

MARYLAND STATE FIREMEN'S ASSOCIATION

Representing the Volunteer Fire, Rescue and Emergency Medical Services Personnel



Standard Operating Procedure (SOP)

SOP No: A001

Title: Preparation and Revision of
Standard Operating Procedures
Prepared By: Dennis Skinner

Effective Date: 7/1/2009
Authorized By: President Powell

1.0 Purpose

- 1.1 The purpose of this procedure is to define the method for the preparation and revision of MSFA Standard Operating Procedures (SOPs).

2.0 Responsibilities

- 2.1 Constitution and Bylaws Committee- The committee responsible for processing, maintaining, and revising the SOPs of the MSFA.
- 2.2 The Executive Committee- The committee responsible for reviewing the initial release and revision of the SOPs of the MSFA.
- 2.3 MSFA President- The officer responsible for final approval of the MSFA SOPs.

3.0 Procedure

3.1 Preparation of SOPs

- 3.1.1 A SOP may be generated by any committee or Officer of the Association or by the Constitution and Bylaws Committee at the request of the Executive Committee or an Officer.
- 3.1.2 The SOP shall be submitted to the Constitution and Bylaws Committee for formatting and number assignment. Numbering shall be as follows: AXXX-Administrative SOPs, EXXX-EMS SOPs and standards, and SXXX-Suppression SOPs and standards.
- 3.1.3 The Constitution and Bylaws Committee shall present the formatted SOP to the originator for their review and approval.
- 3.1.4 After approval by the originator the SOP shall be submitted to the Executive Committee and the MSFA President for their review and approval.
- 3.1.5 After approval by the Executive Committee and the President the Constitution and Bylaws Committee shall coordinate with the MSFA webmaster to post the SOP on the MSFA website.

- 3.1.6 If the SOP is disapproved the Constitution and Bylaws Committee will coordinate with the originator to incorporate changes that will make the SOP acceptable and have the SOP posted on the MSFA website.
 - 3.2 Revision of SOPs
 - 3.2.1 Revisions to a SOP will be submitted to the Constitution and Bylaws Committee for formatting. The Constitution and Bylaws Committee will identify those portions to be revised and will submit the revision to the Executive Committee and MSFA President for approval.
 - 3.2.2 Following approval the Constitution and Bylaws Committee will update the SOP with the revisions and complete Section 5 of the SOP indicating the revision.
 - 3.2.3 If the revision is disapproved the Constitution and Bylaws Committee will coordinate with committee or officer requesting the revision to incorporate changes that will make the SOP acceptable. Section 5 of the SOP will be completed and the revised SOP submitted to the MSFA webmaster for posting to the MSFA website.
- 4.0 Forms
 - 4.1 MSFA Standard Operating Procedure Format
- 5.0 Revisions

SOP No: A002

Title: Expense Reimbursement
Prepared By: Dennis Skinner

Effective Date: 7/1/2009
Authorized By: President Powell

1.0 Purpose

- 1.1 The purpose of this procedure is to define how Officers and Committee Chairman will be reimbursed for expenses not directly related to travel. Travel expenses will be reimbursed in accordance with SOP A003 "Travel Reimbursement".

2.0 Responsibilities

- 2.1 The Budget and Revenue Committee- The committee responsible for establishing procedures to implement the budget, with approval of the Executive Committee.
- 2.2 The Executive Committee- The committee responsible for the approval of the MSFA budget based upon inputs from the Budget and Revenue Committee.

3.0 Procedure

- 3.1 The Budget and Revenue Committee shall distribute to the Elected Officers, Appointed Officers, and Committee Chairmen the form to request funds to be included in the annual budget.
- 3.2 The Officers and Committee Chairman shall include in the budget request estimated expenses to be reimbursed for their office or committee. Those Officers that have appointed assistants approved by the Executive Committee shall include any reimbursement for those assistants in their budget submittal.
- 3.3 The Budget and Revenue Committee shall compile the annual budget to be presented to the Executive Committee at the first meeting of the Committee following the Convention and Conference for final approval.
- 3.4 As expenses are incurred they shall be presented to the Treasurer with receipts and the appropriate form for reimbursement.
- 3.5 No reimbursement in excess of the amount authorized in the budget shall be given without the approval of the Budget and Revenue Committee and the Executive Committee.

4.0 Forms

- 4.1 Budget Request Form
- 4.2 Reimbursement Request

SOP No: A003

Title: Travel Reimbursement
Prepared By: Dennis Skinner

Effective Date: 7/1/2009
Authorized By: President Powell

- 1.0 Purpose
 - 1.1 The purpose of this procedure is to define who is eligible for travel reimbursement and the amount of that reimbursement for attendance at Executive Committee meetings.

- 2.0 Responsibilities
 - 2.1 Budget and Revenue Committee- The Committee responsible for review of expenses and sources of revenue and setting the amount of reimbursements.
 - 2.2 Executive Committee- The Committee responsible for final approval of reimbursement amounts and revisions to this operating procedure.

