officer should include who is missing, last known location, and actions being taken. Firefighting positions must not be abandoned during the rescue effort, and officers MUST control free-lancing. Command will initiate a rescue effort.

Medical personnel will be needed to treat rescued firefighters. The incident commander must ensure that an adequate number of medical personnel are responding to the incident to treat and transport injured firefighters. The incident commander should understand that the situation is critical, and that firefighters sometimes tend to overextend themselves when searching for a missing firefighter, resulting in additional fire fighters becoming injured. Adequate medical resources must be readily available and on site.

MAY-DAY

INTENT
It is the intent of this operating procedure is to identify the roles and responsibilities of all the parties involved at an incident where a "May-Day" has been transmitted.

TACTICAL
The radio message "May-Day" will be used by firefighters to report their status as being lost, trapped, or injured and needing assistance. Any member may use "May-Day" to report a lost firefighter. Any report of "May-Day" will receive priority radio traffic. The term "May-Day" will be reserved only to report lost, trapped, or injured firefighters. The term "emergency traffic" will be used to report all other emergencies. The orange button on radios is an emergency button that will emit emergency notification tones over the radio and will hold the microphone open for a short period of time for emergency communication needs.

Command will maintain an awareness of the location of firefighters on the fire ground, primarily through assignments and the accountability system. In the event that a firefighter cannot be located through a Personnel Accountability Report (PAR), or any other time a firefighter is missing, a "May Day" shall be announced. Command shall respond to a "May Day" by implementing a rescue plan for the firefighters. All personnel operating at the scene must be alerted that a firefighter is lost, trapped, or injured.

Company officers and individual firefighters that suspect a firefighter is missing must notify the incident commander immediately. The incident commander must always assume that the missing firefighter is lost in the building until the member is accounted for. The system must include the ability to identify when a firefighter's rescue is going to be delayed beyond his or her SCBA air supply time. The plan should include:

- Fire operations continue during rescue efforts.
- Establish/deploy the Rapid Intervention or Rescue Team.
- Provide for sufficient medical personnel.
- Need for specialized equipment or support activities.
- Safety.
- Media control and information management.

Incident Command must restructure their fire attack strategy and action plan to include a firefighter rescue effort. Accurate information must be quickly obtained and acted upon. Additional resources must be immediately obtained. Rapid commitment of the RIT/Rescue Team must occur. Resources must be organized and controlled. The Command organization must expand. The strategy, plan, and objectives must be quickly communicated to Command. The plan and rescue activities must be continually monitored and revised as necessary.

At least one additional alarm for mutual aid should be immediately requested upon a report of a lost, trapped, or injured firefighter. Additional EMS units shall also be dispatched to the incident. Additional alarms may need to be requested based on circumstances and potential. There should be no hesitation in requesting additional resources.

The incident commander must ensure that an adequate number of medical personnel are responding to the scene to treat and transport injured firefighters. The incident commander should understand that the situation is critical, and that firefighters sometimes tend to overextend

themselves when searching for a missing firefighter, resulting in additional firefighters becoming injured. Adequate medical resources must be readily available and on site.

All significant firefighting operations will have a Rapid Intervention Team (RIT) Rescue Team assigned. This team should be fully outfitted with protective clothing, SCBA, etc., and shall monitor all tactical radio traffic. Upon report of a missing firefighter, the incident commander shall have a completely fresh crew fully outfitted and available for commitment to an immediate search and rescue of the last known area of the missing firefighters. The RIT team, or any fresh crews in staging, must be immediately sent to the rescue area. The commitment of additional crews, however, must be controlled and organized.

There is a direct relationship to the use of RIT teams and fire fighter survivability on the fire ground. National Fire Protection Association studies reveal that a majority of fire fighter fatalities occur at residential fires. Dispatch of an additional engine and RIT Rescue Team upon the report of a working structural fire will substantially increase the chances of firefighter survivability. Once the fire is declared under control, the incident commander has the option to cancel the additional response or to utilize the company as a fresh crew for relief.

In some situations, such as collapse or explosion, crew members may get separated, and the only practical method to obtain an accurate Personnel Accountability Report of effected crews, may be to withdraw them to the exterior. In addition, withdrawal may be the only way to quickly obtain accurate information and reconnaissance on exactly where trapped members may be, routing to victims, debris locations, and the type of rescue equipment needed. Once the roll call and reconnaissance information is obtained, crews can be re-assembled into a more organized rescue effort.

If missing firefighters are to survive, the incident commander must keep the fire out of the rescue area. With a RIT team in place, the incident commander can initiate an immediate rescue effort without withdrawing or relocating fire combat companies. In most situations the incident commander cannot allow the fire to spread. If anything, these fire combat positions need to be reinforced. Additional companies should be sent to priority positions to keep the fire out of the rescue area. Large caliber hand lines and master-stream appliances should be deployed when safe to do so. An adequate water supply must be obtained for this reinforced response.

Rescue operations are high risk. The operation may be taking place in a post-collapse environment. Flashover may have occurred. The incident commander must avoid sustaining additional injuries. Each additional injury requires a resource commitment that will draw away from the priority rescue effort. A safety officer in the affected area will help control the risk taking. The officer will be able to conduct an assessment of the hazards allowing time for the RIT team officer to concentrate on the critical rescue effort. These officers must work hand in hand to ensure that a safe and effective rescue operation is conducted.

If it becomes necessary to issue a May-Day, the firefighter shall give a “LUNAR” report which is used during a May-Day or other emergency. LUNAR stands for “Location, Unit, Name, Air Supply, and Resources” which are needed for your rescue. This is a great resource when you are trapped in a collapse or if you are in need of assistance during an incident.

It shall be the responsibility of the Incident Commander or Officer in Charge to designate the appropriate fire ground channel(s) for the incident. Separate channels shall be assigned as determined necessary for the incident.

MUTUAL AID

PURPOSE
It is the intent of this operating procedure to define procedures for requesting or answering calls for mutual aid.

TACTICAL
Calls for mutual aid may be made by the officer in charge or the incident commander at the time of initial size-up operations or at any time that conditions indicate a situation that appears to exceed or has the potential to exceed the ability to be controlled by the department.

The department will respond to all calls for mutual aid when requested by other departments through standard alarm notification by the dispatcher. There may also be other forms of notification such as pager only, siren only, or a phone call from the dispatcher to an officer, from the requesting agency to an officer, or phone calls from an officer to individual members of the fire department. Other notifications may also be sent in a group text when appropriate.

The department or agency having initial responsibility and jurisdiction over the incident will retain incident command status, unless by prior written agreement, or upon agreement between the incident commander and the officer in charge, another agency takes over command of the incident.

Although mutual aid agreements should be maintained with all area departments, the Karnes City Volunteer Fire Department, Inc. will respond for mutual aid requests, unless a department has been notified in writing that we would not respond for mutual aid.

Any time it becomes necessary to call for mutual aid, it is the responsibility of the incident commander to advise the requested department of the situation and the type of equipment needed, and the number of personnel needed.

Any time this department is called to provide mutual aid to another department, before leaving the station, the requesting department shall be contacted to verify the type of situation, the type of equipment requested, and the number of personnel needed.

City, County, State or Federal agencies may by law or statutes have the authority to or be required to take command of certain situations.

NEW MEMBERS

PURPOSE
It is the intent of this operating procedure to provide guidance to persons interested in membership in this department and to guide new members through their probationary period.

INTRODUCTION
Welcome to the Karnes City Volunteer Fire Department, Inc. We are pleased that you have expressed a desire to volunteer your time to the cause of saving lives and protecting property in our community. You are entering a public service organization which can be very demanding while at the same time be personally rewarding. The following section contains information and rules that pertain to your induction into the department as well as your probationary period following your induction into the department. These rules are not intended to discourage your participation; instead, they are designed to promote safety, education, and comradery. Training is the key to a safe and effective operation, and this can only be accomplished by your dedicated participation. In the following rules, a member on their probationary period will be referred to as a new member or a student member. The following rules for new and student members are intended to be a supplement to the requirements set out by the Constitution of this department.

MEMBERSHIP
No person under 18 years of age may be elected as a member of this Department, except for persons between the ages of 16 and 18 who are sponsored by an active member in good standing in this Department. Members between the ages of 16 and 18 must be enrolled in and remain enrolled in Karnes City High School, or have a High School diploma or GED, or be home schooled, and live in the Karnes City VFD service area, and shall in this Constitution be referred to as student members. Student members in this department shall follow the same rules, and shall have the same duties, responsibilities, and attendance requirements as any other probationary member.

Applicants age 18 or older shall complete a Department issued application. The application must be signed by the applicant and one recommending active member in good standing in the Department. Any applicant under the age of 18 shall complete a Department issued application with the signature of one parent, or legal guardian, and the sponsoring member. The parent, or guardian, and the sponsoring member must both be present at the meeting at which the voting on the student member takes place in order for the student member to be eligible to be voted on.

An Application Review Committee consisting of the Chief, Assistant Chief, Captain and Lieutenant shall review all applications prior to the applicant's first attendance and determine if the applicant is of good moral character, fitting a member of the Department, and has the physical ability to fulfill the duties required of a member of the Department. Any applicant rejected by the Application Review Committee shall wait a minimum of 90 days before submitting a new application for membership.

Persons wishing to join the Department shall, after completing an application, attend at least one meeting and two practices before being eligible for membership in the Department. An applicant having attended two practices will be eligible for election into the Department at the end of the first meeting they attend, just prior to adjourning the meeting.

Voting on the admission of members shall be done by secret ballot and it shall require a two-thirds majority vote of the eligible voting members present at a meeting to accept an applicant into the Department as a member on probation. Any applicant rejected by the membership shall wait a minimum of 90 days before submitting a new application for membership.

Each member voted in shall read the Constitution, the By-Laws, and the Standard Operating Procedures and Rules and Regulations Manual and they must sign a form stating that they understand the requirements of each and agree to abide by them, before being issued any department property.

Each member must complete the following training within 90 days of being voted on probation:
ICS-100 (Introduction to the Incident Command System)
ICS-200 (ISC for Single Resources and Initial Action Incidents)
ICS-700 (Introduction to the National Incident Management System)
ICS-800 (National Response Framework)

Each member must complete the SFFMA Firefighter I Certification training and must pass a minimum of three randomly selected skills from a list of SFFMA skills before being removed from probation.

Upon being removed from probation, each new member will have their name placed on the back of their bunker coat and will be given a helmet front with their name and number to be placed on their structural helmet.

Each new member must complete the following classroom instructed courses as soon as possible after being voted in, preferably within one year of being voted in if the courses are available. On-line courses will not be accepted.
Courage to be Safe
Traffic Incident Management

Probationary members, ages 17 and over, who are voted into the Department will be placed on probation for a period of not less than one year or more than three years. Probationary members between the ages of 16 and 17 who are voted into the Department will be placed on probation until, at a minimum, they reach the age of 18, and until they fulfill all the probationary requirements as that of any other member of the department and must do so in a time frame not to exceed 2 years after they turn 18 years of age. Any extenuating circumstances that prevent a member on probation from fulfilling the probationary requirements within the time frame requirements stated in this section shall address the issue with the Probation Committee.

All members on probation shall be evaluated at least quarterly or as necessary by a Probation Committee consisting of the Chief, Assistant Chief, Captain, Lieutenant, Certification Coordinator and Assistant Certification Coordinator. Probationary members may be evaluated on any action or lack thereof that the committee determines may be cause for notice, including but not limited to the rules of Article 9, Section 1. It is the responsibility of each member of the department to notify the Probation Committee of any action, or lack thereof, that may be used for the purpose of a fair evaluation of a probationary member. The Probation Committee shall report to each probationary member and/or sponsor, the committee's findings, and inform them of their progress in the department whether good or bad.

The Probation Committee shall give reports of unsatisfactory evaluations to probationary members in the following manner:

1. Verbal warnings will be given as a first notice and may also be given as a subsequent notice on minor issues determined to be unsatisfactory.
2. Written warnings will be given as a more serious form of notification or for a repeated notice of the same unsatisfactory issue that is not resolved.
3. If verbal or written warnings do not resolve issues of unsatisfactory evaluations or in the case of very serious infractions, the Probation Committee may recommend the expulsion of the new member from the department during any meeting of the department.
4. In case of serious infractions, the Probation Committee may bypass the verbal and written warnings and immediately recommend expulsion from the department.

A vote to remove a probationary member from the Department may be called for by the Probation Committee, or by any active member in good standing, during any meeting of the department. The member making the request shall present reasonable and just cause to the membership present at the meeting as to why the member should be removed. Voting on the expulsion of probationary members shall be done by secret ballot and it shall require a two-thirds majority vote of the eligible voting members present to reject the member and expel them from the Department and the person shall wait a minimum of 90 days before submitting a new application for membership.

Members who complete their probationary period and are determined and recommended by the Probation Committee to be acceptable for membership in the department will be accepted as a member in good standing in the Department and no election will be held unless called for as provided in Section 13. A motion may be made and a vote taken to confirm the recommendation of the Probation Committee.

If any person, having been elected a member of this Department, fails to appear within 30 days after having received notice of their election, the election shall be declared void, unless prevented by sickness, absence from the city or such other misfortunes that may render it impossible to attend.

Active members, who resign from the Department in good standing, may rejoin the Department as an Active member in good standing by submitting a request for re-entry into the Department. The request must be presented during a Department meeting within a time frame from the original date of resignation that is less than or equal to the past members previous years of service and does not exceed 5 years.

Approval of the reactivation request shall be done by a secret ballot and shall require a two-thirds majority vote of the eligible voting members present at a meeting to reactivate a member into the Department. Any applicant rejected by the membership shall wait a minimum of 90 days before submitting a new request for reinstatement into the Department.

Any past member that has been inactive for more than 5 years, or resigned from the Department while not in good standing, or any past member whose resignation was accepted due to the 90 day rule, as addressed in Section 14 or Section 15 of this article, shall fulfill the same application and entry requirements as of any other new member, except that their requirement for practice attendance will be set at 40% per calendar year.

When a full complement of 32 members is attained, a waiting list shall be kept by the Department and applicants shall be notified in order of date of application, at which time membership drops below 32 active members.

Should any member of the Department fail to attend any meeting or practice for 90 consecutive days without submitting a request for leave of absence, then this extended absence shall be considered as a resignation from the Department unless the absence is covered under Article 8, Section 4.

A member may request only one six-month leave of absence from this Department during any 12-month period. At any time during, or at the end of that 6-month leave of absence, the member must return to active membership or resign from the Department. Members on leave of absence will be notified of the expiration of their leave of absence and will be given 30 days to respond. Failure to respond will be considered as a resignation from the Department.

Members of this Department may not request a leave of absence while on probation, under suspension, or while holding an office within this Department.

Any person applying for membership in this Department as a Fire Marshal or Fire Marshal/Firefighter shall fulfill the same application requirements as of any other person requesting membership in this Department and shall meet the same probationary requirements of any other active member in this Department. In addition, the applicant shall provide a written resume with their application.

All immediate family members of active members in good standing in this Department, as determined by the membership, who are between the ages of 16 and 18 shall be eligible for student membership in this department. In addition to immediate family members, there shall be a maximum of (5) five student members in the Department at any one time. An active member in good standing in the Department may sponsor only one student member at any one time.

An active member who sponsors a student member must remain in good standing in this Department in order for the student member to remain eligible for student membership in this Department. Should a sponsoring member become ineligible to sponsor a student member due to probation, suspension, expulsion, resignation, or any other cause that may so cause ineligibility, then the student member shall also become ineligible for student membership, unless the sponsorship is accepted by another active member of the Department in good standing.

To be elected to, or remain eligible for Student membership in this Department, or for any member over the age of 18 who is enrolled in High School or is home schooled to be elected a member of this Department, the applicant/member shall meet or maintain the following requirements:

1. Must be enrolled in and remain enrolled in Karnes City High School, or have a High School diploma or GED, or be home schooled and live in the Karnes City VFD service area.
2. Must have passing grades on their most recent eligibility/progress report or report card prior to election and submit a copy of their most recent report with their department application.
3. Must maintain passing grades to remain active in this Department.
4. Must submit a copy of each eligibility/progress report and report card to their sponsoring member within 5 days of issuance.
5. Must live within a reasonable proximity to the Karnes City fire station as determined acceptable by the membership.
6. Student members failing to provide a copy of their eligibility/progress report and/or report card within 5 days of issuance will be suspended from any and all functions of the Department except for meetings and practices until the report is provided.

Upon receipt of a failing eligibility/progress report or report card, the student member or any member over the age of 18 who remains enrolled in High School or is home schooled will be suspended from all functions of the Department, except for meetings and practices until passing grades are shown on the next eligibility/progress report or report card. Quitting school to circumvent this rule will be cause of immediate expulsion from the department.