- 3.0 Procedure
 - 3.1 The rates for mileage reimbursement shall be as follows:
 - 0-50 miles: No Reimbursement
 - 51-100 miles: \$ 25.00
 - 101-200 miles: \$ 30.00
 - Over 200 miles: \$ 35.00
 - 3.2 The above reimbursement will be for those driving their personal vehicle not Fire Department or Government owned vehicles.
 - 3.3 There will be one (1) reimbursement per vehicle. The driver will state on the reimbursement form that "I am the primary driver of my personal vehicle and not a governmental or departmental vehicle."
 - 3.4 The primary driver, in order to receive mileage reimbursement must be one of the following: Elected Officers including the Trustees, Executive Committee Members, the MSFA Attorney, Assistant Secretaries, Assistant Treasurers, Assistant Financial Secretaries, the Chief Chaplains, Chaplains, Public Address Systems Group, Committee Chairman or their Designee giving a report, and one (1) Sergeant at Arms.
 - 3.5 The amount of reimbursement for an overnight stay shall be \$ 50.00 per night.
 - 3.6 The following will be eligible for two (2) nights reimbursement: Elected Officers including the Trustees, Executive Committee Members, the MSFA Attorney, Assistant Secretaries, Assistant Treasurers, Assistant Financial Secretaries, Public Address Systems Group, the Chief Chaplain, Chaplains, one (1) Sergeant at Arms, and any Committee Chairman asked to stay an additional day by the Executive Committee Chairman.
 - 3.7 All Committee Chairman or their designee, giving a report will be entitled to one (1) night reimbursement only.
 - 3.8 The Budget and Revenue Committee shall make a recommendation as to the amount of mileage reimbursement and overnight stay reimbursement at

the first Executive Committee meeting of the year immediately following the Convention and Conference.

3.9 The Executive Committee shall approve the final reimbursement amounts for the year at the first Executive Committee meeting of the year following the Convention and Conference.

4.0 Forms

4.1 Reimbursement Request Form

5.0 Revisions

SOP No: A004

Title: Operation and Maintenance
of the President's Vehicle Fleet

Effective Date: 7/1/2009

Prepared By: Dennis Skinner

Approved By: President Powell

1.0 Purpose

- 1.1 The purpose of this SOP is to establish rules and regulations for the operation and maintenance of the MSFA President's Vehicle Fleet.

2.0 Responsibilities

- 2.1 President's Vehicle Committee- The MSFA committee having the responsibility for the acquisition, maintenance, and disposition of the vehicles in the Presidential fleet. They shall develop rules and regulations governing the use of these vehicles and forms to document compliance.
- 2.2 The Executive Committee- The MSFA committee having the responsibility of review and oversight of the President's Vehicle Committee.

3.0 Procedure

- 3.1 The use of a vehicle in the Presidential fleet is a privilege, not a certainty. These vehicles are the property of the MSFA and are to be used as authorized by the Executive Committee. The President's Vehicle Committee and the Executive Committee shall investigate any instances of misuse.
- 3.2 Maintenance
 - 3.2.1 All vehicles will be serviced regularly, not less than every 5,000 miles. Vehicle service shall be documented on the Vehicle Information Form as provided by the President's Vehicle Committee and shall be kept on file in the vehicle.
 - 3.2.2 All warranty work will be done at a dealership. All warranty work shall be documented on the Vehicle Information Form as provided by the President's Vehicle and shall be kept on file in the vehicle.
 - 3.2.3 Tires shall be replaced as necessary, using the original equipment tire as those that were installed on the vehicle when new.
 - 3.2.4 Non-warranty repairs shall be made by an authorized repair facility as determined by the President's Vehicle Committee. The custodian of the vehicle shall submit a receipt to the Treasurer for reimbursement.
- 3.3 Vehicular Collisions
 - 3.3.1 All collisions involving MSFA vehicles will be reported to the local police department pursuant to Maryland law. In addition, the custodian of the vehicle shall notify the Chairman of the President's Vehicle Committee and the MSFA President. Such notification shall be made in a timely manner, but not more than twenty-four (24) hours after said collision.
 - 3.3.2 The custodian of the vehicle shall be responsible for providing the Chairman of the President's Vehicle Committee written

documentation of the collision to include: a copy of the police report, the vehicle registration information for all other vehicles involved, the name and contact information of other drivers, and all information pertaining to injuries. All required documentation shall be forwarded to the Chairman of the President's Vehicle Committee as soon as possible, but no later than seventy-two (72) hours following said collision.

- 3.3.3 The Chairman of the President's Vehicle Committee will be responsible for notifying the MSFA insurance carrier of the collision, once all required documentation is received.
- 3.3.4 Only authorized repairs may be made, and must be made by an authorized repair facility.
- 3.3.5 Payment for repairs will be made only by the MSFA Treasurer after receipt of payment by the insurance carrier, and invoices from the authorized repair facility making the repairs. Payment for repairs will only be made to the authorized repair facility.
- 3.3.6 Damage(s) other than those resulting from a collision shall be handled as stated above, with the exception of vandalism, which must be reported to the local police.

3.4 Vehicles being exchanged after completion of term of office shall be detailed inside and out. This expense shall be incurred by the custodian of each vehicle.

Registrations shall be changed at the Convention and Conference and forms from the President's Vehicle Committee shall be provided for at the time of exchange.

3.5 Vehicles being sold shall be stripped out prior to the Convention and Conference, and be ready for delivery at the Convention and Conference, if necessary. If the successful bidder is not present then the vehicle will have a set of local government tags attached and be taken back to a central point for the new owner to arrange pickup.

3.6 Smoking policy- There will be absolutely **no** smoking in MSFA vehicles. This is necessary due to the health issues of second hand smoke and damage to upholstery and carpeting that have been observed in MSFA vehicles.

4.0 Forms

- 4.1 MSFA President's Vehicle Committee Vehicle Transfer Form
- 4.2 MSFA Vehicle Information Form

5.0 Revisions

SOP No: E001

Title: Ambulance Company Standards
Prepared By: Dennis Skinner

Effective Date: 7/1/2011
Approved By: President David Lewis

1.0 Purpose

- 1.1 The purpose of this SOP is to establish the ambulance company standards for member companies of the Maryland State Firemen's Association.

2.0 Responsibilities

- 2.1 EMS Committee- The MSFA Committee having the responsibility for formulating standards for ambulances operated by members of the MSFA.
- 2.2 The Executive Committee- The MSFA committee having the responsibility of review and oversight of the EMS Committee and for reviewing the initial release and revision of the SOPs of the MSFA.
- 2.3 MSFA President- The officer responsible for final approval of the MSFA SOPs.

3.0 Procedure

- 3.1 Every ambulance shall be equipped with medical supplies and equipment as follows:

GENERAL SUPPLIES AND EQUIPMENT

- 1) Twenty-four (24) each Sterile gauze pads (4" X4" minimum)
- 2) Two (2) rolls 2" adhesive tape (some hypo-allergenic must be available)
- 3) Two (2) rolls 1" adhesive tape (some hypo-allergenic must be available)
- 4) Twelve (12) each Cravats (Triangular Bandages)
- 5) Twelve (12) rolls 4" self-adhering gauze bandages
- 6) Four (4) each Cold packs
- 7) One (1) box Assorted plastic bandage strips
- 8) Six (6) each Sterile sanitary napkins (or highly absorbent dressings)
- 9) Five (5) each Sterile Trauma Dressings (5"X9" minimum)
- 10) One (1) each Poison Kit
- 11) Three (3) each glucose supplements
- 12) One (1) each Penlight (narrow beam flashlight is acceptable)
- 13) One (1) each Adult BP cuff, regular and obese (sphygmomanometer)
- 14) One (1) each Pediatric BP cuff (sphygmomanometer)
- 15) One (1) piece Non-adherent material for occlusive dressing (18"X25"minimum-metal foil is not acceptable)
- 16) One (1) each Adult PASG with passive relief valves
- 17) Two (2) liters Sterile saline or sterile water
- 18) Two (2) each Sterile or clean sheets for burns (individually wrapped)
- 19) One (1) box Exam gloves (assorted sizes-OSHA standards will be followed)
- 20) Two (2) each Emesis basins

- 21) One (1) each Urinal
- 22) One (1) each Stethoscope
- 23) One (1) pair Bandage Scissors
- 24) One (1) each Container of disinfecting solution for ambulance (OSHA standards will be followed)
- 25) One (1) box Facial tissue
- 26) One (1) each Maryland Triage tag kit
- 27) One (1) each Sterile obstetrical (OB) kit containing: One (1) large towel or receiving blanket, Four (4) pairs sterile gloves (assorted sizes), Twelve (12) each sterile 4X4 gauze pads, Four (4) each umbilical clamps or ties, Two (2) sanitary napkins (or comparable absorbent dressings), One (1) bulb syringe for suctioning, and One (1) pair blunt scissors. (A commercially available OB kit may be substituted for these items)
- 28) One (1) each Rescue shears
- 29) Four (4) each Surgical masks
- 30) Four (4) each Gowns through which blood and/or body fluids cannot penetrate
- 31) Four (4) each Eye/face shields (NOTE: May be combined with surgical masks) NOTE: Items 29-31 may be combined into a bio-hazard kit carried on the ambulance.
- 32) Five (5) each Plastic, seal able bags with bio-hazard stickers
- 33) One (1) each bedpan
- 34) Two (2) each IV solution hangers
- 35) One (1) trash can

PORTABLE FIRST AID KIT

- 1) Twenty-four (24) each Sterile gauze pads (4"X4" minimum)
- 2) One (1) roll 2" adhesive tape (hypo-allergenic)
- 3) One (1) each Rescue shears
- 4) Eight (8) each Cravats (triangular bandages)
- 5) One (1) set Oropharyngeal airways (assorted sizes, 0-5)
- 6) One (1) each Ring cutter
- 7) One (1) each Stethoscope
- 8) One (1) each BP cuff (adult sphygmomanometer)
- 9) One (1) each Bandage scissors
- 10) One (1) each Penlight (narrow beam flashlight is acceptable)
- 11) Six (6) rolls 4" self-adhering gauze bandages
- 12) Two (2) rolls 6" self-adhering gauze bandages
- 13) Four (4) each Sterile trauma dressing (5"X9" minimum)
- 14) One (1) each Patient Marking pen
- 15) One (1) each Kit large enough to carry above equipment (dust and water resistant)
- 16) Two (2) pairs Exam gloves
- 17) One (1) set Nasopharyngeal Airways (assorted sizes)

AIRWAY MAINTENANCE SUPPLIES

- 1) One (1) each Portable oxygen resuscitator of at least 300 L capacity. Two (2) size "D" or one (1) size "E" extra medical oxygen (green for steel)

cylinders, unpainted brushed metal for aluminum or stainless steel cylinders), shall be free of grease and oil and shall bear a current hydrostatic test date. Unit shall be equipped with an appropriate thread or pin indexed yoke, a reducing valve limiting line pressure to 50 PSI, and a cylinder pressure gauge to indicate the amount of oxygen remaining. Additionally, a variable flow valve (not gravity dependent) and a flow meter capable of delivering at least 15 LPM shall be attached.