A person requesting membership in the department may request to be voted in as a Support Personnel member. Support Personnel members shall abide by all the same rules and regulations as any other member being voted in with the exception of training requirements and any other requirements established by the Support Personnel section of the Standard Operating Procedures and Rules and Regulations. Support Personnel may not perform duties outside of the scope of their training.

In order for this department to operate, there are many functions that must be administered to in order for the department to be successful. In addition, this department is involved in many other activities to support the community, activities that in turn help to promote a positive reputation of the fire department within the community. It is only through the assistance of all of the members of the department that we are able to provide this support to the department and to the community. When possible, the activities will be announced during the business meeting or practice prior to taking place, and when that is not possible, members will be notified as soon as is practical.

This Department prohibits discrimination on the basis of race, color, religion, sex, or national origin.

MEETINGS

The meetings of this department shall be held on the second Monday of each month at 7:30 P.M. Special meetings may be called as necessary.

Any member or new member failing to attend at least 25% of the meetings per calendar year may be expelled from the department.

PRACTICES

Except for in December, the regular practices of the Department shall be held at 7:30 P.M. on each Monday of the month, except for the second Monday, unless a holiday makes scheduling practice inappropriate.

Special practices may be called by the Chief or Assistant Chief as deemed necessary at their discretion.

Any member failing to attend at least 40% of the regular practices per calendar year, and any probationary member failing to attend 60% of the practices per calendar year, may be expelled from the Department unless they display some good and satisfactory excuse for their absence.

Should any member of the Department on probation miss three practices in a row without displaying some good and satisfactory excuse for their absence, then this absence shall be considered as a resignation from the Department. Should a probationary member commit a second violation of this section, then the member may be expelled from the Department unless they display some good and satisfactory excuse for their absence.

ALARMS

Any member failing to attend at least 25% of the alarms per calendar year may be expelled from the Department unless they display some good and satisfactory excuse for their absence.

It shall be the responsibility of each member answering an alarm to verify that all appropriate apparatus has responded and/or the member(s) have verified from the officer in charge of the alarm that no additional apparatus is needed. Any firefighter failing to do so will not be credited for attendance at the alarm.

It shall then be the responsibility of each member answering an alarm to see that their name is listed on the board showing that they were present and available to respond and then, the responsibility of the officer in charge at the alarm to see that the names are recorded onto the report and that the members are credited for their attendance.

Student members leaving class upon receipt of an alarm shall return to class as soon as is reasonably possible following the completion of the alarm. Student members must also be aware that there may be times, at their instructors' discretion, whereby the student member may not be allowed to leave class for an alarm.

New members on probation shall respond to all alarms in a non-emergency manner and shall abide by all non-emergency vehicle traffic laws of the State of Texas. This includes responding to the fire station and/or to the scene of the alarm in privately owned vehicles (POV). Members on probation will not be allowed to run emergency lighting on their privately owned vehicle.

New members on probation will not be allowed to drive a fire department vehicle in an emergency unless ordered to do so by the highest-ranking officer present and then will abide by all non-emergency vehicle traffic laws of the State of Texas.

New members on probation will not be allowed to drive a fire department vehicle in non-emergency situations unless accompanied by an active member of the department in good standing.

New members on probation will not be allowed to perform radio communications during an emergency unless ordered to do so by the highest-ranking officer present.

New members on probation will not be allowed on an attack line upon initial attack on any type of emergency incident unless ordered to do so by the highest-ranking officer at the scene.

New members on probation may enter a structure for final extinguishment, only after the officer in charge declares it under control, if under the direct supervision of an active member of the department in good standing unless ordered to do so by the highest-ranking officer present.

New members on probation will not be allowed to enter into the warm or hot zone at the scene of any hazardous materials incident, unless ordered to do so by the officer in charge at the scene.

New members on probation will not be allowed to participate in the extrication of patients at the scene of an emergency, unless ordered to do so by the officer in charge at the scene.

PAGERS

PURPOSE
It is the intent of this operating procedure to establish guidelines for the proper use, care and maintenance of fire department pagers.

TACTICAL
Upon entrance into the fire department, and completion of entry requirements, members will be issued a pager to alert them of alarms. Pagers are to be carried by firefighters any time they are available to respond to an alarm, so long as there is not a danger of damage to the pager due to the environment. Damage may be caused by dusty or wet locations, dropping from elevated areas, hazardous or explosive environments, etc. **Pagers are very susceptible to damage in wet locations.**

CARE AND MAINTENANCE
Pagers need not be carried at working fires or in hazardous or explosive environments as they may be lost or damaged.

Broken pager cases, inoperative pagers, or other problems shall be reported as soon as possible so that they may be repaired for optimum performance. The volume control on pagers should be rotated back and forth periodically to keep the control operating properly.

Pagers should not be left in the charger continually and never removed. This will shorten the battery life and cause the battery to eventually begin to leak and destroy the battery compartment contacts. A good charging rule to follow is to charge the pager at night and take it out during the day, even if you are not going to carry it with you that day.

POST INCIDENT ANALYSIS

PURPOSE
It is the intent of this operating procedure to provide guidance in evaluation of performance and related factors that will aid in better future performance of the department.

TACTICAL
As soon as possible after an incident, firefighters involved will evaluate performance in a general manner that will not publicly reprimand any firefighter. Evaluation will include attention to performance, equipment, training needs, weaknesses in operating procedures, etc.

Evaluation of the situation will be the responsibility of the incident commander or officer in charge and this evaluation will not cover personal problems with another member of the department. An individual member's action at an incident will be handled separately. This evaluation is designed to improve the overall operating procedure.

Complaints regarding procedures or problems with other member's actions will be brought to the attention of an officer or aired at a meeting of the department.

Critical incident stress refers to the range of physical and psychological symptoms that might be experienced by someone as a result of being involved in a traumatic critical incident. Critical incident stress is simply the body's normal reaction to an abnormal event. A Critical Incident Stress Debriefing shall take place as needed following a traumatic incident.

Critical Incident Stress Debriefing is a process through which a facilitator helps a group of people work through their response to a highly stressful or traumatic event. CISD is a form of crisis intervention aimed at reducing the traumatic impact of an event by fostering a connection between people who went through the same experience, increasing effective coping, and trauma education after the stressful event.

THERE WILL BE NO PUBLIC AIRING OF PROBLEMS OR COMPLAINTS.

PROTECTIVE CLOTHING

PURPOSE
It is the intent of this operating procedure to establish guidelines for the proper use, care and maintenance of protective clothing.

TACTICAL
All personnel actively participating in incident control will wear appropriate protective clothing. Personnel not wearing appropriate protective clothing per incident requirements will stay clear of the incident location.

Boots provide protection from water, puncture wounds, cuts, and they support the foot and ankle.
Coats and Pants provide protection from heat, cold, water and minor cuts and bruises.
Gloves provide protection from heat, cold, cuts and steam scalding.
Goggles provide eye protection from dust, dirt, water, and products of combustion, etc.
Helmets provide protection from falling debris, hot embers, weather and water.
Hoods provide protection from heat and cold.
Other safety devices and specialized equipment are available for other purposes. For example, hazardous materials or water rescue incidents.

WARNING! Protective clothing provides limited protection against heat and flames. Minimize exposure to heat. While wearing protective clothing, you may be burned without heat sensation or warning, and in some circumstances, without any sign of damage to the protective clothing. Skin burns occur when skin reaches a temperature of 118 degrees F. Fire burns at temperatures up to 2000 degrees F. Moisture and/or compression of your protective clothing may reduce protection. Do not use protective clothing that is damaged or dirty, as it will not provide the intended protection.

WARNING! Wearing your protective clothing may increase your risk of heat stress, which may cause heart attack, stroke, dehydration, or other conditions resulting in Death, Injury, or Illness! If you feel dizziness, dehydration, loss of focus, or shortness of breath, get to a safe area, remove your protective clothing, and seek medical attention. Heat stress is one of the leading causes of serious injury and death among firefighters.

It is essential that protective clothing and all appropriate safety equipment be properly donned before you approach the scene. Guard against becoming careless about protective clothing and its capabilities. The department does not possess the proper protective equipment for every situation you may encounter.

Resist the urge to sacrifice safety for mobility. Your protective clothing is designed to afford protection of firefighters against adverse conditions faced during structural fire fighting and other fire department operations. It will provide years of dependable service if properly cared for and stored after use.

Equipment not properly dried and put away wet will begin to mold, mildew, and rot, which will shorten the life of the equipment. If minor rips or tears are found in your gear, it is your responsibility to see that the repairs are made.

It is the responsibility of each member to care for his or her gear. If any gear is lost or destroyed due to gross negligence of a member, the member may be required to replace the gear.

To reduce the risk of injury of death, you must assemble and wear together all the following items: boots, coat and pant with outer shell and attached inner liner, gloves, helmet with eye protection, hood, and SCBA. ALWAYS make sure that all ensemble layers have the proper overlap and that all items fit with adequate looseness. Tight fit lowers insulation protection and restricts mobility.

Protective clothing may not protect you from electrical shock, or chemical, radiological, or biological hazards that can cause death, injury, disease, and illness.

Although we are fortunate enough to have good protective clothing, funding does not allow for the replacement of gear every time there is minor damage to a piece of equipment. Each member will be responsible for keeping their gear clean and in good order for the safety and well-being of the member. Each member will report any damage to his or her gear. If any damage to gear is due to neglect or poor maintenance by the member, corrective actions will be taken.

Protective clothing will be inspected by an assigned officer, or a person appointed by the assigned officer, as often as is necessary as determined by fires, rescue calls, or other incidents, at which protective clothing is worn. If it appears that proper care is neglected or lacking, the member responsible for the protective clothing will be given a warning by the assigned officer. If a member is given a warning for the lack of care and maintenance of their gear, the member will have forty-eight hours to comply with the warning and provide proper care and maintenance for their protective clothing.

The length of time since the last alarm at which the protective equipment was worn may be taken into consideration in determining if there is a lack of care and maintenance. After the second and all subsequent warnings, the member may be fined, suspended, placed on probation, expelled, or face other forms of discipline as determined by the Chief, or the majority of the members present at a meeting.

It shall be the responsibility of each member to see that every other member maintains their protective clothing in a proper manner. Pier pressure from every other member will insure proper maintenance of protective clothing by all members. Remember, that each member must rely on every other member’s protective clothing at the scene of an incident as we work together as a team.

A complete set of bunker gear cost approximately $5,000.00. TAKE CARE OF IT.

CARE AND MAINTENANCE

Coats and Pants shall be cleaned and dried as needed, after each use. If the inside lining of coats or pants gets wet, it may be necessary to turn them inside out to properly dry. For proper cleaning, detach the outer shell from the inner liners and wash shell and liner separately to avoid re-depositing soil from one component to another. Never use chlorine bleach or chlorinated detergents to clean your garments. Wash garments on the normal cycle with the water temperature at 110 degrees and double rinse to insure dirt and detergent removal. Remove from washing machine and turn inside out to expose the inner surface. Dry by hanging in a shaded area that receives adequate cross ventilation or use a fan to circulate air. Do not machine dry, as excessive heat and mechanical action may damage or shrink your garment. Do not dry clean. Do not dry in direct sunlight, as it will greatly reduce the strength and protective qualities of your garment due to UV degradation. Failure to properly dry protective clothing can result in the growth of mold, mildew, and bacteria, that can lead to skin irritation and rashes, and may affect the protective barrier materials, and the life of the garment.

Boots shall be cleaned after each use and shall not be put back on the racks with mud on them. Leave the mud and dirt outside the station. Keeping your protective footwear clean is very important. Failure to keep them clean will increase your risk of burns, injuries, disease, and illness. You will need to thoroughly clean your footwear at least every six months. Hand wash in warm water. Do not use chlorine bleach. Do not machine wash. Air drying on a rack that provides maximum air exposure is recommended. Do not dry in direct sunlight. Machine drying will damage the protective footwear.

Helmets and face shields shall be kept clean. When face shields are scratched beyond use, a new one will be issued. On helmets with metal hardware kits that hold the face shield to the helmet, the hardware shall be removed annually and lubricated to keep the threads from seizing. If threads seize beyond repair, new hardware kits will be issued. To properly clean helmets, remove ear/neck protector, headband, and crown straps. Clean the inner and outer shells with mild detergent. Wash the ear/neck protector, headband, brow pad, and crown straps in warm, soapy water and air dry at room temperature. Do not dry in direct sunlight. Clean face shields with mild detergent, rinse thoroughly with clean water, and dry with a soft cloth. Users should not use helmets that are not thoroughly cleaned and dried. Do not use solvents or paint thinners to clean your helmet as it will degrade the protective properties of the helmet.

Gloves shall be cleaned and dried after each use and shall not be placed in the coat or pant pocket wet. Gloves shall be cleaned and dried in the same manner as your coat and pants.

Goggles shall be cleaned and dried after each use and shall not be placed in your coat or pants pocket wet. Goggles shall be cleaned and dried in the same manner as helmets and face shields.

Hoods shall be cleaned and dried after each use, and shall never be placed back in the coat or pant pocket wet. Hoods shall be cleaned and dried in the same manner as your coat and pants.

PUBLIC RELATIONS

PURPOSE
It is the intent of this operating procedure to establish guidelines for maintaining good community relations and a good working relationship between the membership of the department and the people of the community.

TACTICAL
The members of the department will display a positive attitude within the community and be informed of the purposes of the department and its role within the community.

Problems of the department belong to the department and should remain within the realm of the department. Personal disagreements are not a problem of the department and should not be aired within the department nor should they be publicized in such a manner as to affect the public perception of the department. Within the functions of the department, all members should be able to work together as a team.

Weakness within the department should be discussed at the monthly business meetings or brought to the attention of the Chief or other officer, in private.

Be cautious about the information that you release into the community about what happened or what you saw at an incident. We are called to help people in the community and not to invade their privacy and tell stories that may publicly embarrass them.

Medical information is confidential and Federal Law affords a patient the right to confidentiality. Release of information may result in a violation of Federal Law that is punishable by a fine and/or jail time.

Remember, no matter how rich or poor, how big or small a person's house is, or what type of property they own, a person's house is their castle, and our job is PROTECTION.

GENERAL CONSIDERATIONS
A good public perception of the department depends on the ability of the membership to work together as a team.

Our success in achieving our goals depends on the relationship that we maintain with the community.

PUMP OPERATIONS

PURPOSE
It is the intent of this operating procedure to establish policy in selection of a pump operator and initiation of pump operations.

TACTICAL
The firefighter who will be the pump operator will be knowledgeable of the apparatus and general pump operations.

Pump operators will be knowledgeable in friction loss calculations and GPM flow ratings of various size nozzles. Friction loss will be calculated at 5 psi friction loss for each 50-foot section of 2 1/2" hose and a 1 psi increase/decrease for every 1 foot of increase/decrease in elevation.

The pump operator is responsible for locating and maintaining an adequate water supply. During incidents where it may be necessary to shuttle water, the pump operator should verify with the incident commander that a water supply officer is appointed if necessary.

Pump operators will charge attack lines to supply proper volume and pressure. Generally, a 200 foot pre-connect will require 110 to 120 psi for an initial attack.

Most fire fighting nozzles are designed to deliver their most desirable pattern at 100 psi nozzle pressure.

The pump operator will maintain communications with the fire lines to deliver a satisfactory pressure while maintaining the overall apparatus operations.

RAPID INTERVENTION

INTENT
It is the intent of this operating procedure to define the response, tasks, and organization of a Rapid Intervention Team. The objective of a RIT team is to have a fully equipped rescue team onsite, in a ready state, to immediately react and respond to rescue firefighters. A RIT team will be established anytime firefighters are on air inside a structure, or command deems it necessary.

TACTICAL
Any time firefighters are on air inside a structure, and the potential for any hazards that could endanger a firefighter's life are present, a Rapid Intervention Team (RIT) will be on scene to provide emergency services to the interior crew. A RIT team shall consist of a minimum of three firefighters with an attack line, radio, personal protective equipment, and SCBA. One RIT member is solely dedicated to account for the location of interior crews, and to initiate a firefighter rescue if necessary. Other RIT team members may take on other roles such as a safety officer, provided they are ready to immediately take on the RIT team duties.

Any time a Rapid Intervention Team (RIT) is needed, the most readily available firefighting team will assume the responsibilities of the RIT team. A RIT pack will be immediately available and positioned for quick access for the RIT team. See "Rapid Intervention" for more information.

If it becomes necessary to issue a May-Day, the firefighter shall give a "LUNAR" report which is used during a May-Day or other emergency. LUNAR stands for "Location, Unit, Name, Air Supply, and Resources" which are needed for your rescue. This is a great resource when you are trapped in a collapse or if need assistance during an incident.

It shall be the responsibility of the Incident Commander or Officer in Charge to designate the appropriate fire ground channel(s) for the incident. Separate channels shall be assigned as determined necessary for the incident.

A RIT team should initially be deployed to locate injured or lost firefighters, and to render aid and assistance to them. The RIT Team will then report their position and conditions to command for deployment of appropriate rescue resources to extricate the member, if necessary.