- 2) One (1) each on board installed piped oxygen resuscitator of at least 3,000 L capacity shall be available. Cylinder shall be properly color coded for medical oxygen, shall be free of grease and oil, shall be accessible for replacement, preferably from outside the patient compartment, and shall have a hydrostatic test date of less than five (5) years old. Unit shall be equipped with an appropriate thread or pin indexed yoke, a reducing valve limiting line pressure to 50 PSI, and a cylinder pressure gauge to indicate the amount of oxygen remaining. Additionally, at least one (1) oxygen wall outlet with plug-in variable flow valve, and a flow meter capable of delivering at least 15 LPM shall be installed.
- 3) Two (2) each Adult oxygen masks and cannulas, transparent, single use: Non-rebreather and Nasal Cannula.
- 4) Two (2) each Pediatric oxygen masks and cannulas, transparent, single use: Partial rebreather (Simple Face Mask) and Nasal Cannula.
- 5) Two (2) each Oxygen connecting tubing.
- 6) One (1) each Hand operated adult bag resuscitation unit with oxygen inlet, reservoir tube, clean adult and pediatric masks, without pop-off valve or with selective pop-off valve (clear recommended).
- 7) One (1) Hand operated infant bag resuscitation unit with oxygen inlet, reservoir tube, clean infant mask, and pop-off valve (clear recommended).
- 8) One (1) set Nasopharyngeal Airways (assorted French sizes).
- 9) One (1) set Oropharyngeal Airways (assorted sizes, 0 to 5).
- 10) One (1) Portable suction unit, battery powered with a minimum twenty (20) minute continuous operation. Assorted catheters and rigid suction tips. Must be able to develop 11.81 inches of water vacuum (300 mmhg) within four (4) seconds of clamping.
- 11) One (1) On-board, piped suction unit capable of providing a free air flow of at least twenty (20) LPM at the end of the delivery tube and a vacuum of 11.81 inches of water (300 mmhg) within four (4) seconds of clamping. The suction force shall be adjusted for use in children and intubated patients. The suction force must be reliable, such as from engine manifold and/or a permanent election suction pump powered by the vehicles' alternator/batteries.

LINEN SUPPLIES

- 1) One (1) each Pillow (Non-absorbent or disposable).
- 2) One (1) each Pillowcase.
- 3) Two (2) each Sheets.
- 4) Two (2) each Towels.
- 5) Two (2) each Blankets (cotton or other non-conductive material).

CARRYING DEVICES

- 1) One (1) each Cot with mattress, four (4) wheels and adjustable head position.
- 2) Two (2) safety straps, minimum. (OSHA standards should be followed).
- 3) One (1) each Auxiliary Litter.
- 4) One (1) each Stair Chair (Items 3 and 4 may be combined.)

IMMOBILIZATION EQUIPMENT

- 1) Two (2) full spinal immobilization devices that meet OSHA standards.
- 2) One (1) half spinal immobilization device that meets OSHA standards.
- 3) One (1) orthopedic stretcher.
- 4) Six (6) 9 inch straps (speed clips, etc. or an equivalent for immobilizing two (2) patients on two (2) long boards).
- 5) One (1) adult leg traction splint with ankle hitch.
- 6) One (1) pediatric leg traction splint with ankle hitch.
- 7) Two (2) padded board splints (54"X3").
- 8) Two (2) padded board splints (36"X3").
- 9) Two (2) padded board splints (15"X3").
- 10) Two (2) sets of head immobilization devices (head blocks, blanket roll).
- 11) Two (2) sets extrication collars (Five (5) sizes per set. Note: Soft cervical collars do not provide adequate immobilization for undiagnosed potential injuries).
- 12) One (1) Child safety seat that meets federal specification FMVSS-213.

SAFETY ITEMS

- 1) One (1) fire extinguisher (5 lb. multipurpose dry chemical).
- 2) Two (2) hand lights.
- 3) One (1) each NO SMOKING sign in the patient compartment.
- 4) Three (3) each Reflective triangles that meet D.O.T. standards.
- 5) One (1) each per crewmember Public Safety Traffic Vest.

PERSONAL PROTECTIVE EQUIPMENT

It is recommended that each riding member have their own protective gear (meeting NFPA standards). Should this not be available, the company will supply gear for members responding on that call.

- 1) One (1) each per crewmember present Protective coats.
- 2) One (1) each per crewmember present Helmet.
- 3) One (1) each per crewmember present Turnout pants and boots.
- 4) One (1) pair per crewmember present Safety Goggles.
- 5) One (1) pair per crewmember present Firefighter gloves.
- 6) One (1) each per crewmember Nomex hood.
- 7) One (1) each per crewmember Public Safety Traffic Vest.

EXTRICATION EQUIPMENT

Unless an emergency vehicle capable of providing extrication support is within a ten (10) minute response and is routinely dispatched with the ambulance from its or another station on every call that would reasonably require such support, then certain access and extrication equipment should be carried on the

ambulance. The following is the minimum extrication equipment that should be available at all times:

- 1) One (1) each Wrench, 12" open ended.
- 2) One (1) each Screwdriver 12" standard slot blade.
- 3) One (1) each Screwdriver 12" Phillips type.
- 4) One (1) each Hacksaw.
- 5) Six (6) each Hacksaw blades (Carbide type).
- 6) One (1) each Pliers, Channel-lock, adjustable.
- 7) One (1) each Pliers, 10" Vise grip.
- 8) One (1) each Hammer, 2-5lb., 15" handle.
- 9) One (1) each Fire axe, butt, 24" handle.
- 10) One (1) each 24" Wrecking bar.
- 11) One (1) each Spring-loaded punch.

The following equipment is recommended but not required:

- 12) One (1) each Crowbar 51" with pinch point.
- 13) One (1) each Bolt Cutter with 1 1/4" jaw opening.
- 14) One (1) each Portable power jack and spreader tool.
- 15) One (1) each Shovel 49" with pointed blade.
- 16) Two (2) each Rescue rope, each 50 feet long, 1/2" diameter.

AMBULANCE VEHICLE

Refer to COMAR Section 11.14.02- Department of Transportation Standards

- 1) Functional climate control system (heating and cooling).
- 2) Functional emergency warning lights.
- 3) Functional emergency audible warning devices (horn excluded).
- 4) Functional head, tail, and signal lights.