The rescue of trapped or lost firefighters in a burning building is especially time sensitive. There is a very narrow "window of survivability" for a firefighter that is out of breathing air or trapped by approaching fire. Individual firefighters must not delay reporting to Command if they become lost, trapped or in need of assistance. Company officers must also not delay the reporting of lost firefighters, or inability to complete accountability reports. Command and sector officers must always assume that the missing firefighter is lost in the building until the firefighter can be accounted for. Command must also restructure the strategy and action plan to include a high priority rescue effort.

The radio message "May-Day" will be used by firefighters to report their status as being lost, trapped, or injured and needing assistance. Any member may use "May-Day" to report a lost firefighter. Any report of "May-Day" will receive priority radio traffic. The term "May-Day" will be reserved only to report lost, trapped, or injured firefighters. The term "emergency traffic"

will be used to report all other emergencies. The orange button on radios is an emergency button that will emit emergency notification tones over the radio and will hold the microphone open for a short period of time for emergency communication needs. See “May-Day” for more information.

The term "May-Day" typically will be used in the following situations:

1. By the firefighter who is lost, trapped, or in trouble.
2. By the company officer, sector officer, or another firefighter who cannot account for an assigned firefighter who is operating in the hazard zone. This "May-Day" would generally occur following a PAR report that fails to locate or account for the suspected lost member.
3. By a member who witnesses or has confirmed that a firefighter is lost or in trouble.

Standard exceptions to the establishment of a RIT Team at structure fires:

1. When there is a reported or suspected life hazard where immediate action of the extra firefighters could prevent the loss of life.
2. When the fire is in an incipient stage that could be controlled by a portable fire extinguisher, without the use of PPE or SCBA.

Command has the following options for use of RIT companies:

1. To address all critical fire ground factors within the Risk Management Profile.
2. Assign the company to RIT duties.
3. If assigned to anything other than RIT duties, Command should request additional companies as RIT units.
4. Cancel the company en-route after a declaration of “fire under control” and a personnel accountability report has been obtained from all crews.
5. Assign other duties, such as relief for working crews, overhaul duties, etc.

RIT/RESCUE SECTOR RESPONSIBILITIES

- Monitor tactical radio channel.
- Consider critical fire ground factors.
- Consider air management. (elapsed time)
- Consider fire fighter fatigue.
- Consider the point of entry for crew/member in trouble and alternate exit points.
- Consider the last known location of crew/member in trouble.
- Consider your water supply/hoseline selection. (speed, mobility, and length)
- Assign tasks to the entry crew. (TI camera, air, taglines, tools, etc.)
- Provide timely reports to Command.
- Consider need for additional rescue personnel. (call additional resources early)
- Have RIT Pack and thermal imaging camera ready for use.
- Provide means of egress for roof operations or those operating above the ground floor.
- Coordinate the opening of doors and windows and remove security bars/devices.
- Illuminate entrance and exits.
- Confirm utilities are secure.
- Execute the search plan and locate the firefighter.
- Assess the firefighter and the environment.
- Transfer air and package the firefighter for extrication.
- Monitor entry team air supply.

COMMAND RESPONSIBITIES. Incident Commander must always assume that a missing firefighter is lost or trapped in the building until the firefighter is accounted for. Rapid, concise, decisions and actions must be taken to increase survivability. The following is a list of actions to be taken by Command for a reported missing or trapped firefighter. These are guidelines and do not necessarily need to be accomplished in the order listed. The first five must be accomplished very rapidly.

EMERGENCY TRAFFIC. Immediately upon a report of a missing or trapped firefighter "Emergency Traffic" will be sounded to alert all personnel working on the fireground of the situation. Following the emergency traffic tone, "May Day" will be announced to alert all operating units of lost or trapped firefighters.

CHANGE THE PLAN TO A HIGH PRIORITY RESCUE EFFORT. The Incident Commander must restructure the plan to include a high priority firefighter rescue effort. A rapid, well thought out, rescue plan must be developed, and the Command organization expanded. The plan and objectives must be communicated to other Command staff and sector officers for implementation.

IMMEDIATELY REQUEST ADDITIONAL ALARMS. At least one additional alarm should be immediately requested including a medical component. Additional multiple alarms may be requested based on circumstances and potential. Early consideration should be given to heavy equipment resources and tactical rescue assistance in structural collapses.

FIREGROUND ACCOUNTABILITY. A Personnel Accountability Report must be immediately requested from all companies operating on the fireground. This is especially important in situations of structural collapse. Command cannot develop an effective rescue plan until accurate information is available on the number of missing firefighters, their identity, their last reported work area, and which companies are affected.

COMMIT THE RAPID INTERVENTION TEAM. Deploy the RIT Team to initiate search and rescue efforts, typically in the last reported work area. The Rescue Sector will coordinate activities at that location. Additional available resources in staging may also be committed to rescue efforts.

WITHDRAWAL OF COMPANIES FROM AFFECTED AREA. In some situations, such as collapse, crew members can get separated. The only practical method to obtain an accurate roll call for a PAR may be to withdraw crews to the exterior. Withdrawal is a judgment call based on circumstances at the time, information available, and resources. It may not be practical or possible to do. However, the absolute need for an accurate roll call (PAR) and information on missing firefighters remains a critical priority.

DO NOT ABANDON FIRE FIGHTING POSITIONS. Abandoning firefighting positions during the rescue effort should be avoided. Command and crews should take aggressive measures to protect trapped or missing firefighters from the effects of the fire. Efforts should be concentrated on reinforcing existing positions and keeping the fire out of the rescue area and providing appropriate ventilation and lighting. In some situations, it may be appropriate to write off some areas of the building in order to relocate companies and crews to better protect the rescue effort.

ASSIGN CHIEF OFFICER TO THE RESCUE SECTOR/BRANCH. A chief officer should be assigned to direct the rescue sector and rescue operations. Depending on the size of the rescue area and the complexity of operations, more than one chief officer may be needed to fill additional support positions or sectors. The sector officer will assign specific areas of the building to search to each rescue team. Search efforts must be closely coordinated between sectors, and Command must be kept informed.

ASSIGN A SAFETY SECTOR TO THE RESCUE EFFORTS. Rescue operations are high risk. The rescue operation may be taking place in post-collapse conditions or a flashover environment. Emotions may be high and firefighters will tend to want to free-lance and take chances. A Safety Sector must be assigned to monitor activity and evaluate the safety of the operation. An available chief officer should assume this position as soon as possible. Other Safety Sector

responsibilities will be to assess the hazards, thus, allowing time for the rescue sector officer to concentrate on the critical rescue effort. These sector officers must work hand in hand to ensure that a safe and effective rescue operation is conducted.

EARLY ESTABLISHMENT OF TREATMENT AND TRANSPORTATION SECTORS. The Incident Commander must have treatment personnel in a position to immediately treat any rescued firefighters. A transportation sector must also be in place and must be coordinating activities with the treatment sector officer.

OPEN/UNLOCK ALL DOORS, IF APPROPRIATE. All doors in the immediate area should be unlocked, or forced open, and at least the immediate interior area quickly searched. Where practical, the doors should be left open to provide an emergency escape route, unless doing so will have negative effects on the fire. In all cases, the doors must remain unlocked.

VENTILATE, MAINTAIN TENABILITY AND LIGHTING. Reducing smoke conditions, through effective ventilation, improves the air quality for any victims, and will enhance search and rescue capabilities through increased visibility of the interior. Ventilation should be aggressively employed. Lighting of the operation, both interior and exterior needs to be included.

COORDINATE AND CONTROL THE SEARCH EFFORTS. The Incident Commander and Rescue Branch officer must ensure that a complete, coordinated, and controlled search is conducted. Close coordination of all search efforts is a must, in order to eliminate duplicate searches that waste time. All areas must be thoroughly searched.

R.I.T. RESCUE KITS. Each rescue team should enter the building with at least one R.I.T. Rescue Kit for each reported lost or trapped firefighter. Missing firefighters may have exhausted their SCBA air supply or may be trapped and cannot be quickly extricated. In each case the firefighter must be provided breathing air to increase survivability. The kits shall have a quick refill or shoreline capability.

WATCH FOR STRUCTURAL STABILITY OF THE BUILDING. Command and all personnel must watch the structural stability of the building throughout the rescue effort. Where a structural collapse has occurred, or the fire or other event has compromised the structural integrity of the building, carefully evaluate the structure. Technical Rescue Teams may be called upon to assist with shoring the rescue area, or for the use of other specialized equipment.

STRONG SUPERVISION REQUIRED. Strong supervision and control of activities will be required by all officers. Emotions will be very high. Firefighters in this situation will tend to want to free-lance or take higher risk. Treatment personnel will need to be restricted to only those needed. Crowd control of our own non-essential personnel may be required.

MEDIA CONTROL. Command will need to control the media early and throughout the incident. Information on the identities and conditions of lost or trapped firefighters must be restricted until after next of kin are notified. Media crews should be restricted to areas that are safe and at a distance that will prevent visual/facial identification of any victims.

CONFIRM THAT DISPATCH MONITORS ALL RADIO CHANNELS. Command must ensure that dispatch monitors all radio channels. Should a lost firefighter declare an emergency on a channel other than the fire ground tactical channel, Command must be immediately directed to the lost firefighter's channel for direct communications. Command must monitor any channels that Dispatch cannot monitor.

REHABILITATION

PURPOSE
It is the policy of the Karnes City Fire Department that no member will be permitted to continue emergency operations beyond safe levels of physical or mental endurance. The intent of this operating procedure is to lessen the risk of injury that may result from extended operations under adverse conditions. This procedure is in no way intended to diminish initial fire attack aggressiveness.

TACTICAL
The Rehabilitation Sector, commonly known as REHAB, will be utilized to evaluate and assist personnel who could be suffering from the effects of sustained physical or mental exertion during emergency operations. A Rehab Team concept will be utilized wherever possible to establish and manage the Rehab Sector. Rehab will provide a specific area where personnel will assemble to receive:

1. A physical assessment.
2. Revitalization - rest, hydration, and refreshments.
3. Medical evaluation and treatment of injuries.
4. Continual monitoring of physical condition.
5. Transportation for those requiring treatment at medical facilities.
6. Initial stress support assessment.
7. Reassignment.

Rescue 1 will be dispatched on incidents for use as a designated Rehab area. It be the responsibility of Command to make an early determination of situations requiring the implementation of a Rehab Sector. Should Rescue 1 be unavailable, Command will determine a suitable Rehab area. An EMS unit may also be called to the incident scene to provide a rehab area. The Rehab Sector should be located adjacent to the Command Post whenever possible.

The Rehab Sector area will be divided into the following four sections:

ENTRY POINT. This is the initial entry point and decontamination area. Assigned personnel will take a pulse rate on all crew members. Any member who has a pulse rate greater than 120 will report directly to Medical Treatment and Transport, where they will be treated appropriately. Members that do not require medical attention will then report to Hydration and Replenishment.

HYDRATION AND REPLENISHMENT. All personnel will be provided supplemental cooling devices, fluid and electrolyte replacement, and the proper amount of nourishment.

MEDICAL TREATMENT AND TRANSPORT. This section is staffed by an EMS crew. Personnel reporting here will receive evaluation and treatment for heat stress and injuries. The EMS unit assigned will advise the Rehab Sector Officer of medical transportation or other medical attention requirements of personnel due to their physical condition. The EMS crew in this section will pay close attention to the firefighters Pulse, B/P, and Body Temperature.

After allowing 20 minutes for a cooling down period, the pulse, blood pressure, and temperature will be rechecked. Any person with a pulse rate greater than 100 will be relieved from duty for the remainder of the alarm. Anybody who has a temperature greater than 101 or a blood pressure less than 100 systolic will need IV fluids and transportation to an appropriate medical facility. The attending EMS unit will follow path protocol with their base hospital. Crews released from medical treatment will be released to report to the Reassignment Section.

REASSIGNMENT. This critical section determines a firefighter's readiness for reassignment. Diligent efforts and face-to-face communication with the Rehab Sector Officer are required. Personnel manning this section advise the Rehab Sector Officer of all firefighters' status for reassignment. This information is relayed to Command by the Rehab Sector Officer.

The Rehab Sector Officer will update Command throughout the operation with pertinent information including the identities of firefighters in Rehab, the firefighters available for reassignment, and the status of injured personnel. All personnel leaving Rehab will report to Command.

RESPONSE

PURPOSE
It is the intent of this operating procedure to establish guidelines that will promote efficiency and safety during response to and the return from an incident location, and to provide guidelines for apparatus operation.

TACTICAL
All fire fighting personnel will report to the fire station in a safe manner as soon as possible after an alarm is received. Personnel responding late may proceed to the incident, after obtaining their bunker gear, in their personnel vehicle, if their help is needed at the scene. If a full compliment of firefighters has already responded to an incident, example, two per vehicle on a grass fire, then the remaining firefighters may return home, or stay at the station on standby, until the on-scene incident commander determines if they will be needed.

Upon arrival at the station, a full compliment of firefighters, if available, shall board one truck and get it enroute to the scene before beginning to fill the next truck. All personnel shall have proper protective clothing before leaving the fire station.

Apparatus will be driven and operated by a responsible member who is knowledgeable of the operation of the apparatus for which he has taken responsibility. The driver will not assume right-of-way. BE CERTAIN! Be aware of safety of pedestrians, other motorists, crew members, and equipment. Always apply the brakes and block the wheels before leaving the apparatus.

While enroute to an incident, vehicles will display emergency lighting and sound an audible alarm. Vehicles shall be driven to incident locations in a safe manner, making safe arrival at the scene the top priority. All personnel not already assigned a position on a fire apparatus should board personal vehicles if they will be needed at the scene.

No firefighter will be allowed to ride to or return from an incident location on the tailboard, catwalk, or other open area of an apparatus. Apparatus shall not have an excessive number of personnel in the cab which will hamper safe driving. At the scene, vehicles shall be parked so as not to interfere with normal incident operations or to cause an unsafe operation. Apparatus parked at the scene shall have the brake set and the wheels chocked.

Upon arrival, personnel should report to the incident commander for instructions if assignments or tasks have not already been issued. When a structure fire is assumed, trained personnel upon arrival at the scene shall don breathing apparatus.

Upon completion of an assignment, return to the station in a safe manner, service the apparatus as needed, and prepare the apparatus, tools, and equipment for the next call. After each incident, it is the responsibility of the firefighters on each apparatus to verify that all equipment is checked and readied for use and that the apparatus is fueled and placed back into service.

Defensive driving is essential both enroute to the station and to the fire. Drivers should be aware of road conditions and their own limitations. REMEMBER that your job is to save lives and property, a safe and timely arrival is crucial to our purpose.

SAFETY

INTENT

It is the intent of this operating procedure to identify the need for risk assessment and safety management at all incidents, and to instill in each firefighter, an "Attitude Toward Safety". While we are committed to providing our firefighters with the safest possible work environment, working at an emergency incident poses an inherent risk of injury, or even worse, death. It is important that all members operating at incidents operate in a safe manner. Each firefighter must practice safety at all times, for their own safety, as well as to minimize risk to others.

RISK MANAGEMENT

It is important that a risk management profile be applied at all emergency incidents and that it be continuously re-assessed throughout the incident operation. Example: Victims buried by a trench collapse or under water for 10 minutes or more would be unlikely to survive, and therefore an extremely cautious and well-planned recovery operation is required.

Before entering a structure involved in fire, for rescue purposes, firefighters must first consider the odds of survivability of any victims. Firefighters must consider the conditions present in the "compartment" or area of fire, or other conditions affecting survival. A significant fire in a residence with floor level dense smoke under pressure throughout the building likely means that victims could not survive. A very cautious and calculated rescue and fire control operation would be warranted.

Whereas a fire in a rear bedroom of a house, with light smoke throughout the house, may allow a survivable environment if a search and rescue effort is initiated quickly, a well-involved building would likely represent a zero-survivability profile. Similar conditions in an abandoned building would indicate little survivability and little property to be saved, and members should avoid an offensive fire attack.

The following actions are required for a safe operation:

1. Incident Command established.
2. Proper personal protective equipment.
3. Accountability system established.
4. Safety procedures in place.
5. Continuous risk assessment by all members.

TACTICAL

The safety of firefighting personnel represents the major reason for an effective and well-timed offensive vs. defensive decision or the associated "write-off" by Command. The two strategies are based on a risk management plan that is to be employed at all structure fires.

When operating in a defensive strategy, operating positions should be as far from the involved area as possible while remaining effective. Position and operate from behind barriers if available. The intent is for personnel to utilize safe positioning where possible or available, to safeguard against sudden changes such as backdraft explosion, structural collapse, etc.

The Accountability System will be utilized during each incident, and the system will be maintained until firefighters are released from the incident scene. See "Accountability" section.

When operating in an offensive strategy, be aggressively offensive. An effective, coordinated interior attack directed toward knocking down the fire eliminates most safety problems. Due to the inherent hazards of the fire or the incident scene, efforts must be made by Command to limit the number of personnel on the fire ground to those assigned to a necessary function.

The intent of this procedure is to minimize fire ground confusion and congestion and to limit the number of personnel exposed to fire ground hazards to only that necessary to successfully control the operation. Individuals or crews shall be restricted from wandering about the fire ground or congregating in non-functional groups. If personnel have not been assigned to a sector or do not have a necessary function to perform, they shall remain outside the fire ground area.

Fire ground officers should be aware of firefighters who may be suffering from stress and fatigue, or personnel who may be acting or thinking irrationally or irresponsibly.

When it is necessary to engage personnel in extremely hazardous circumstances, Command will limit the number of personnel exposed to an absolute minimum and assure that all feasible safety measures are taken. In situations where crews must operate from opposing or conflicting positions, such as front vs. rear attack streams, roof crews vs. interior crews, etc., utilize radio or face-to-face communications to coordinate your actions with those of the opposing crew, to prevent needless injuries.

Ground crews must be notified and evacuated from interior positions before exterior streams, whether hand lines or master streams, go into operation in an area where interior crews are operating. This procedure is intended to prevent injuries to personnel due to stream blast and the driving of fire and/or heavy heat and smoke onto interior crews.

If possible, when utilizing ladders on buildings with fire conditions, place ladders near building corners, or fire walls, as these areas are generally more stable in the event of structural failure. When operating either above or below ground level, establish at least two (2) separate escape routes where possible, and preferably at opposite ends or diagonal corners of the building.

To provide for the safety of firefighting personnel, Sector Officers must maintain the capability to communicate with forces under their command, so that they can control both the position and function of their companies. Sector officers and company officers shall be able to account for the whereabouts and welfare of all firefighters under their assignment. See “ACCOUNTABILITY” section for more information.

Positioning of operating companies can severely affect the safety and survival of such companies. Personnel must use caution when placed in the following positions:

- Where fire is above or can move in behind firefighters.
- Where sector cannot control position or retreat.
- When involved with opposing fire streams.
- When combining interior and exterior attack.
- With limited access such as one way in and one way out.
- When operating under involved roof structures.
- In areas containing hazardous materials.
- In areas where a backdraft potential exists.

REHABILITATION

It is the intent of this Sector to reduce the fatigue and trauma experienced during difficult operations to a reasonable and recoverable level and is in no way intended to lessen the individual and collective efforts expected of all members during field operations.

To regulate the amount of fatigue suffered by fire ground personnel during sustained field operations, officers should frequently assess the physical condition of their assigned companies. When a firefighter exhibits signs of serious physical or mental fatigue, they should be reassigned to a Rehabilitation Sector, if possible. See "REHABILITATION" section.

It is the on-going responsibility of Command to summon adequate resources to tactical situations, to effectively stabilize that situation, and to maintain adequate resources during extended operations, to complete all operational phases.

SAFETY SECTOR

The recognition of situations that present inordinate hazards to fire ground personnel, and the proper response to safeguard personnel from those hazards, is of critical importance to all fire department operations. Command has the responsibility to recognize situations involving a high risk to personnel and to initiate appropriate safety measures.

Command shall establish a Safety Sector at incidents involving any inordinate danger to personnel. Command will establish a Safety Sector on any incident where is advantageous to the overall safety of operations. Command may designate any available personnel to establish a Safety Sector when the need is indicated. This is a high priority assignment.

The establishment of a Safety Sector or the presence of a Safety Officer in no way diminishes the responsibility of all officers for the safety of their assigned personnel. Each member shall always utilize common (safety) sense, and work within the established safety procedures at all times. See "Safety Officer/Sector" for more information.

STRUCTURAL COLLAPSE

Structural collapse has been a major cause of serious injury and death to fire fighters. The possibility of structural collapse should be a major consideration in the development of any tactical plan. Structural collapse is always possible when a building is subjected to intense fire. If fire is allowed to affect a structure long enough, structural failure is inevitable. Regardless of the age and appearance of the building, the possibility exists that a principal structural-supporting member is being affected by heat, and may collapse, inflicting serious injury to firefighters.

It is a principal Command responsibility to continually evaluate and determine if the fire building is tenable for interior operations. This on-going evaluation of structural fire conditions requires the input of company officers advising their sectors, and of sectors advising Command of the conditions in their area of operation.

If structural failure of a building or section of a building appears likely, a perimeter must be established a safe distance from the area that may collapse. All personnel must remain outside this perimeter. Buildings containing one or more of the following features must be constantly evaluated for collapse potential. These evaluations should be a major consideration in determining the strategy, of offensive vs. defensive operations.

Structures have been known to collapse without warning, but usually there are indications that may tip off an alert fire officer. Action shall be taken to avert any imminent hazard. Signs of building collapse may include:

- Cracks or bulges in exterior walls.
- Sounds of structural movement--creaking, groaning, snapping, etc.
- Smoke or water leaking through walls.
- Flexible movement of any floor or roof where firefighters walk.
- Interior or exterior bearing walls or columns--leaning, twisting or flexing.
- Sagging or otherwise distorted roof lines.
- Time of fire involvement.

The following construction features or conditions have been known to fail prematurely or to contribute to early structural failure when affected by fire. Some of these factors include:

- Parapet walls.
- Large open, unsupported areas such as supermarkets, warehouses, etc.
- Large signs or marquees, which may pull away from weakened walls.
- Ornamental or secondary front or side walls, which may pull away and collapse.
- Buildings with lightweight truss, bar joist, or bowstring truss, roofs.
- Buildings supported by unprotected metal beams, columns, etc.

Most structures are not designed to withstand the effects of fire and can be expected to fail if exposed to heavy fire involvement. If after 10-15 minutes of interior operations, heavy fire conditions still exist, Command should initiate a careful evaluation of structural conditions, and should be fully prepared to withdraw interior crews and change to a defensive strategy.

EVACUATION

Interior firefighting operations should be abandoned when the extent of the fire prohibits fire control, or the structure becomes unsafe to operate within. When such conditions make the building untenable, evacuate, account for personnel, regroup, communicate, and re-deploy.

Our primary concern when a hazard that may affect the safety of fire personnel becomes apparent, is the welfare of those personnel. To protect personnel who may suffer the adverse effects of hazards such as structural collapse, explosion, backdraft, etc., a structured method of area evacuation must be utilized. The method must provide for the rapid and effective notification of personnel involved, and one that will accurately account for those personnel.

The method of evacuation selected will vary depending on the following circumstances:

- Imminence of the hazard.
- Type and extent of hazard.
- Perception of the area affected by the hazard.

The emergency traffic announcement is designed to provide immediate notification for all fire ground personnel. The use of "Emergency Traffic" should be initiated only when the hazard appears to be imminent or has just occurred. Any member has the authority to utilize the "Emergency Traffic" announcement when it is felt that a notable danger to personnel is apparent. However, considerable discretion should be applied to its use, as emergency traffic announcements become ineffective if overused.

When an imminent hazard has been realized, the emergency traffic process should be initiated. Usually, an officer will be the initiator. The initiator should describe the apparent hazard, and order a positive response, usually to evacuate a particular area or section, according to the scope of the hazard. If possible, the sector officers of those areas to be evacuated should request an acknowledgment of the emergency traffic dispatch from those crews to be evacuated.

If an incident escalates to the point that the safety of personnel may be in jeopardy and it is necessary to immediately evacuate the space, structure or area, an IMMEDIATE RETREAT signal shall be sounded. The signal shall consist of an audible signal from a siren accompanied by three (3) short blasts of an air horn. The signal will be sounded until the space, structure or area is evacuated. This is an immediate evacuation of personnel only and all equipment shall be left behind.

Upon receipt of the emergency traffic evacuation order, company officers shall assemble their crews and promptly exit to a safe location, where the company officer will report a PAR for all firefighters. Shortly after the evacuation order, sector officers shall begin the process of accounting for all evacuated crews. When all affected crews and crew members are accounted for, the Sector officer will report a PAR for that Sector. At this time a more specific determination as to the reality or extent of the hazard can be made, and efforts initiated to re-deploy or redirect attack crews.

Building evacuation generally involves a shift from an offensive to a defensive strategy. In such cases, Command must develop a corresponding operational plan and must communicate that plan to all operating companies. It is extremely important that everyone gets the word that a shift in strategy has been made. This transition can be time consuming based on company's interior positions.

SEARCH AND RESCUE

Search and rescue should be performed according to an efficient, well-planned procedure that includes the safety of search crew personnel. The object of the search effort is to locate possible victims, not create additional ones by neglecting the safety of the search crew.

Prior to entering the search area, all search team members should be familiar with a specific search plan including the overall objective, a designation of the search area, individual assignments, etc. This may require a brief conference among crew members before entering the search area to develop and communicate the plan.

Two or more members should conduct individual search activities when possible. Company officers must maintain an awareness of the location and function of all members within their crew during search operations. Whenever a search is conducted that exposes search crews to fire conditions, particularly above the fire floor, the search team should be protected with a charged hose line, to insure a safe escape route. If search personnel are operating without a hose line, lifelines should be used when encountering conditions of severely limited visibility. See "Search and Rescue" section for more information.

SAFETY OFFICER/SECTOR

PURPOSE

It is the intent of this operating procedure to provide guidelines for the implementation of a “Safety Officer” or "Safety Sector" at any incident, special operations rescue, trench rescue, confined space rescue, and hazardous materials incidents. In addition, a Safety Sector or Incident Safety Officer should be implemented at any incident of special hazard presenting an unusual risk to fire fighters, customers, or the public.

This procedure in no way diminishes the responsibility of each member's commitment to safe work behaviors and to operate within standard operating procedures at all times. Company officers carry an additional responsibility of ensuring that all members of their crew are operating in a safe manner. Chief officers and sector officers must also ensure that operations are conducted safely.

TACTICAL

The first arriving member or company will establish Command, and the Incident Command System will be implemented at all working incidents. Command is responsible for assigning a Safety Officer or Safety Sector. The Safety Officer will automatically assume the Incident Safety Officer responsibilities upon their arrival at the incident, following the appropriate command procedures and a briefing. Command must be notified of the assumption of Safety Sector responsibilities for accountability and scene management purposes.

It will be the responsibility of Command to establish an incident action plan that includes a safety plan for the incident. This safety plan must be communicated to the Safety Sector Officer and other sector officers. Command may request the Safety Sector Officer to develop and recommend an appropriate safety plan.

The Safety Sector reports directly to command and has full authority to terminate, suspend, or alter any unsafe condition or action. The Safety Sector/Section intervention at scene operations involves three approaches. First is for life threatening situations; the second is for non-life-threatening situations; and the third approach occurs in the on-going incident planning process.

Any life-threatening conditions will be corrected immediately and directly. Where time permits, Command must be notified, and corrective action will be initiated by Command immediately. In obvious life-threatening situations that do not allow time for Command's intervention, the Safety Sector shall immediately stop any action, or countermand any order, by direct and immediate intervention such as to order crews out of a building, countermand an order for crews to go to the roof etc. Such action may be taken with the understanding that the Safety Sector works for Command and is accountable to Command for actions taken. Command must be immediately advised of any direct intervention by the Safety Sector under these circumstances. A change of strategy and/or tactics by Command or sector officers may be required because of the Safety Officer's actions. Sector officers may have to be notified of hazards, required safety corrections, or updated on the strategic plan, tactics, and objectives.

EMERGENCY TRAFFIC SHOULD BE USED FOR ANY CRITICAL EMERGENCY NOTIFICATIONS OR ALERTS REQUIRED AT THE INCIDENT SCENE.

The second approach is for non-life threatening situations and involves a more "one-on-one" correction of safety problems with individual firefighters, company officers, and/or sector officers, such as to require SCBA, correct ladder position, etc., and often does not affect incident strategy. This approach is the most frequent type of interaction. Where corrective action does not affect Command's strategy, Command may not need to be notified. Corrected items should, however, be noted for discussion during a post incident analysis.

The third approach occurs in the on-going incident planning process. Upon the implementation of the Safety Sector, Command must provide the Safety Sector an overview of the incident action plan and specific details of the safety plan. The Safety Officer, upon their arrival, will confirm that a safety plan is in effect, review it, and provide recommendations as needed. In some cases, Command may request that the Safety Officer develop a proposed safety plan and recommendations for Command. Command must be kept aware of any adjustments that affect overall site operations, and the strategic plan, via frequent and timely progress reports.

The Safety Sector must remain a part of the on-going planning process with Command and/or the Safety Section chief. The officer, assuming Safety Section responsibilities, may utilize any previous Safety Sector officers to their best advantage, coordinating resources, and incident assignments as approved by Command.

SAFETY SECTOR RESPONSIBILITIES

1. The Safety Officer has a face-to-face conversation with a member of the Command team.
2. After confirming a safety plan with Command, the Safety Officer will assume the Safety Sector responsibilities.
3. Safety officer will don full protective clothing and begin to observe all exterior areas of the incident and identify any structural or hazardous conditions. He or she will then give a report of these conditions to Command.
4. Ensure that a RIT Team is properly positioned and that all personnel are wearing proper protective clothing and equipment.
5. Ensure that all crews and personnel are operating safely and within safety standards.
6. Safety Officer has the authority to terminate, suspend, or alter any unsafe operations.
7. Monitor the health and welfare of all personnel and ensure that they are not over-extended and are rehabilitated in an effective manner. Rehab should be a component of the safety plan.
8. Provide Command with frequent progress reports on safety related issues.
9. On large operations, it may be advisable to establish a Safety Branch or multiple safety sectors such as North, South, or possibly roof-top function areas.
10. Safety Sector will maintain a liaison with Command to update and review the on-going incident safety plan.
11. Review and address accountability and rehab.

SELF-CONTAINED BREATHING APPARATUS

PURPOSE
It is the intent of this operating procedure to establish guidelines for the required use of self-contained breathing apparatus (SCBA).

TACTICAL
SCBA shall be used by all personnel working in areas where:

A. The atmosphere is hazardous.
B. The atmosphere is suspected of being hazardous.
C. The atmosphere may rapidly become hazardous.

All firefighters working in or around a hazardous atmosphere will be trained in the use of and will use SCBA. Firefighters must be aware of the effects of breathing toxic gases and reduced oxygen levels.

It shall be necessary to provide for atmospheric monitoring prior to removing SCBA and/or PPE at any incident scene where the atmosphere may be hazardous to firefighters on scene.

Firefighters using SCBA must meet OSHA and NFPA 1500 standards regarding facial hair. NFPA 1500 states: Beards or facial hair that interferes with the face mask seal shall be prohibited for members required to use SCBA. Members who do not meet these requirements will not be allowed to wear SCBA in a hazardous environment. Firefighters shall not wear eyeglasses with frames that pass through the seal area of the face piece.

Each SCBA will be cleaned, inspected, filled, and properly stored after each use. This includes filling air cylinders, washing and disinfecting masks, cleaning harness assemblies, extending straps on harness and masks, cleaning storage cases, and properly packing the SCBA for the next use. SCBA shall be dried thoroughly prior to being placed back in storage cases.

Any SCBA that does not perform properly shall be immediately removed from service and the problem reported to the officer in charge or the training instructor.

A combination of the following three conditions can create the problem of pressure build-up:

1. High pressure in the system, either because of the cylinder valve open, or because pressure has not been drained from the system after the cylinder valve is shut-off., and
2. The regulator by-pass is open, and
3. The outlet of the regulator is blocked.

CARE AND MAINTENANCE

After each use, the following shall be checked prior to the unit being placed back into service:

A. Examine mask, hoses and harness for contamination, damage, wear, deterioration, and proper function.
B. Test the following on unit as worn, with audible alarm hooked up to cylinder:
    1. Check cylinder gauge for full indication of 2216 psi or 4500 psi as required. Replace or recharge cylinder if pressure is less than the cylinder's rated service pressure.
    2. Check cylinder for wear or damage after each use and prior to filling.
    3. With automatic shut-off engaged, open cylinder valve to pressurize regulator and hose. Alarm must ring as pressure increases, indicating that the alarm is operating.
    4. Close cylinder valve. Compare remote gauge reading to cylinder gauge reading.
    5. Watch remote gauge for drop in pressure reading which would indicate leakage.
    6. Release automatic shut-off by inhaling on mask. Watch remote gauge for indication of pressure at which audible alarm rings. The alarm should ring at about 25% of the cylinders rated pressure. If the alarm does not ring, remove the unit from service.
    7. With the cylinder valve closed, allow the remaining pressure to bleed from system.
C. Store in unit in a clean dry location.

All cylinder inspection procedures should include a check of the cylinder test date. DOT requires that composite cylinders be hydrostatically tested every three years, and steel cylinders tested every five years, in accordance with Title 49, Code of Federal Regulations. There is a maximum service live of 15 years from the date of manufacture on composite cylinders.