SANITATION STANDARDS

- 1) Freshly laundered linen or disposable sheets and pillowcases or their equivalent will be used in transporting patients and changed after each use. At least one (1) complete change will be carried in the ambulance at all times. Moisture-proof protective covers shall be provided for the mattress and for any reusable pillows.
- 2) First aid supplies shall be stored in a clean container, free from dust, moisture, insects, and rodents.
- 3) The ambulance interior shall be cleaned after use. When patients with known infectious diseases have been transported, the patient compartment should be disinfected in compliance with organizations Infection Control Plan that meets OSHA bloodborne pathogen standards (CFR29.1910.30).
- 4) Suitable containers shall be provided for trash and soiled supplies.
- 5) An approved container to safely dispose of sharps (glass, needles, etc.) shall be provided on the ambulance.
- 6) Implements intended for use in a patient's nose or mouth shall be separately wrapped and properly stored and handled. Should such implements be contaminated through use, it should be disposed of, if disposable, and disinfected, if reusable. Of particular concern are suction tubing and catheters, diaphragms, oxygen delivery devices, resuscitator bags and face

masks. These items should be checked after each use and on a regular basis for debris and contamination.

OPTIONAL EQUIPMENT (RECOMMENDED BUT NOT REQUIRED)

- 1) One (1) each respirator for each crewmember as recommended by the Center for Disease Control and Prevention.
- 2) One (1) each Body Substance Isolation Kit. A second kit consisting of four (4) surgical masks, four (4) eye protection devices, and four (4) protective gowns for each crewmember.
- 3) One (1) each AED.
- 4) One (1) each Pulse Oximeter.

4.0 Forms

4.1 Maintenance and Operation records

5.0 Revisions

SOP No: E002

Title: ALS (MICU) Standards
Prepared By: Dennis Skinner

Effective Date: 7/1/2011
Approved By: President David Lewis

1.0 Purpose

- 1.1 The purpose of this SOP is to establish the ALS (MICU) company standards, including ALS Chase Units, for member companies of the Maryland State Firemen's Association.

2.0 Responsibilities

- 2.1 EMS Committee- The MSFA Committee having the responsibility for formulating standards for ALS units operated by members of the MSFA.
- 2.2 The Executive Committee- The MSFA committee having the responsibility of review and oversight of the EMS Committee and for reviewing the initial release and revision of the SOPs of the MSFA.
- 2.3 MSFA President- The officer responsible for final approval of the MSFA SOPs.

3.0 Procedure

- 3.1 Each MICU shall be equipped with medical supplies and equipment as follows:
 - 1) All the items required on a basic life support ambulance as set forth in SOP "E001 Ambulance Company Standards".
 - 2) The following specialized ALS supplies and equipment (Note: The following items and kits may be carried in combination with other items or kits and shall be carried in appropriate containers free from dust, moisture, insects and rodents.):

ADDITIONAL ALS EQUIPMENT

- 1) One (1) each Cardiac Monitor/Defibrillator with quick look capability (adult and pediatric) (Note 1 & 2).
- 2) Two (2) each Adult defibrillator pads (Note 3).
- 3) Two (2) each Pediatric defibrillator pads (Note 3).
- 4) Two (2) sets Monitoring cables.
- 5) Six (6) sets Monitoring electrodes.
- 6) Two (2) sets Adult pacing pads (Optional Note 4).
- 7) One (1) set Pediatric pacing pads (Optional Note 4).
- 8) One (1) set Spare monitor/defib batteries.
- 9) One (1) each Spare EKG paper.
- 10) One (1) each Tube electrode paste or jell pads (Note 4).
- 11) One (1) each PDR or equivalent index (Optional).
- 12) One (1) each Copy of Maryland Medical Protocols.
- 13) One (1) each Gastric tubing (8, 10, 12, 14fr).
- 14) Two (2) each Appropriate size lavage syringes.

- 15) One (1) each Pneumothorax Kit.
- 16) One (1) each Glucometer Kit (Optional).

MEDICATIONS & DELIVERY DEVICES (NOTE 5)

- 1) Five (5) each Adenosine- 6 mg each.
- 2) Four (4) each Albuterol- 2.5 mg each.
- 3) Two (2) each Nebulizers.
- 4) Eight (8) each Atropine Sulfate- 1 mg each.
- 5) Two (2) each Calcium Chloride- 1 g each.
- 6) Two (2) each Dextrose 50%- 25 g each.
- 7) Two (2) each Diazepam (Valium)- 10 mg each.
- 8) Two (2) each Diphenhydramine (Benadryl)- 50 mg each.
- 9) Two (2) each Dopamine- 800 mg each.
- 10) Six (6) each Epinephrine 1:10,000- 1 mg each.
- 11) Two (2) each Epinephrine 1:1,000- Multi dose (or 5 amp set).
- 12) Two (2) each Furosemide (Lasix)- 100 mg each.
- 13) Two (2) each Glucagon- 1 mg each.
- 14) Four (4) each Lidocaine 2%- 100 mg each.
- 15) Two (2) each Morphine Sulfate- 10 mg each.
- 16) Two (2) each Naloxone (Narcan)- 2 mg each.
- 17) Two (2) each Nitroglycerin- Spray/Tab (Note 6).
- 18) Two (2) each Sodium Bicarbonate- 50 mg each.
- 19) Two (2) each Terbutaline
- 20) One (1) each Controlled access system.
- 21) Four (4) each 1cc syringes with 25 g needles.
- 22) Eight (8) each 3-5 cc syringes.
- 23) Four (4) each 18 or 19 g needles.
- 24) Four (4) each 1 ½ in. 21 g needles.