The 4500 psi MSA SCBA's with the integrated pass devices require the annual replacement of their batteries for proper and dependable operation. There are batteries in the ICM and in the MMR Air Mask that are to be replaced annually. The batteries shall be replaced each year, prior to the annual SCBA service.

SEARCH AND RESCUE

PURPOSE

It is the intent of this operating procedure to provide guidelines for primary search and rescue operations of all involved and exposed occupancies that can be safely entered and for any type of incident where performing search and rescue is appropriate. Command must structure initial operations around the completion of the primary search. Primary search means companies have quickly gone through all affected areas and verified the removal and/or safety of all occupants.

TACTICAL

Time is the critical factor in the effective “primary search” process. Successful primary search operations must be done as soon and as quickly as possible. Any rescue functions that follow the primary search will be regarded tactically as presenting a “secondary search”. Secondary search means that companies thoroughly search the interior of the fire area after initial fire control and ventilation activities have been completed, or as conditions allow based on the incident type. Different companies should preferably complete secondary search than those involved in primary search activities. Thoroughness, rather than time, is the critical factor during the secondary search.

It shall be the responsibility of Command to rapidly deploy the TIC in a visibly diminished atmosphere or in an atmosphere that may suddenly become visibly diminished. One of the primary uses of the TIC for the fire department is for conducting search and rescue and crew accountability tasks. The use of a TIC can prove to be a useful tool during search and rescue tasks by reducing the amount of time it may take using standard search techniques. This will lead to a more effective and organized search, while quickly locating the fire. By locating the fire quickly, we will be better able to determine our tactical priorities and rescue priorities.

The completion of the primary search is reported utilizing the standard radio reporting term “ALL CLEAR”. It is the responsibility of Command to coordinate search assignments, secure completion reports from interior crews, and to transmit the "ALL CLEAR" report to Command. The term "SEARCH & RESCUE" should be used when structuring a primary search over the radio. "ALL CLEAR" should be used only to report the completion of the primary search.

The stage of the fire becomes a critical factor that affects the rescue approach developed by Command. The following items outline the basic Command approach to fire stages:

- In a “nothing showing” situation, or in very “minor fire” cases that clearly pose no life hazard, Command must structure a rapid interior search and report "ALL CLEAR". The interior search for victims will also verify “no fire”.
- In “smoke showing” and “working fire” situations, fire control efforts must be done simultaneously with rescue operations, to gain entry and control interior access, to complete the primary search. In such cases, Command and operating companies must be aware that the operation is in a “rescue mode”, until primary search is complete, regardless of the fire control required. In “working fire” situations, primary search must be followed by a secondary search.
- In cases of “fully involved” buildings or sections of buildings, immediate entry and primary search activities become impossible, and survival of occupants is improbable. Command must initially report fully involved conditions. Command will not report an all clear. As quickly as fire control is achieved, Command must structure what is, in effect, a secondary search for victims.

Command and operating companies cannot depend upon reports from spectators to determine the status of victims. Control forces should utilize reports as to the location, number, and condition of victims, during primary search efforts, and must extend and complete a primary search wherever entry is possible.

Command must consider the following factors in developing a basic rescue size-up:

- The number, location, and condition of victims.
- The effect the fire has on the victims.
- The capability of crews to enter buildings, remove or protect victims, and control the fire.

Command must make the basic rescue decision: "Do we remove the victims from the fire, or do we remove the fire from the victims? In some cases, occupants are safer in their rooms than moving through contaminated hallways and interior areas. Such movement may also impede interior firefighting.

Command must realistically evaluate the manpower required to remove victims and then treat their fire-affected bodies. In such cases involving multiple victims, Command must call for the timely response of adequate resource and quickly develop an operation plan that will both stabilize the fire and provide for the removal and treatment of the occupants. The most urgent reason for calling additional alarms is for the purpose of covering life safety. Command must develop a realistic rescue size-up as early as possible.

Rescue efforts should be extended in the following order:

- Most severely threatened victims.
- The largest number of victims.
- The remainder of the fire area involved.
- The exposed areas.

Command must make primary search assignments for companies to cover specific areas of large, complex occupancies, and maintain on-going control of such companies until the area is searched. When primary search companies encounter and remove victims, Command must assign other companies to continue to cover the interior positions vacated by those companies.

All initial attack efforts must be directed toward supporting rescue efforts. Hoselines must be placed in a manner to control interior access, confine the fire, and protect avenues of escape. Hose line placement becomes a critical factor in these cases, and Command and all operating companies must realize that the operation is in a rescue mode. It may be necessary to operate in a manner that "writes off" the structure to buy rescue time.

Normal means of interior access, such as stairs, halls, interior public areas, etc. should be utilized to remove victims whenever possible. Secondary means of rescue such as ladders, fire escapes, etc. must be utilized in their order of effectiveness.

Command must establish for the treatment of victims after removal. Multiple victims should be removed to one location for more effective triage and treatment. Command should coordinate and utilize the capabilities of medical personnel wherever available and assign treatment to a Medical Sector.

Once the primary search has been completed and an "ALL CLEAR" transmitted, Command must maintain control of access to the fire area. Beware of occupants and others re-entering the building.

The Accountability System will be utilized during each incident, and the system will be maintained until firefighters are released from the incident scene. See “Accountability” for more information.

It shall be the responsibility of the Incident Commander or Officer in Charge to designate the appropriate fire ground channel(s) for each incident. Separate channels shall be assigned for firefighters on an interior attack or within the hot zone of an incident as determined necessary by the Incident Commander or Officer in Charge.

Any time firefighters are on air inside a structure, and the potential for any hazards that could endanger a firefighter’s life are present, a Rapid Intervention Team (RIT) will be on scene and solely dedicated to providing emergency services to the interior crew. See “Rapid Intervention” for more information.

Incident Command shall appoint a safety officer/sector at every incident to ensure all operations are conducted in the safest possible manner. It will be the responsibility of Command to establish an incident action plan that includes a safety plan for the incident. This safety plan must be communicated to the Safety Sector Officer and other sector officers. Command may request the Safety Sector Officer to develop and recommend an appropriate safety plan.

The Safety Sector reports directly to command and has full authority to terminate, suspend, or alter any unsafe condition or action. The Safety Sector/Section intervention at scene operations involves three approaches. First is for life threatening situations; the second is for non-life-threatening situations; and the third approach occurs in the on-going incident planning process. See “Safety Officer/Sector” for more information.

SIZE-UP

PURPOSE
It is the intent of this operating procedure to provide guidance in the size-up of an incident to determine the best course of action to be taken to control and contain the situation.

TACTICAL
Size-up will be the responsibility of the highest-ranking member on the first arriving apparatus, unless otherwise instructed by an officer in charge. The size-up shall be transmitted to all responding units.

The person responsible for size-up will provide necessary information to both personnel on the scene and other personnel enroute to the scene so that attack and other operations may begin as soon as possible.

The officer in charge will use size-up information to determine the placement of apparatus and hose lines, the need for additional apparatus, equipment, personnel or mutual aid and the initial attack procedure. Potential for structural failure, location of power lines and other hazards should also be noted.

The Thermal Imaging Camera (TIC) may provide valuable information during size-up, which can assist the Incident Commander in determining the strategy and formulating the incident action plan. Early identification of tactical needs and priorities can prove beneficial in placing initial and subsequent attack lines. When a company officer or incident commander arrives on the scene, one of the first challenges is to identify the location of the fire. A TIC can save a great deal of time by helping to pinpoint a concentration of heat within a particular area of the building, especially in large commercial or multi-story structures. An incident commander, armed with this knowledge, can better direct firefighters regarding their point of entry and plan of attack, to optimize their resources.

When necessary, the officer in charge will give a verbal description of the incident over the radio for other responding units. Example, "We have a two-story wood frame structure with fire showing through the upper floor windows".

STRUCTURE FIRES

PURPOSE
It is the intent of this operating procedure to provide guidelines for safely and effectively handling structure fires.

RESPONSE
Inside City Limits

1st out	City Engine with a full compliment of firefighters, if available
2nd out	Rural Engine with a full compliment of firefighters, if available
3rd out	Rescue 1 with 3 firefighters, if available
4th out	Tanker 1 with a minimum of firefighter (maximum of 2)
5th out	First out Brush Truck with 2 firefighters
6th out	Second out Brush Truck with 2 firefighters

Outside City Limits

1st out	Rural Engine with a full compliment of firefighters, if available
2nd out	Tanker 1 with a minimum of 1 firefighters (maximum of 2)
3rd out	Rescue 1 with 3 firefighters, if available
4th out	First out Brush Truck with 2 firefighters
5th out	Second out Brush Truck with 2 firefighters

On all structure fire alarms, the Engine will respond first, with a full compliment of firefighters, if available, in full bunker gear. On alarms inside the city limits, both Engines will respond. On out-of-town alarms, the Rural Engine will be the only Engine to respond. Firefighters arriving at the station will first fill and roll one truck before beginning to fill the next truck. No firefighter will be allowed to ride to or return from an incident location on the tailboard, catwalk, or other open area of an apparatus.

After the Engine(s), Tanker, and the rescue/equipment truck have rolled, the first out Brush Truck will respond with a minimum of 1 and preferably 3 firefighters. The driver will be responsible for using this truck to supply the Engine on scene with water if it is not hooked to a hydrant. The second out Brush Truck will also respond to the scene for water supply with a minimum of 1 and preferably 3 firefighters. As Rescue 1, the Brush Trucks arrive at the scene, firefighters will report to the incident commander for assignments.

The first arriving officer or the ranking firefighter on the first arriving apparatus will serve as the incident commander and quickly size-up the incident and determine a course of action, begin an attack, and provide instructions for incoming units.

The Accountability System will be utilized at all incident scenes and the system will be maintained until firefighters are released from the incident scene. See “Accountability” for more information.

After each incident, it is the responsibility of the firefighters on each apparatus to verify that all equipment is checked and ready for use and that the apparatus is fueled and placed back into service.

SAFETY

At all times, the safety of the emergency responders and the public will be paramount over all other incident considerations. All emergency responders at the scene will wear the proper personal protective equipment, as indicated by the incident, at all times. It shall be understood that a "do nothing" decision may be the safest and the only decision to be made on some structure fires.

No emergency responder will attempt any mitigation procedure or rescue attempt which will put in jeopardy their own or any other persons, life, health, or safety. No emergency responder will attempt any mitigation procedure or rescue attempt that is above his or her level of training.

Any time firefighters are on air inside a structure, and the potential for any hazards that could endanger a firefighter's life are present, a Rapid Intervention Team (RIT) will be on scene and solely dedicated to providing emergency services to the interior crew. See "Rapid Intervention" for more information.

Incident Command shall appoint a safety officer at every incident to ensure all operations are conducted in the safest manner possible. It will be the responsibility of Command to establish a strategy action plan that includes a safety plan for the incident. This safety plan must be communicated to the Safety Sector Officer and other sector officers. Command may request the Safety Sector Officer to develop and recommend an appropriate safety plan.

The Safety Sector reports directly to command and has full authority to terminate, suspend, or alter any unsafe condition or action. The Safety Sector/Section intervention at scene operations involves three approaches. The first is for life threatening situations; the second is for non-life-threatening situations; and the third approach occurs in the on-going incident planning process. See "Safety Officer/Sector" for more information.

Once the incident commander establishes the control zones no unauthorized person shall enter a control zone. The incident commander will only issue authorization. No responder shall enter the control zone unless the proper protective clothing and SCBA is worn.

When necessary, on structure fires, Command shall establish a Rehabilitation Sector, commonly known as REHAB, will be utilized to evaluate and assist personnel who could be suffering from the effects of sustained physical or mental exertion during emergency operations. See "Rehabilitation" section for more information.

If an incident escalates to the point that the safety of personnel may be in jeopardy and it is necessary to immediately evacuate the space, structure or area, an IMMEDIATE RETREAT signal shall be sounded. The signal shall consist of an audible signal from a siren accompanied by three (3) short blasts of an air horn. The signal will be sounded until the space, structure or area is evacuated. This is an immediate evacuation of personnel only and all equipment shall be left behind.

When operating at a scene of an incident with vehicle traffic moving in the area, position apparatus whereas to protect the firefighters from injury from being struck by passing motorists. Traffic vests are available in every apparatus and are to be worn for better visibility of firefighters working at the scene.

APPARATUS DISPATCH

Upon notification of a structure fire incident by dispatch, all available equipment as dictated by the incident and the number of personnel responding shall be dispatched to the scene. Before leaving the station, the first engine shall gather as much information as possible as to the type of structure involved, type of occupancy, weather conditions, and any other information that is available and may influence the incident.

The incident commander or the highest-ranking member on the first responding unit is responsible for the gathering and communicating incident data and routes to take for an effective approach. All incoming emergency units and personnel shall upon arrival, report to the incident commander for instructions.

INCIDENT COMMAND

The highest-ranking officer first arriving on the scene shall assume all duties and responsibilities of the incident commander, including identifying command, establishing a command post, and establishing a communication channel. Should the first arriving fire apparatus not contain a fire officer, or there is no fire officer on scene, the highest-ranking member of the first arriving apparatus shall assume all duties and responsibilities of the incident commander until such time a fire officer arrives on the scene.

The incident commander shall pass his authority to a higher-ranking fire officer upon their arrival. Should the command be passed, the relieved officer shall provide the assuming incident commander with the following information:

A. Location and assignment of all apparatus on scene.
B. A list of all resources enroute.
C. The progression of the incident to the time of the assuming commander's arrival.
D. Any other information needed to effectively assume command.

The incident commander shall immediately establish an incident command post and broadcast to all units on the scene and any incoming units the new incident command information. All information pertaining to the incident shall be transmitted to and from the incident command post and the incident commander. See "Incident Command" for more information.

The Thermal Imaging Camera (TIC) may provide valuable information during size-up, which can assist the Incident Commander in determining the strategy and formulating the incident action plan. Early identification of tactical needs and priorities can prove beneficial in placing initial and subsequent attack lines. When a company officer or incident commander arrives on the scene, one of the first challenges is to identify the location of the fire. A TIC can save a great deal of time by helping to pinpoint a concentration of heat within a particular area of the building, especially in large commercial or multi-story structures. An incident commander, armed with this knowledge, can better direct firefighters regarding their point of entry and plan of attack, to optimize their resources.

Even before firefighters enter a burning structure, the incident commander or company officer can accomplish a great deal from the exterior with the aid of thermal imaging technology. Some factors that can be assessed from the outside include finding the seat of the fire, observing changing or spreading conditions, identifying critical building construction features, and identifying conditions that could threaten structural integrity.

COMMUNICATION

Once the incident command post is established, all unnecessary communications over the radio shall cease, leaving only emergency traffic. All use of 10-code shall no longer be used and shall be replaced by plain, clear, concise English. All instructions transmitted by the incident commander or safety officer shall be repeated to the sender to ensure accuracy and understanding of instructions. See “Communication” for more information.

It shall be the responsibility of the Incident Commander or Officer in Charge to designate the appropriate fire ground channel(s) for each incident. Separate channels shall be assigned for firefighters on an interior attack or within the hot zone of an incident as determined necessary by the Incident Commander or Officer in Charge.

The radio message "May-Day" will be used by firefighters to report their status as being lost, trapped, or injured and needing rescue. Any member may use "May-Day" to report a lost firefighter. Any report of "May-Day" will receive priority radio traffic. The term "May-Day" will be reserved only to report lost, trapped, or injured firefighters. The term "emergency traffic" will be used to report all other emergencies. The orange button on radios is an emergency button that will emit emergency notification tones over the radio and will hold the microphone open for a short period of time for emergency communication needs. See “May-Day” for more information.

If it becomes necessary to issue a May-Day, the firefighter shall give a “LUNAR” report which is used during a May-Day or other emergency. LUNAR stands for “Location, Unit, Name, Air Supply, and Resources” which are needed for your rescue. This is a great resource when you are trapped in a collapse or if you need assistance during an incident.

Any time a Rapid Intervention Team (RIT) is needed, the most readily available firefighting team will assume the responsibilities of the RIT team. A RIT pack will be immediately available and positioned for quick access for the RIT team. See “Rapid Intervention” for more information.

PUMP OPERATIONS

The firefighter who will be the pump operator will be knowledgeable of the apparatus and general pump operations. Pump operators will be knowledgeable in friction loss calculations and GPM flow ratings of various size nozzles. Friction loss will be calculated at 5 psi friction loss for each 50-foot section of 2 1/2" hose and a 1 psi increase/decrease for every 1 foot of increase/decrease in elevation.

Pump operators will charge attack lines to supply proper volume and pressure. Generally, a 200 foot pre-connect will require 110 to 120 psi for an initial attack. The pump operator will maintain communications with the fire lines to deliver a satisfactory pressure while maintaining the overall apparatus operations.

FIRE ATTACK

The total flow from hose lines deployed for fire attack must exceed the required fire flow for the anticipated level of involvement. Hose lines selected for an offensive fire attack must provide the maximum flow rate that is possible with the available staffing and based on the fire flow required for potential conditions.

The following is a list of considerations for proper placement of hose lines for an offensive fire attack:

1. To saves lives imminently threatened by fire.
2. To protect exterior exposures that presents a potential life exposure.
3. To protect means of egress presently involved or imminently threatened by fire.
4. To confine and extinguish the fire.
5. To check extension above the fire.
6. To protect exterior exposures that do not present a potential life threat.

Hose lines shall be placed from the unburned side of the structure unless it is necessary to attack from the burned side to provide for the life safety of exposed persons (firefighter of civilian) or if access to the unburned side is unavailable or will be delayed.

No member shall initiate an exterior attack on a structure fire while an interior attack team is in operation.

Before entering a structure involved in fire, for rescue purposes, firefighters must first consider the odds of survivability of any victims. Firefighters must consider the conditions present in the "compartment" or area of fire, or other conditions affecting survival. A significant fire in a residence with floor level dense smoke under pressure throughout the building likely means that victims could not survive. An extremely cautious and calculated rescue and fire control operation would be warranted.

Whereas a fire in a rear bedroom of a house, with light smoke throughout the house, may allow a survivable environment if a search and rescue effort is initiated quickly, a well-involved building would likely represent a zero-survivability profile. Similar conditions in an abandoned building would indicate little survivability and little property to be saved, and members should avoid an offensive fire attack.

Use a straight stream or power cone pattern for interior fire attack and open overhead concealed spaces to check for fire involvement before entry into a room when substantial extension is anticipated.

If fire attack has no impact on the volume of fire within 30 seconds, advise the incident commander that increased flow is required.

WATER SUPPLY

When a sufficient water supply is not readily available at the fire scene, a water supply officer will be assigned to establish a water supply sufficient for the incident at hand.

Some of the water supply options that may be utilized are fire hydrants, El Oso Water flush plugs, stock ponds, lakes, water tankers, mutual aid, dry hydrants, etc.

If necessary, for refilling apparatus tanks, a 300 GPM floating pump is stored on Brush 12 and is available upon request. The officer in charge shall see to it that the pump will arrive at the scene prior to the apparatus running out of water.

SUPPORT PERSONNEL

PURPOSE

It is the intent of this operating procedure to provide guidelines and restrictions on Support Personnel members.

TACTICAL

A person requesting membership in the department may request to be voted in as a Support Personnel member.

Support Personnel members shall abide by all the same rules and regulations as any other member being voted in with the exception of training requirements and any other requirements established by the Support Personnel section of the Standard Operating Procedures and Rules and Regulations.

Support Personnel may not perform duties outside of the scope of their training.

TRAINING OBJECTIVES

SFFMA Firefighter I and Firefighter II training program
Section 1 – Orientation & Fire Service History
Firefighter I – All objectives listed (1-I.01 thru 1-I.13)
Firefighter II – All objectives listed (1-II.01 thru 1-II.06)

Section 2 – Forcible Entry
Firefighter I – 2-I.01 and 2-I.02

Section 3 – Fire Service Ladder Practices
Firefighter I – All objectives listed except 3-I.04, 3-I.07(C&D) and 3-I.13

Section 4 – Fire Hose Practices
Firefighter I – All objectives listed except 4-I.08, 4-I.10, 4-I.12, 4-I.20 and 4-I.21

Section 5 – Salvage and Overhaul
Firefighter I – Only 5-I.01, 5-I.02, 5-I.04, 5-I.05 and 5-I.09

Section 7 – Ventilation Practices
Classroom training only

Section 8 – Rescue Operations
Firefighter I – Only 8-I.03 and 8-I.05
Firefighter II – Only 8-I.01, 8-I.02, 8-I.06 and 8-I.09

Section 9 – Fire and Life Safety Initiatives
Firefighter I – All objectives listed (9-I.01 thru 9-I.04)

Section 10 – Water Supplies
Firefighter I – All objectives listed (10-I.01 thru 10-I.14)

Section 12 – Fire Behavior (Fire Science)
Firefighter I – All objectives listed (12-I.01 thru 12-I.16)

Section 13 – Fire Department Communications
Firefighter I – All objectives listed (13-I.01 thru 13-I.08)

Section 16 – Firefighter Safety & Health
Firefighter I – All objectives listed (16-I.01 thru 16-I.11)

Section 18 – Firefighter PPE & SCBA
Firefighter I – All objectives listed except 19-I.05, 19-I.07, 19-I.10, 19-I.14 and 19-I.16

Section 20 – Portable Extinguishers
Firefighter I – 21-I.01 and 21-I.02

NFPA 1002: Driver/Operator Training Program

NFPA 1072: Hazardous Materials Awareness Training

Safe Practices for Traffic Incident Responders (SHRP2)

VIOLATIONS

Any member who violates this policy will be subject to appropriate disciplinary action, up to and including termination.

SWIFT WATER RESCUE

PURPOSE
It is the intent of this operating procedure to provide guidance in safely handling swift water rescue incidents.

TACTICAL
The highest-ranking officer first arriving on the scene of a swift water incident shall assume all duties and responsibilities of the incident commander and shall place the incident command system into effect immediately.

The incident commander shall appoint a safety officer at every incident to ensure all operations are conducted in the safest manner possible. It will be the responsibility of Command to establish an incident action plan that includes a safety plan for the incident. This safety plan must be communicated to the Safety Sector Officer and other sector officers. Command may request the Safety Sector Officer to develop and recommend an appropriate safety plan.

The Safety Sector reports directly to command and has full authority to terminate, suspend, or alter any unsafe condition or action. The Safety Sector/Section intervention at scene operations involves three approaches. First is for life threatening situations; the second is for non-life-threatening situations; and the third approach occurs in the on-going incident planning process. See “Safety Officer/Sector” for more information.

The Accountability System will be utilized during each incident, and the system will be maintained until firefighters are released from the incident scene. See “Accountability” for more information.

Any time this department responds to a swift water rescue incident, the safety of the emergency responders and the public will be paramount over all other incident considerations.

All emergency responders in the hazard area will wear proper protective equipment including a personal flotation device and a water rescue helmet. Each member in the hazard area shall also have a rope throw bag, whistle, prussic cords, carabiners, and any other equipment that may be needed for the incident at hand. Firefighters shall not wear bunker gear at the scene of, or near the water during a swift water rescue incident.

Emergency responders shall work in teams of two on all swift water incidents. No emergency responder will make any rescue attempts which will put in jeopardy their own or any other person’s life, health, or safety. Every attempt possible shall be made to rescue the victim from the shore prior to placing rescuers in the water.

The radio message "May-Day" will be used by firefighters to report their status as being lost, trapped, or injured and needing rescue. Any member may use "May-Day" to report a lost firefighter. Any report of "May-Day" will receive priority radio traffic. The term "May-Day" will be reserved only to report lost, trapped, or injured firefighters. The term "emergency traffic" will be used to report all other emergencies. The orange button on radios is an emergency button that will emit emergency notification tones over the radio and will hold the microphone open for a short period of time for emergency communication needs. See “May-Day” for more information.

The department's self-contained breathing apparatus (SCBA) used in fire fighting operations shall not be confused with self-contained underwater breathing apparatus (SCUBA) and may not be used during water rescue incidents.

No member shall attempt a rope rescue unless they have been trained in the proper use of ropes and knots and have a general knowledge of rescue systems and operations.

No member will be required to perform tasks for which they are not trained or physically able to accomplish within a reasonable margin of safety.

If you feel you are not able to properly carry out a task assigned to you, inform the incident commander or officer in charge.

THERMAL IMAGING

PURPOSE
The intent of this operating procedure is to identify the strategic and tactical approach for the deployment of thermal imaging cameras.

TACTICAL
The Thermal Imaging Camera (TIC) may provide valuable information during size-up, which can assist the Incident Commander in determining the strategy and formulating the incident action plan. Early identification of tactical needs and priorities can prove beneficial in placing initial and subsequent attack lines. When a company officer or incident commander arrives on the scene, one of the first challenges is to identify the location of the fire. A TIC can save a great deal of time by helping to pinpoint a concentration of heat within a particular area of the building, especially in large commercial or multi-story structures. An incident commander, armed with this knowledge, can better direct firefighters regarding their point of entry and plan of attack, to optimize their resources.

Even before firefighters enter a burning structure, the incident commander or company officer can accomplish a great deal from the exterior with the aid of thermal imaging technology. Some factors that can be assessed from the outside include finding the seat of the fire, observing changing or spreading conditions, identifying critical building construction features, and identifying conditions that could threaten structural integrity. A sector officer will also benefit from this information in assessing the operational objectives, progress, and needs.

DEPLOYMENT
The early and rapid deployment of the Thermal Imaging Camera (TIC), while operating in an Offensive Strategy, may enhance the visibility in a visibly diminished atmosphere, thus increasing firefighter safety and survival, as well as improving the survival potential of our customers.

The TIC can also be deployed while operating in a Defensive Strategy. It can provide the Incident Commander or Company Officer with valuable information during size-up. Early identification of structural compromise, fire location in the structure, and identification of severely threatened exposures, would provide valuable information when determining the strategy. This information would also aid in identifying key tactical positions and needs. By deploying a TIC to the exposures, information could be obtained as to the extent of impingement to the exposed structure, early identification of avenues of fire spread and possibly any hot spots, which could cause extension.

PRIMARY APPLICATION
It shall be the responsibility of Command to rapidly deploy the TIC in a visibly diminished atmosphere or in an atmosphere, that may suddenly become visibly diminished. The primary use of the TIC for the fire department is for conducting search and rescue and crew accountability tasks. The use of a TIC can prove to be a useful tool during search and rescue tasks by reducing the amount of time it may take using standard search techniques. This will lead to a more effective and organized search, while quickly locating the fire. By locating the fire quickly, we will be better able to determine our tactical priorities and rescue priorities.

The TIC will enhance the ability to maintain crew accountability by increasing the vision capabilities of the operator or Company Officer. This will ultimately lead to enhanced firefighter safety while working in a hostile environment. This does not replace the accountability tasks required of the officers and each individual operating on the fire ground. We must stay together in complex situations and/or structures to enhance our survival.

While the TIC may enhance the operation of the crews on the fire ground, it is imperative to realize that with any tool, there are limitations. TIC deployment into the operation should not instill a sense of security. Crews and TIC operators must be aware that the TIC may malfunction and sole reliance on the camera is not prudent firefighting. Additionally, it should not replace or violate the core of our experience, training, safety procedures, or standard firefighting practices and principles. Remember that Thermal Imaging is only a tool that is to be used to supplement standard firefighting practices, and as always, safety must be the top priority.

TRAINING FACILITY

PURPOSE
The purpose of the operating guidelines in this contract are to provide emergency service agencies with information on the use of the Karnes County Emergency Services Training Facility located at 1026 E. Main Street in Karnes City, Karnes County, Texas. This facility is being provided for emergency service personnel to educate, train, and facilitate the betterment of emergency protection for the citizens of Karnes County, Texas.

TACTICAL
Scheduling for the use of any part, or all of the training facility, will be handled on a first come first served basis. To schedule use of the training facility, submit a request to Karnes City VFD Fire Chief , 103 E. Calvert Ave., Karnes City, Texas 78118 or by phone at 830-534-7261 or email: firechief@kcvfd.org

The training field will be available to all Karnes County emergency service groups and support teams at no charge. Anyone using the training facility will cooperate with and adhere to the schedule of training and shall have the right to access and use the training facility in accordance with the established operating guidelines.

The cost of consumables such as propane, smoke fluid, etc. are currently funded in the Karnes County Commissioners Court budget, and so long as the funding is available, Karnes County emergency service groups using the facility will not pay for the consumables used. If funds are no longer available, or depleted, then the Karnes County emergency service groups will be responsible for paying for the cost of consumables. Out of county emergency service groups using the facility will pay the cost of consumables as listed in the fee schedule of this contract.

Anyone using the facility will be responsible for cleaning the facility and restoring it to the original condition upon completion of training. Use of live ammunition on the training field grounds is strictly prohibited.

There will be no smoking or vaping, or use of any type of tobacco products on the training grounds or in the training building. A smoking area will be provided in an area outside the fenced area of the training field.

Anyone using any of the burn projects will provide certified safety officers as needed for the projects being used, and one person will be designated as the burn operator in the control tower and there will not be any unnecessary persons in the control tower during live burns. Copies of Incident Safety Officer certifications must be provided prior to burning.

Medical personnel are required on site for all live burns. If Karnes County EMS is needed during training events, notification must be made to Karnes County EMS at least one week prior to the date needed. Requests for medical personnel shall be made to Karnes County EMS Chief Casey Ebrom at 830-623-1667 or by email to: casey.ebrom@co.karnes.tx.us

Release forms will be signed by any non-Karnes County emergency responders entering the training grounds.

A first aid kit and an AED will be available and located in the training classroom building.

RULES ON USE OF TRAINING CLASSROOM

Anyone using the facility will be responsible for cleaning the facility and restoring it to the original condition upon completion. Garbage shall be removed from the building and hauled off after use. Garbage may be dumped in the waste wheelers behind the Karnes City fire station.

After each use of the training building the number of attendees and number of hours used shall be reported to Fire Chief Charles Malik by phone or text at 830-534-7261.

There will be no smoking, vaping, or use of any type of tobacco products in the training building or on the training grounds.

No bunker gear may be worn in the classroom training building.

Doors must remain unlocked at any time the training building is occupied.

If you wish to use the two televisions together and are not familiar with the proper connection, notify Monica Quintanilla in advance at 830-534-4298.

It is the responsibility of the person/organization requesting the use of the training building to set the A/C or heat setting prior to class and far enough in advanced to reach the desired temperature. When not in use the A/C shall be set to 85 degrees and the heat to 55 degrees.

This facility is available to all emergency responders, and it is the responsibility of all to assist in maintaining the facility. If you notice that we are running low, or out of supplies such as soap, toilet paper, hand towels, etc., or to report any issues that you cannot resolve on your own, to Fire Chief Charles Malik at 830-534-7261.

RULES ON USE OF TRAINING TOWER BURN ROOM

The Incident Command System shall be utilized during all live fire operations with a minimum of the following positions being filled by certified personnel: Incident Command, Safety Officer, Control Tower Operator, Accountability, and Drill Commander. Except for the Control Tower Operator, multiple positions may be filled by one individual.

During live burns in the burn room of the training tower one safety officer will oversee monitoring the temperature in the burn room. Burn room temperatures shall not exceed 600 degrees F during training evolutions. If temperatures exceed 600 degrees F, the Safety Officer assigned to monitor the temperature shall immediately notify the Drill Commander to terminate the evolution and remove all personnel from the burn room until temperatures fall to within the safe operating limits set above. Do not attempt to cool panel surfaces following extinguishment and do not unnecessarily direct straight stream nozzle patterns at the panel surfaces.

Only organic materials may be burned during live burns (IE hay, non-treated lumber ect.). **Do not use Flammable or Combustible liquids in the burn room.** Do not place wedge devices between doors and frames to hold doors open. Burn room doors are not to be held open during burn evolutions.

If the rules on the use of the training tower burn room are not followed and damage is done to the insulating panels, the responsible party will be responsible for the cost of replacement of the insulation panels.

TRAINING FIELD FEES - Out of County Emergency Responders

Facility	**1/2 Day Fee**	**Full Day Fee**	**Cleaning Fee** (If not cleaned)
Classroom Building	100.00	200.00	100.00
Drill Tower w/o Live Burns Add $25.00 per hour for smoke generator	300.00	600.00	100.00
Drill Tower w/Live Burns Includes Water Supply Add $25.00 per hour for smoke generator	600.00	1,200.00	100.00
Oil Field Training Section Includes Water Supply	400.00	800.00	100.00
Propane (As used)			

UNIFORMS

PURPOSE
It is the intent of this operating procedure to provide guidelines for the wearing of department uniforms that will help maintain a good public image of the department.

TACTICAL
Department uniform shirts may be worn to fire conventions, training seminars, awards banquet, etc., or any other function where the uniform would be appropriate.

Firefighters shall keep in mind that any time they wear the department uniform or represent the department in any way, they shall act in a manner that will reflect a good image of the department. Only department members may wear department uniforms. Absolutely no non-members may wear department uniform shirts.

New members of the department will be issued a uniform shirt. These shirts will have the KCVFD patch on the left and right shoulder. The following collar insignia will be allowed: FD, KCFD, KCVFD, or rank insignia such as crossed or upright bugles. No other patches or insignia will be allowed on the uniform, except for the badge on the left breast and the name bar on the right breast. The name bar will be centered, 1/4" above the right pocket.

Rank insignia such as crossed or upright bugles used to designate the rank of command officers shall be as follows:

Fire Chief	5 Crossed Bugles
Assistant Chief	4 Crossed Bugles
Fire Marshal	3 Crossed Bugles
Captain	2 Upright Bugles
Lieutenant	1 Upright Bugle

Upon leaving the department, uniform shirts will be returned, unless the member retires after more than 10 years of service in the department.