INTERVENOUS EQUIPMENT AND SUPPLIES

- 1) Six (6) each IV catheters gauges (14,16,18,20,22,24).
- 2) Three (3) each Red Top tubes.
- 3) Three (3) each Purple Top or any tube w/anticoagulant.
- 4) Two (2) each Vacutainers.
- 5) Two (2) each IO needles.
- 6) Two (2) each Saline lock (Optional).
- 7) Two (2) each 20 cc of normal saline (for Saline Lock) (Optional).
- 8) Eight (8) sets IV Administration Sets (4 capable 10-15 drops per minute).
- 9) Six (6) each 1000 cc bags Ringers Lactate.
- 10) Site Preparation Materials.
- 11) One (1) each Portable Sharps container.

INTUBATION KIT

- 1) One (1) set Miller blades (0,1,2,3,4).
- 2) One (1) set McIntosh blades (1,2,3,4).
- 3) One (1) each Adult laryngoscope handle.
- 4) One (1) each Pediatric laryngoscope handle.
- 5) Two (2) each ET tubes (6,7,8,9) cuffed.

- 6) Two (2) each ET tubes (2.5,3,3.5,4,5) uncuffed.
- 7) ET Tube holders (Optional).
- 8) Two (2) each Adult stylette.
- 9) Two (2) each Pediatric stylette.
- 10) Two (2) rolls 1" adhesive tape.
- 11) Four (4) each 10 cc syringes.
- 12) One (1) each Adult Magil forceps.
- 13) One (1) each Pediatric Magil forceps.
- 14) One (1) each Surgical lubricant (tube or packets).
- 15) One (1) each Lidocaine 10% or Benzocaine spray 20%.
- 16) One (1) each Lidocaine 2%- Jelly.
- 17) Spare laryngoscope bulbs and batteries (Optional).

Notes:

- 1) Cardiac monitor shall have capability of synchronized cardio version, and pacing capability where EMTPs respond on the unit.
- 2) Units with Defib Pads that offer "quick look" are acceptable in lieu of quick look paddles.
- 3) Required when unit not equipped with paddles.
- 4) Not required when unit not equipped with paddles.
- 5) Packaging of medications may vary but quantities must be met.
- 6) One (1) bottle of tablets or one (1) multidose spray.

PERSONAL PROTECTIVE EQUIPMENT

- 1) Each ALS provider responding on the ALS unit must have a set of turn out clothing consisting of a coat with liner, boots with puncture resistant soles, firefighter's gloves, and helmet approved for fire service, and a Public Safety Traffic Vest. In addition a Nomex hood shall be provided.

3.2 Minimum standards for Advanced Life Support (ALS) companies performing ALS with a chase vehicle (ALS Unit). An ALS Unit is a vehicle equipped to render ALS, transport the ALS provider and equipment to the scene to provide patient care, and accompany the patient to the appropriate medical facility on an ambulance.

Note: This section does not apply to companies operating a chase unit to upgrade an ALS equipped ambulance from basic life support staffed to ALS staffed. This section does not apply to companies operating chase vehicles to upgrade an ALS equipped ambulance for BLS staffed to ALS staffed, unless the ALS equipment is carried on the chase vehicle. The following items and kits may be carried in combination with other items or kits and must be carried in appropriate containers free from dust, moisture, insects and rodents.

ADDITIONAL ALS EQUIPMENT

- 1) One (1) each ALS radio to communicate with on-line medical control.
- 2) One (1) each Cardiac monitor with quick look capability (adult and pediatric) (Note 1 and 2).
- 3) Two (2) each Adult defibrillator pads (Note 3).
- 4) Two (2) each Pediatric defibrillator pads (Note 3).
- 5) One (1) set Monitoring cables.

- 6) Six (6) sets Monitoring electrodes.
- 7) Two (2) sets Adult Pacing pads (Optional) (Note 4).
- 8) One (1) set Pediatric Pacing pad (Optional) (Note 4).
- 9) One (1) set Spare monitor/defibrillator batteries.
- 10) One (1) each Spare EKG paper.
- 11) One (1) each Tube electrode paste or jell pads (Note 4).
- 12) PDR or equivalent index (Optional).
- 13) One (1) each copy of Maryland Medical Protocols.
- 14) One (1) each Gastric tubing (8,10,12,14fr).
- 15) Two (2) each Appropriate size lavage syringes.
- 16) One (1) each Pneumothorax Kit
- 17) Glucometer Kit (Optional).
- 18) Pulse Oximeter (Optional).

MEDICATIONS AND DELIVERY DEVICES (NOTE 5)

- 1) Five (5) each Adenosine- 6 mg each.
- 2) Four (4) each Albuterol- 2.5 mg each.
- 3) Two (2) each Nebulizers.
- 4) Eight (8) each Atropine Sulfate- 1 mg each.
- 5) Two (2) each Calcium Chloride- 1g each.
- 6) Two (2) each Dextrose 50%- 25 g each.
- 7) Two (2) each Diazepam (Valium)- 10 mg each.
- 8) Two (2) each Diphenhydramine (Benadryl)- 50 mg each.
- 9) Two (2) each Dopamine- 800 mg each.
- 10) Six (6) each Epinephrine 1:10,000- 1 mg each.
- 11) Two (2) each Epinephrine 1:1,000- Multi-dose (or 5 amp set).
- 12) Two (2) each Furosemide (Lasix)- 100 mg each.
- 13) Two (2) each Glucagon- 1 mg each.
- 14) Four (4) each Lidocaine 2%- 100 mg each.
- 15) Two (2) each Morphine Sulfate- 10 mg each.
- 16) Two (2) each Naloxone (Narcan)- 2 mg each.
- 17) Two (2) each Nitroglycerin- Spray/Tab (Note 6).
- 18) Two (2) each Sodium Bicarbonate- 50 mg each.
- 19) Two (2) each Terbutaline.
- 20) Controlled access system.
- 21) Four (4) each 1 cc syringes with 25 g needles.
- 22) Eight (8) each 3-5 cc syringes.
- 23) Four (4) each 18 or 19 g needles.
- 24) Four (4) each 1 ½" 21 g needles.