Members with more than 10 years of service to the department may, upon retirement from the department while in good standing, keep a member badge. Members holding the office of Chief, Assistant Chief, Captain, or Lieutenant, who wish to keep their officer badge upon retirement, may be awarded the officer badge upon retirement by a majority vote of the members present at a regular meeting.

Members being expelled from the department will return their shirts, even if they have 10 years of service in the department.

VEHICLE FIRES

PURPOSE
It is the intent of this operating procedure to provide guidelines for vehicle fire fighting operations.

RESPONSE
Inside City Limits

1st out	City Engine with a full complement of firefighters, if available
2nd out	Rescue 1 with 3 firefighters, if available
3rd out	First out Brush Truck with 3 firefighters, if available
4th out	Second out Brush Truck with 3 firefighters, if available

All other apparatus will be rolled upon the request of the incident commander.

Outside City Limits

1st out	Rural Engine with a full compliment of firefighters, if available
2nd out	Tanker 1 with a minimum of 1 firefighter
3rd out	Rescue 1 with 2 firefighters, if available
4th out	First out Brush Truck with 3 firefighters, if available

All other apparatus will be rolled upon the request of the incident commander.

Upon arrival at the station, a full complement of firefighters shall board one truck and get it enroute to the scene before beginning to fill the next truck.

TACTICAL
Although small in relation to a structure fire, vehicles contain large amounts of combustible material, most of which is plastic, and when burned produces large amounts of heat and very toxic smoke. As in structure fires, there are no ordinary vehicle fires.

The Accountability System will be utilized at all incident scenes and the system will be maintained until firefighters are released from the incident scene. See “Accountability” for more information.

Firefighters must be aware of the many dangers associated with vehicle fires. Some of the hazards associated with a vehicle fire include:

Very high heat concentrations
Large quantities of very toxic smoke
Shock absorber bumpers blowing off
LPG or CNG tanks in the vehicles
Gasoline cans stored in the vehicle
Plastic gas tanks that may at any time dump large amounts of burning fuel
Hazardous materials in vehicles
Tires pressurized with propane
Guns and bullets in vehicles
Other passing motorists

Before leaving the station, the first engine shall gather as much information as possible as to the type of vehicle involved, type of cargo, weather conditions, and any other information that is available and may influence the incident.

Upon arrival at the scene the driver will position the apparatus so that a safe operation may be completed. On narrow roadways it may be necessary to block the entire road to protect the firefighters from the hazards of passing motorists. It may be necessary to assign a person to handle traffic control on wider, heavy traffic roadways. Do not hesitate to call the dispatcher for an officer to assist in traffic control.

Position the vehicle in a manner whereby the fire can be attacked, and the firefighters and pump operator will be out of the line of smoke, traffic or flying bumpers.

When operating at a scene of an incident with vehicle traffic moving in the area, position apparatus whereas to protect the firefighters from injury from being struck by passing motorists. Traffic vests are available in every apparatus and are to be worn for better visibility of firefighters working at the scene.

Vehicle fires will be attacked with a 1 1/2" line and firefighters in the hazard area will wear full protective clothing, including SCBA.

Fire attack will be from the sides of the vehicle with emphasis on working from the unburned to the burned, or if fully engulfed, with emphasis on the fuel tank area. All compartments will be opened and inspected before leaving, being careful to preserve any evidence. Be certain that all fire is out before leaving.

If an incident escalates to the point that the safety of personnel may be in jeopardy and it is necessary to immediately evacuate the space, structure or area, an IMMEDIATE RETREAT signal consisting of the high/low audible signal from a siren followed by two short blasts form an air horn will be sounded until the space, structure or area is evacuated. This is an immediate evacuation of personnel only and all equipment shall be left behind.

After each incident, it is the responsibility of the firefighters on each apparatus to verify that all equipment is checked and ready for use and that the apparatus is fueled and placed back into service.

ELECTRIC AND HYBRID VEHICLE FIRES

TACTICAL

Fighting vehicle fires is inherently dangerous. When responding to an electric or hybrid vehicle fire there are additional challenges responding crews must consider.

Upon arriving on scene, perform a proper size up to determine the extent of the fire and if it is a compartment fire or if it includes the electric components of the vehicle. Battery fires will initially show from under the vehicle. Determine if the engine compartment or the passenger compartment is on fire.

Wear full PPE and SCBA and establish an appropriate command structure. Ensure that the vehicle is off, and in park, if possible. Extinguish small fires that do not involve the high voltage battery using typical vehicle firefighting procedures.

The best way to control a battery fire is with water. Secure a large, continuous, and sustainable water supply with a minimum of 30,000 gallons of water.

Where safe, consider chocking the wheels. Electric vehicles move silently, so never assume it is powered off. Never assume that an EV will not move.

When attacking the vehicle fire, understand that once the contents of the fire are extinguished, sustained suppression on the battery pack may be necessary. Use large volumes of water to suppress and cool the fire and the battery. Battery packs are stored in a sealed metal case usually between the frame rails. It may be necessary to open the case to be able to access the batteries.

Have sufficient fire personnel and apparatus on scene for an extended operation and to monitor the battery's heat for possible secondary ignition. The heat from the fire may have damaged additional cells, which may require additional suppression activities.

Batteries should always be treated as energized. During overhaul, do contact any of the high voltage components.

It shall be understood that a "do nothing" decision may be the safest and most logical decision to be made on some incidents. Water supply, manpower and/or location issues should be considered in making the determination to let it burn.

Brief towing company personnel on the hazards, including providing 50 feet of clear space around the vehicle once stored, and never store inside of a building. A fire apparatus may need to escort the vehicle to the storage location. Thermal events with the battery system could continue for some time after the initial incident.

Batteries that have been damaged or are suspected of damage, or otherwise compromised but have not caught fire, need to be monitored for thermal runaway. A thermal imager can be used to monitor the heat of the battery.

Best practices for responders on new and evolving forms of automobile technology include:
1. Don full structural Personal Protective Equipment and Self-contained Breathing Apparatus.
2. Approach the vehicle from uphill and upwind to maximize visibility and safety.
3. Identify whether the vehicle is conventional, electric, or hybrid.
4. Identify the make and model of the vehicle.
5. Implement an appropriate isolation zone.
6. Ensure availability of ample water supply.
7. Consult the manufacturers emergency response guide to find emergency service disconnects, no-cut zones, and high voltage battery locations.
8. Access the area of the high voltage battery pack and assess for heat.
9. If thermal runaway is occurring, direct a stream of water to the area.

LPG/ CNG POWERED VEHICLES

TACTICAL

Alternative fueled vehicles (AVF) present a challenge to firefighters due to the pressurized fuel tanks that may or may not be visible. Understand that the current required Federal signage is very inadequate to readily identify the fuel type. All semi-trucks/ transit vehicles should be treated as an AVF with tank/ Cylinders under pressure until the fuel source is identified.

LPG (propane) is a liquefied gas stored in cylinders at a temperature above its boiling point and remains under pressure and in liquid form only so long as the container remains closed to the atmosphere. LPG operating pressure is generally around 150 psi. Pressure is relieved by a pop-off type valve that will open and close as the pressure is relieved. Heat applied to the cylinder will cause excessive pressure to build up in the cylinder opening the relief valve. There is a great possibility that a cylinder involved in a fire will "BLEVE" (Boiling Liquid Expanding Vapor Explosion). A BLEVE can occur in minutes despite the proper operation of a pressure relief valve.

Many vehicles that operate on LPG are also dual fueled with gasoline. A fire can originate with a gasoline leak and may eventually involve both fuels. Fire attack should be made at a forty-five (45) degree angle avoiding the ends of the LPG tank. The priority focus should be the cooling of the LPG tank while extinguishing the fire.

CNG (Compressed Natural Gas) is a fuel gas that is composed of mostly methane and is compressed for storage to 1% below the volume that it occupies at standard atmospheric pressure. It is stored and distributed in thick wall containers at a pressure of around 3000 psi. CNG cylinders are protected with a Thermal Pressure Relieving Device. These devices are generally installed in the ends of the tanks and are designed to vent the contents of the cylinder once the temperature reaches 212-220 degrees. CNG cylinders are subject to failure, but not to a "BLEVE" because they do not contain liquid. Pressure Relieving Devices can release with a flame length of up to fifty (50) feet in any direction.

CNG tanks may either be mounted across the frame or parallel with the frame rails. Firefighters must avoid the ends of tanks. If there is no flame impingement, approach from a forty-five (45) degree angle and extinguish the fire with normal tactics. If there is fire impinging on fuel cylinders, do not approach the vehicle and do not apply water to CNG cylinders exposed to fire. Applying water may cool the Pressure Relieving Devise, which will allow the pressure to continue to build up in the cylinder. This build-up of pressure may cause a catastrophic rupture and ignition of CNG. If the Pressure Relieving Devise has been activated, allow it to burn off the product and protect exposures from a safe distance until the gas is depleted and no more flames are visible.

VENTILATION

PURPOSE
It is the intent of this operating procedure to provide guidance for proper ventilation procedures to facilitate fire fighting and rescue operations.

TACTICAL
During the early phases of a fire, ventilation will usually not be necessary. A direct attack should adequately suppress these fires. When free burning fires are encountered, a decision must be made as to whether to use vertical or horizontal ventilation to channel the heat and gases out of the structure to control the spread of the fire and/or to facilitate rescue. Vertical ventilation will help reduce the heat build up in concealed spaces such as attics.

The incident commander will assign a ventilation team and this team must be coordinated with the other fire fighting efforts. Hose lines must be in place before ventilation is completed. During the smoldering phase, due to the danger of a backdraft explosion, positive pressure ventilation must be performed.

Although vertical ventilation is most effective, horizontal ventilation requires less manpower and causes less damage and should be considered as a viable solution if the fire has not advanced into concealed spaces. Strip ventilation may be used to limit the spread of fire in large warehouse type facilities.

The Thermal Imaging Camera (TIC) may provide valuable information during size-up, which can assist the Incident Commander in determining the strategy and formulating the incident action plan. When a company officer or incident commander arrives on the scene, one of the first challenges is to identify the location of the fire. A TIC can save a great deal of time by helping to pinpoint a concentration of heat within a particular area of the building, especially in large commercial or multi-story structures. An incident commander, armed with this knowledge, can better direct firefighters regarding the best method and area of ventilation.

WATER SUPPLY

PURPOSE
It is the intent of this operating procedure to provide guidelines for locating and establishing a water supply sufficient for the incident at hand.

TACTICAL
When a sufficient water supply is not readily available at the fire scene, a water supply officer will be assigned to establish a water supply sufficient for the incident at hand.

Tanker 1 and Brush trucks will be our primary water supply options in areas where fire hydrants are not available.

In addition to fire hydrants, some other water supply options that may be utilized are El Oso Water flush plugs, stock ponds, lakes, tank trucks, mutual aid, dry hydrants, etc.

WEAPONS OF MASS DESTRUCTION

PURPOSE
The intent of this operating procedure is to establish guidelines for the safe response and handling of Weapons of Mass Destruction (WMD) incidents. Response actions at WMD incidents can be divided into those actions undertaken by operational responders, and those undertaken or supervised by haz-mat technicians. Medical management includes decontamination, triage, treatment, behavioral health, and transportation. The specific WMD agent involved, whether chemical, biological or radiological, has an impact on scene management. WMD incidents are crime scenes, and a police sector needs early establishment.

TACTICAL
The first arriving officer will establish Command and begin size-up by surveying visible activity, signs, and symptoms, and notice potential effects of wind, topography, and location of the incident. Command must route any other responding companies away from visible or suspected hazards. Care must be taken to establish staging in a safe area, taking into account the characteristics of the likely WMD agent.

Area Isolation/ Perimeter Establishment

I. Command size-up gathers information for an incident management plan.
- In known or suspected explosions where terrorist activity cannot be ruled out, initial actions should be to secure a hot zone and call for law enforcement personnel to respond.
- Entry into the hot zone should be under the direction of unified Command with Haz-Mat, radiological monitoring, Tech Rescue, etc. with secondary collapse and/or explosive devices, and crime scene, issues being addressed.
- If victims are present, the Incident Commander should establish communication quickly to control their anxiety and behavior. Select a firefighter or officer as a point of communication to establish rapport and credibility. If possible, all direct communications to victims should be conducted or coordinated through this person.
- A WMD/terrorist incident is a CRIME SCENE. Once the fire or haz-mat work is complete, the scene passes to law enforcement personnel.
- Remember to note any signs of WMD devices, dispersion apparatus, or other evidence.
- BE AWARE OF SECONDARY DEVICES designed to injure additional victims and/or first responders. Upon sighting a device or any suspicious appearing device that appears operable, withdraw personnel until it has been inspected and rendered safe.
- Remember locations of potential evidence; do not move or collect it yourself.
- Pay attention to symptoms exhibited by victims for relay to haz-mat and EMS personnel.
- Prepare to evacuate nearby areas if indicated by wind, explosive, or similar danger.
- If fire is present and radiological agent suspected, evacuate to 2000 feet.

In case of a letter or package containing an unknown substance:
- Quarantine persons in the immediate area of exposure and place them in a safe area.
- Isolate the area where the substance or package is located and hold for Haz-mat Team to double bag and secure.
- Control HVAC Systems by shutting down to prevent spread of contamination.
- If a biological agent is contained in a single room or office in a multi-function building, the entire building should be evacuated.
-

II. If no apparent victims, life hazards, rescue situation, or fire exist, fire department personnel should not be exposed to risk. First arriving units should secure a perimeter, evaluate the situation, and await the arrival of the Hazardous Materials Technicians.
- Use available PPE to minimize safety risks for operational responders.
- Minimize entry of first responders into HOT ZONE.
- Minimum PPE is turnouts, butyl rubber gloves and SCBA.

III. Establish Zones of Limited Access.
- The **HOT ZONE** is the area immediately around the site/munitions/device/source. Enforce a single-entry control point. All personnel entering this area must wear full protective gear. The entry control point should be a minimum of 300 feet from the source. This applies whether suspected agent is chemical, biological or radiological.
- **WARM ZONE** is upwind and uphill from the Hot Zone for Chemical and Radiological Threats. Biological agents are non-volatile and controllable. If contained in a building little downwind threat is posed. If release point is in the open, downwind hazard exists.
- Hot Zone Support, Rescue, and Technical Decon personnel operate in the WARM ZONE with full protective gear. Decon lines are established in the WARM ZONE. This area should be a minimum of 15 feet wide but must encompass all victims awaiting decon and decon equipment. A sector will be established at the entry to the warm zone for accountability.
- The **COLD ZONE** is outside the Warm Zone. For Chemical and Radiological agents, the COLD ZONE is uphill and upwind from the Warm Zone. No contaminated personnel or equipment should pass into the COLD ZONE. Incident Command, medical, and transportation are in the COLD ZONE. Personnel should keep protective gear at hand in case of wind shift or accidental contamination.

IV. Coordinate with police to establish security for site.
- Police will search immediate area for presence of secondary devices.
- If potentially explosive devices are sighted or suspected, a Special Assignments Unit will investigate and clear. Fire personnel will withdraw to safe staging area until safe re-entry is possible.
- Victims and others will be denied entry and exit from HOT ZONE. Police will enforce these restrictions. Fire personnel will NOT use physical force to restrain the public.

Equipment Positioning
Position equipment upwind, uphill, and upstream from the incident site. If the incident is indoors, ensure any ventilation exhaust ports are not blowing vapors into the established response areas. Shut down Air Conditioning and Heating Systems (HVAC) systems to minimize contamination spread.

Assess Downwind Hazards
Be aware of the presence of, or potential for, downwind plumes. This threat exists for chemical, biological, and radiological particles, and agents. If a downwind hazard exists, initiate appropriate action, such as evacuation or shelter in place, for those at risk. Adjust incident perimeters to account for wind risks.

Gather Casualties/Initiate Victim Management

I. Immediately begin a process of gathering ambulatory victims.
- Using an amplified PA system, direct victims to an established holding area to await evaluation and emergency gross decontamination.
- If deaths occur during sorting, redefine HOT ZONE perimeter to include bodies. Explain emergency decontamination to victims.
- Once emergency decon is complete, sort ambulatory victims into groups of people with special needs and into gender groups.
- Continue to process any additional victims who exit the impact area.

II. Use Caution (PPE) when contacting victims.
- Those exposed to CHEMICAL agents may be off-gassing.
- BIOLOGICAL victims may be contaminated with particles or droplets of agent.
- Radiological victims pose no danger. Particles on skin or clothing brush or wash off.

III. NOTE LOCATIONS OF DEAD AT SCENE
- HOT ZONE perimeter should be defined to include all dead bodies.
- Unless absolutely necessary do not move bodies.

IV. NON-AMBULATORY VICTIMS SHOULD LIE IN PLACE
- If necessary, administer emergency medical measures while wearing PPE.
- If an external threat such as a building collapse threatens, move victims to a safe area.

V. NOTE VICTIMS IN NEED OF RESCUE. Do not undertake rescue without PPE.

VI. DEAD ANIMALS AND BIRDS AT THE SCENE.
Deceased animals and birds at the scene will be handled as deceased people are handled, expanding the Hot Zone to include their locations.

Emergency Decontamination

I. Emergency decontamination for chemical agents should begin as soon as possible. Emergency Decon serves three functions:
- Marks victims for easy identification.
- Removes product/particles from victims.
- Engages victims in activity that reduces anxiety.

Using PA system/bull horn, instruct victims on decon procedure.
- Spread arms and legs wide; turn slowly so all parts of body are rinsed; clothing is NOT removed for emergency decon unless patient was exposed to a liquid splash.
- Victims will be thoroughly wet using a booster line. Soak victims from top of head downward with copious amounts of water.
- In an event with multiple victims, which may inundate the booster line procedure of emergency decontamination, a master stream creating a dense shower flow should be established as a more effective method of mass casualty emergency decontamination.

II. Minimum PPE for decontaminating victims is turnouts and SCBA.

III. Locate Emergency Decon Corridor. Upgrade from HOT ZONE if possible. Notice direction and impact of uncontrolled runoff for referral to clean-up crews.

HAZMAT UNITS

Hazmat Sector Establishment, Site Assessment

I. Command, through Haz-mat, will make site assessment to:
- Assign levels of PPE
- Confirm or adjust hot/warm/cold zones and incident perimeter. For Radiological Agent, HOT ZONE is defined as area where survey instruments produce readings of 2 MR/hour and higher.
- Confirm or adjust equipment placement.
- Reassess downwind hazards and implement evacuation, or shelter in place as needed.

II. Operations personnel become support.

III. Haz-mat brings necessary pharmaceuticals/antidotes to the scene.

Haz-mat Initiates Technical Decon Set-up/Operation

I. Equipment and protocol for personnel and equipment decontamination are established.

II. Decon shelters will be assembled and staffed.
- Each decontamination shelter will be staffed with a minimum of 5 personnel (for mass casualty incidents) processing victims through the various stations.
- A Separate Technician Decon operation should be set up for response personnel away from the victim decon lines.
- Non-ambulatory and Special Needs Victims will be processed through decon lines with assistance rendered as necessary by station attendants.
- Decon of Deceased takes place AFTER ambulatory and non-ambulatory victims are deconned, treated and transported.
- If Federal response is not available, Fire Department personnel trained in stripping and decontamination of bodies may decontaminate deceased victims. Victims who expire after decontamination (in the cold zone) will be held in the cold zone.

Haz-mat: Initial Entry

I. Haz-mat Technicians will make initial entry into the Hot Zone.
- For Chemical agents, level A protection is worn. All personnel entering the Hot Zone will carry THREE Nerve Agent Antidote Kits for self-administration as needed.
- For Biological agents, the level of protection is worn, as assigned by IC consulting with Haz-mat and toxicologists or poison control.
- For Radiological threats, the minimum PPE is turnouts, butyl rubber gloves and SCBA.

II. Two entry teams and appropriate backup teams will be established. One entry team will be assigned to victim rescue and extrication. The second entry team will address agent identification.

III. When victims are trapped extrication, high angle rescue, trench rescue, or another technical rescue may be used. Non-ambulatory, but not trapped, victims located in the Hot or Warm Zones will be handled only by personnel in appropriate PPE.

Haz-mat: Agent Identification

I. All **Chemical incidents** will be treated as a Haz-mat situation. Chemical detection and air monitoring devices will be used. If the incident is suspected or confirmed to involve unconventional warfare chemicals, special detection devices, in conjunction with the standard equipment, will be used for agent identification. In all cases where a chemical WMD is suspected, every available chemical detection device will be used for secondary and tertiary confirmation of suspected chemicals.

II. For **Biological incidents,** sampling is necessary and scene assessments will be undertaken if equipment is available.
- Haz-mat teams will collect and test samples of any suspected biological agent with the appropriate field detection kit.
- Toxicology support is available through the Poison Control Center.

III. For **Radiological incidents,** radiological instruments will be used to identify the source of contamination and designate zones of operation. Personnel will be monitored.

Haz-mat: Safety and Secondary Devices

I. Beginning with first at scene, all personnel will be cognizant of bombs and secondary devices in their areas of operation. No fire department personnel should ever inspect or move a suspected secondary device.

II. If operational personnel locate a suspected secondary device, the Hot Zone will be expanded to include the device. All fire personnel will withdraw from the area. Technicians will enter the area to render the device safe. Once safety has been established, fire personnel will resume operations.

III. If a secondary device is discovered by Haz-mat technicians as they make entry into the HOT ZONE, they will withdraw from the area. Technicians will enter the area with PPE to render the device safe. Fire operations will resume after safety has been established.

MEDICAL MANAGEMENT

I. Whether the agent is chemical, biological or radiological, victims of a WMD may present injuries caused by explosions, fire, falls, or other mechanisms not directly related to the hazard agent itself. These can include cardiac symptoms. As appropriate, treatment of such injuries should be initiated in the field.

II. For victims in a **chemical incident**, treatment protocols will follow established agent specific guidelines.

III. For **biological agent** victims, it is possible that no symptoms may be present. If an agent is positively identified, patients will be decontaminated and moved to hospitals or other shelters for quarantine or observation.

IV. Victims of a **radiological agent** are unlikely to exhibit specific symptoms at the scene. Exposure to ionizing radiation produces tissue and cell changes that are slow onset. Radioactive particles are easily removed from skin and clothing. RADIATION EXPOSURE ALONE IS NOT A MEDICAL EMERGENCY.

V. Treatment and triage are responsibilities of medical personnel with information from Haz-mat. Extrication from the Hot Zone and decontamination is part of the Haz-mat Sector. In a small incident, transportation may be a sector under the Medical Branch.

VI. Command will assess scene stability and determine whether the medical sector wi1l be located at the scene or away from the scene.

Triage

I. The objective of triage is to sort victims so that the maximum number of lives may be preserved through rapid and effective use of medical therapeutics. Simple triage and treatment criteria will be used for triage, using four classifications:
- **IMMEDIATE:** Requiring immediate treatment for survival.
- **DELAYED:** Not likely to be adversely affected by delay in treatment or movement to definitive care.
- **MINOR:** Ambulatory and able to follow simple commands. May require minor treatment.
- **DEAD OR DYING.**

II. Triage tag will be used for all patients. The tag shows patient classification and identifies injuries and treatments administered in the field and becomes the patients tracking base.
- In the event of a very large number of victims, triage may be indicated initially by marking the priority on the patient's forehead with the felt pen. In such cases, the triage tag will be attached as soon as feasible.
- Triage tag numbers are used for patient tracking and becomes part of the patient record after arrival at the hospital. Tags remain attached to patients transferred from the scene.

Treatment

I. Treatment areas will be established in the cold zone.

II. Medical treatment will address needs of patients. Care for injuries sustained in explosions, fires, falls or other events related to the incident, collateral to a WMD agent exposure, will be administered. Particular attention is reserved for respiratory and cardiovascular support.

III. Agent identification and medical advice will guide treatments administered at the scene from toxicology or poison control personnel.
- For **chemical** exposures, if agent is identified, antidotes may be initially administered during decon and continued in treatment area. Antidotes are agent specific.
- For **biological** agents, antibiotic or antitoxin administration may be initiated after decontamination, as directed by toxicology or poison control.
- For **radiation** exposures, symptomatic support is offered, no antidotes or efficacious treatments exist.

IV. For otherwise uninjured patients exposed to **biological** agents, if victim is non-symptomatic, treatment may be confined to observation or initiation of antibiotics or antitoxins. Command will determine if patients that are to be observed are transported to hospitals or to shelters. Patients receiving initial antibiotic doses may be directed to obtain further antibiotics from public health authorities, hospitals, or from private physicians.

V. For otherwise uninjured, non-contaminated, and non-symptomatic patients, exposed to **radiological agents,** the Treatment Sector Officer will review and direct to treatment by a private physician or to the Police Sector for interview.

VI. For victims of **chemical** agents, exposed patients, whether currently symptomatic or not, require observation. Symptomatic patients require antidotes and supportive therapy. Non-symptomatic patients, particularly those exposed to nerve or blister agents, may become symptomatic within hours. Patients who can be confirmed as not exposed, may be referred by Treatment Sector Officer to the Police Sector for interview.

VII. PHARMACEUTICALS will be brought to the incident scene with the responding medic units. Additional Pharmaceuticals and equipment will be transported to scene as needed.

Transportation

I. The Transportation Sector moves patients from the scene to receiving hospitals or to shelters as assigned by Command.
   - Only patients who have been decontaminated will be transported.
   - Zones will be designated in or near treatment areas to serve as collection points for patients to be transported.

II. Ambulatory victims, once given initial assessment, decontamination, and treatment, can be transported in mass on designated vehicles such as busses or other multiple patient transports. Patients, whose condition merits, will be transported to medical facilities via ambulance. If appropriate and such transport will not further disperse the agent, air transportation may be used.

III. Decontaminated, uninjured patients may be released or transferred to mass shelter locations as determined to be appropriate by Command. Names and contact information will be recorded for all released individuals for any necessary post-incident follow-up.

IV. Some civilians present at the scene may not have experienced injury or exposure to a chemical agent and may not require decon. Witnesses may fall into this category. After medical review, Command may direct such people to be documented and interviewed by the Police Sector.

V. Movement and loading of vehicles at the scene will be managed by the Transportation Sector, with support from the Police Department as appropriate. Acquisition of additional vehicles and equipment will be handled through the Resource Sector.

RECOVERY AND RESTORATION ACTIONS

The recovery and restoration phase begins after the last living patients have been transported from the scene. During this phase, it is expected that Federal response elements will arrive with specialized teams and equipment Federal resources will support hazard monitoring, technical/equipment and environmental decontamination, and site restoration.

Technical Decon of Response Personnel/Equipment and Shutdown

I. Haz-mat personnel continue to perform and/or supervise the technical personnel decon corridor.

II. Haz-mat personnel will establish and operate an equipment decontamination corridor to support restoration of equipment needed to re-establish essential services.

III. Haz-mat personnel will shut down the emergency decon operation and technical decon corridors as they complete operations.

IV. Haz-mat personnel will find and document uncontained runoff problems from decon corridors.

V. Complete Decon of personnel and equipment decontamination.

Site Survey

I. To the extent possible, Haz-mat personnel will continue to monitor all equipment and areas suspected to be contaminated with available detection and identification devices.

II. Haz-mat personnel will document all runoff areas, and any apparatus and other locations suspected or identified as contaminated.

III. When **biological agents** are involved, Haz-mat teams will continue to collect samples of suspected contamination for evaluation.

IV. In **radiological incidents**, Haz-mat personnel will coordinate with the Radiation Regulatory Agency to establish that equipment and site have been successfully decontaminated**.**

V. For **chemical agents**, areas and equipment that cannot be accommodated in the technical equipment decon corridor will be cleaned with a 5% bleach solution. A minimum solution contact time of 15 minutes will be observed, then area or equipment will be thoroughly rinsed and re-monitored for contamination. The process will continue until monitoring indicates no contamination is present.

WEAPONS – ON DUTY CARRY

PURPOSE

It is the intent of this operating procedure to provide guidance for the safety of firefighters, and restrictions on firefighters, carrying weapons during meetings, training, alarms, and other fire department functions.

TACTICAL

Firefighters who are a "License Holder" (as defined by Section 46.035f) and lawfully possess a firearm and/or ammunition in accordance with Texas Government Code Title 4 Subtitle B Chapter 411 Subchapter H, Penal Code Section 30.06 and Penal Code Section 30.07, and who have completed state mandated training for a "First Responder" to carry (as defined by Section 46.035f), are allowed to carry a weapon while "On Duty" with the Fire Department.

A firefighter is considered to be "ON Duty" any time they are performing or attending any fire department function, either in or out of the station, or representing the fire department in any other manner.

Firefighters who are a "License Holder" only (as defined by Section 46.035f) and lawfully possess a firearm and/or ammunition in accordance with Texas Government Code Title 4 Subtitle B Chapter 411 Subchapter H, Penal Code Section 30.06 and Penal Code Section 30.07, have the same rights and responsibilities as "License Holder First Responders" with the exception of taking their weapon to the scene of a fire department alarm.

Firefighters who complete the training requirements for a "License Holder" and/or "License Holder First Responder" concealed carry shall be required to provide a state approved storage container for their weapon, and all weapons must be secured at all times when not on the firefighter's body. The first responder is responsible for all costs associated with the concealed carrying of a weapon and the department will not be liable for any costs thereof.

The department shall not be liable for the security of any weapons, nor shall the department be liable for any damage or loss of any weapons.

All weapons will be holstered at all times in a state approved holster and will remain concealed from public view.

All "License Holders" and/or "License Holder First Responders" who bring their weapon into the station are required to secure their weapon in a state approved storage container during all department meetings and any training that requires wearing any type of protective clothing or any hands-on drill or other function of the department that would be considered by the officer in charge to be unsafe for the carrying of a weapon.

"License Holder First Responders" who elect to take their weapon to a scene to provide security shall not respond on first out apparatus and once on scene shall report to the Incident Commander that they are there to provide security and are not part of fire suppressions activities.

Only one firefighter per alarm will be allowed to provide security and all other firefighters who report to the station with their weapons shall secure their weapons in a state approved storage container.

Any firefighter who fails to maintain his/ her weapon in a safe manor shall be subject to immediate discipline by the Fire Chief under the guidance of Article 9 (Reprimanding Members) of the Constitution.

Any member who is a "License Holder" or "License Holder First Responder" must provide a copy of their license to carry, and a copy of this license shall be maintained in the member's personnel file.

EXCEPTIONS

Any person who is qualified under Section 46.15(a) of the Penal Code is exempt from this policy.

VIOLATIONS

Any "License Holder" and/or "License Holder First Responder" may be checked at any time by a command officer for a rule audit and any violations of this policy will be subject to appropriate disciplinary action by the Fire Chief under the guidance of Article 9 (Reprimanding Members) of the Constitution.

WILDLAND FIRES

PURPOSE
It is the intent of this operating procedure to provide guidance in the safe handling and control of wildland fires.

RESPONSE
Inside and Outside City Limits

1st out: First out Brush Truck with 2 firefighters
2nd out: Second out Brush Truck with 2 firefighters
3rd out: Tanker 1 with a minimum of 1 firefighter
4th out: Support 1 with a minimum of 3 firefighters, if available
5th out: Rural Engine with 3 firefighters, if available, only if needed as a water supply vehicle or to set up to protect an exposure. This unit will not be used as an off-road fire fighting vehicle.

If additional help is needed mutual aid must be requested.

TACTICAL
Upon arrival at the fire station, a full compliment of firefighters shall board one truck and get it enroute to the scene before beginning to fill the next truck. Firefighters will take their wildland gear and their structural bunker gear with them to the scene, as you never know what you may encounter upon arrival. No firefighter will be allowed to ride to or return from an incident location on the tailboard, catwalk, or other open area of an apparatus.

The driver of the vehicle will be in charge of operations and communications on the fire ground while the other will operate the front nozzle. It is the driver's responsibility to protect the firefighters from being hit by tree limbs and other items.

At times, it may be impossible to maneuver around trees and brush and it may be necessary to drive over them to follow the fire line. This is to be done only when absolutely necessary, and deliberate, unnecessary destruction to apparatus and of trees and brush will not be tolerated. The driver must know the limitations of each apparatus on steep embankments and in heavy brush.

It is crucial on all alarms to conserve water as much as possible, as you may run out of water prior to extinguishing the fire and lose any control that you may have gained while you locate a water source and refill the tank. You may also receive another alarm before you return to the station and get the apparatus filled and ready for the next call.

When possible, keep the apparatus on the burned side during initial attack so that if the apparatus should stall, it will not be in the fuel. Always keep firefighters out of the smoke.

When operating at a scene of an incident with vehicle traffic moving in the area, position apparatus whereas to protect the firefighters from injury from being struck by passing motorists. Traffic vests are available in every apparatus and are to be worn for better visibility of firefighters working at the scene.

Brush Trucks either carry Class A foam that is available for batch mixing by pouring the foam directly into the tank or have an on-board foam system that injects the foam into the water stream. The use of Class A foam promotes a quicker and more effective extinguishment of the fire and should be utilized on all wildland fires.

In the batch mixing process, the foam is poured directly into the tank at a rate of one to two gallons per tank depending on the fuel load involved.

It is the responsibility of the firefighters returning to the station to replenish the foam supply in the on-board foam tank or in the gallon containers in the apparatus compartment.

The Accountability System will be utilized during each incident, and the system will be maintained until firefighters are released from the incident scene. See “Accountability” for more information.