INTRAVENOUS EQUIPMENT AND SUPPLIES

- 1) Six (6) each IV catheters gauges (14,16,20,22,24).
- 2) Three (3) each Red top tubes.
- 3) Three (3) each Purple top or any tube w/anticoagulant.
- 4) Two (2) each Vacutainers.
- 5) Two (2) each IO needles.
- 6) Two (2) each Saline lock (Optional).
- 7) Two (2) each 20 cc of normal saline (for Saline lock) (Optional).

- 8) Eight (8) sets IV Administration Kits (Four capable 10-15 drops per minute).
- 9) Six (6) each 1000 cc bags Ringers Lactate.
- 10) Site preparation material.
- 11) One (1) each Portable Sharps.
- 12) Litter mounted pole (Optional).

INTUBATION KIT

- 1) One (1) set Nasopharyngeal airways (sizes 22-34).
- 2) One (1) set Miller Blades (0,1,2,3,4).
- 3) One (1) set McIntosh Blades (1,2,3,4).
- 4) One (1) each Adult laryngoscope handle.
- 5) One (1) each Pediatric laryngoscope handle.
- 6) Two (2) each ET Tubes (6,7,8,9) cuffed.
- 7) Two (2) each ET Tubes (2.5,3,3.5,4,5) uncuffed.
- 8) ET tube holders (Optional).
- 9) Two (2) each Adult stylette.
- 10) Two (2) each Pediatric stylette.
- 11) Two (2) rolls 1" adhesive tape.
- 12) Four (4) each 10 cc syringes.
- 13) One (1) each Adult Magil forceps.
- 14) One (1) each Pediatric Magil forceps.
- 15) One (1) each Surgical lubricant (tube or packets).
- 16) One (1) each Lidocaine 10% or Benzocaine spray 20%.
- 17) One (1) each Lidocaine 2%- Jelly.
- 18) Spare laryngoscope bulbs and batteries (Optional).

OTHER

- 1) One (1) each Portable First Aid/Trauma Kit (Note 7 and 9).
- 2) One (1) each BP Cuffs (Adult & Pediatric).
- 3) One (1) each Stethoscope.
- 4) One (1) each Portable Oxygen Kit.
- 5) One (1) each Portable Suction.
- 6) One (1) each Body Substance Isolation Kit (Note 8).
- 7) Long Backboards and straps (Optional).
- 8) Short Backboards and straps (Optional).
- 9) Head Immobilization equipment (Optional).
- 10) Two (2) each Blankets.
- 11) Gloves (Note 9).

SAFETY ITEMS

- 1) One (1) each fire extinguisher (5lb multipurpose dry chemical).
- 2) Six (6) each 30 minute red road flares or three (3) D.O.T. reflective triangles.
- 3) Two (2) each Hand lights.

PERSONAL PROTECTIVE EQUIPMENT

- 1) One (1) each per crewmember protective coats (turnout or comparable).
- 2) One (1) each per crewmember safety helmets.
- 3) One (1) pair per crewmember boots (3/4 or 1/4 length with turnout pants).

- 4) One (1) pair per crewmember gloves.
- 5) One (1) pair per crewmember safety goggles.
- 6) One (1) each per crewmember Public Safety Traffic Vest.
- 7) One (1) each Nomex hood per crewmember.

ALS VEHICLE

- 1) Functional climate control system (both heating and cooling).
- 2) Functional emergency warning lights.
- 3) Functional emergency audible warning devices (not horn).

Notes:

- 1) Cardiac monitor shall have capability of synchronized cardiac version and pacing capability where EMTPs run on the unit.
- 2) Units with Defib pads that offer “quick look” are acceptable in lieu of quick look paddles.
- 3) Required when unit not equipped with paddles.
- 4) Not required when unit not equipped with paddles.
- 5) Packaging of medications may vary but quantities must be met.
- 6) One (1) bottle of tablets or One (1) multidose spray.
- 7) Kit should be able to provide patient care per Maryland protocols at the patient side.
- 8) Sufficient number for EMS crew manning unit.
- 9) Per Seal of Excellence- BLS criteria.

4.0 Forms

4.1 Maintenance and Operation records

5.0 Revisions

SOP No: E003

Title: Rescue Company Standards
Prepared By: Dennis Skinner

Effective Date: 7/1/2011
Approved By: President David Lewis

1.0 Purpose

- 1.1 The purpose of this SOP is to establish the Rescue Company standards for member companies of the Maryland State Firemen's Association.

2.0 Responsibilities

- 2.1 Standards Committee- The MSFA Committee having the responsibility for formulating standards for Rescue units operated by members of the MSFA.
- 2.2 The Executive Committee- The MSFA committee having the responsibility of review and oversight of the Standards Committee and for reviewing the initial release and revision of the SOPs of the MSFA.
- 2.3 MSFA President- The officer responsible for final approval of the MSFA SOPs.

3.0 Procedure

3.1 Minimum equipment to be carried and the standards are:

- 1) Axes- One (1) pick head, one (1) flat head, and one (1) pry.
- 2) Bars- One (1) 12" Halligan and one (1) 30" Halligan.
- 3) Blankets- Six (6) cotton and wool.
- 4) Breathing- Two (2) positive pressure one-half hour (future purchases to be one-hour) self-contained breathing apparatus with two (2) spare bottles and one (1) positive pressure O2 resuscitator with demand valve and aspirator.
- 5) Chain- Two (2) 10' 20 ton capacity and two (2) 10' 10 ton capacity.
- 6) Chisels- One (1) air chisel with 100' section of line.
- 7) Cutting tools- Bolt cutters; one (1) large pair and one (1) small pair.
- 8) Electrical- One (1) 5 KW stationary or portable generator with a five (5) gallon safety can and one (1) quart of oil. 200 feet electrical line with twist-lock connectors, one (1) 3-way electrical junction box and assorted pigtails/adapters. Four (4) 500-watt portable lights with twist-lock connectors.
- 9) Fans- One (1) explosion-proof 16" smoke ejector.
- 10) Emergency Care- One (1) first aid kit; one (1) long back board; one (1) short back board or extraction immobilization device; one (1) stokes basket and fifty (50) triage tags.
- 11) Fire Extinguishers- One (1) 20 lb dry chemical; one (1) 20 lb Halon or CO2.
- 12) Lifting- One (1) 1/2 ton come-along; one (1) 20 ton porta-power; two (2) 10 ton jacks (manual or hydraulic).
- 13) Ladders- One (1) 10'-16' two (2) section fire service rated ladder; one (1) attic ladder.
- 14) Picks- One (1) point and chisel type; one (1) tunneling.
- 15) Poles- Two (2) 6' pike poles with hooked end.

- 16) Rope- One (1) each 150 ft 9,000 lb tensile strength life line (Kernmantle). All other utility ropes at the discretion of the department.
- 17) Salvage Covers- Two (2) salvage covers 12'X12'.
- 18) Saws- One (1) rescue type circular saw with assorted tips/blades; one (1) chain saw; one (1) skill saw; one (1) hacksaw; one (1) hand saw.
- 19) Shovels- Two (2) long handled pointed shovels; two (2) scoop shovels.
- 20) Sledges- One (1) sledge hammer, 10 lb; and one (1) non-sparking, 8 lb.
- 21) Small Tools- One (1) tool kit containing: one (1) 2lb hammer; one (1) 3lb hammer; two (2) hatchets; one (1) claw hammer; one (1) hacksaw with at least six (6) extra blades; one (1) 8" crescent wrench; one (1) 10" crescent wrench; one (1) 12" crescent wrench; one (1) pair tin snips; one (1) 8" or 10" pipe wrench; one (1) sheet metal cutting tool or crash axe; one (1) pair of regular pliers; one (1) pair 6" diagonal pliers; one (1) pair of long needle-nose pliers; one (1) 3/4" cold chisel; one (1) broad blade brick chisel; one (1) 1" star drill; one (1) set Allen wrenches; and one (1) spring loaded center punch.
- 22) Miscellaneous- Two (2) street brooms; two (2) mops; one (1) mop wringer with bucket; two (2) squeegees; two (2) battery powered hand-lights; cribbing (amount to be determined by the department); one (1) gas tank; one (1) radiological detection apparatus; and one (1) box of road flares.
- 23) One (1) each per crewmember: Respirator and gloves as recommended by the Center for Disease Control and Prevention, for airborne pathogens. One (1) each per crewmember Protective Coats, one (1) Safety Helmet, one (1) Boots with Turnout Pants, one (1) pair Gloves, one (1) pair Safety Goggles, one (1) each Public Safety Traffic Vest, and Nomex hood.
- 24) One (1) Bio-Hazard Kit, consisting of: Four (4) each surgical masks, four (4) each eye protection devices and four (4) protective gowns, two (2) red bio-waste bags, two (2) yellow bio-waste bags, ten (10) plastic trash bags, twenty-four (24) paper towels, twenty-four (24) clean towelettes, two (2) water soluble bags, and two (2) cans of foam alcohol scrub.

4.0 Forms

4.1 Maintenance and Operation records

5.0 Revisions

SOP No: E004

Title: BLS First Responder Standards
Prepared By: Dennis Skinner

Effective Date: 7/1/2011
Approved By: President Dave Lewis

- 1.0 Purpose
 - 1.1 The purpose of this SOP is to establish the BLS First Responder standards for member companies of the Maryland State Firemen's Association.

- 2.0 Responsibilities
 - 2.1 EMS Committee- The MSFA Committee having the responsibility for formulating standards for BLS First Responder units operated by members of the MSFA.

 - 2.2 The Executive Committee- The MSFA committee having the responsibility of review and oversight of the EMS Committee and for reviewing the initial release and revision of the SOPs of the MSFA.

 - 2.3 MSFA President- The officer responsible for final approval of the MSFA SOPs.

- 3.0 Procedure
 - 3.1 Minimum equipment to be carried and the standards are:
 - 1) One (1) each Stethoscope.
 - 2) One (1) each Pediatric BP Cuff.
 - 3) One (1) each Adult BP Cuff, regular and obese (sphygmomanometer).
 - 4) One (1) each Penlight.
 - 5) One (1) each Bandage Scissors.
 - 6) One (1) each Suction unit (hand powered or equivalent).
 - 7) One (1) each Patient Marking Pen.
 - 8) Twenty (20) each Sterile Gauze Pads (4"X4").
 - 9) One (1) roll 2" Adhesive Tape.
 - 10) Six (6) each Cravats.
 - 11) Four (4) each Sterile Trauma Dressing (5"X9").
 - 12) Four (4) rolls 2" Self-adhering gauze bandage.
 - 13) Four (4) rolls 4" Self-adhering gauze bandage.
 - 14) One (1) set Oropharyngeal airways (assorted sizes 0-5).
 - 15) One (1) set Nasopharyngeal airways (assorted sizes 22-34).
 - 16) One (1) Nasal Cannula (Adult Size).
 - 17) One (1) each Non-rebreathing Face Mask- Child and Adult sizes.
 - 18) Four (4) sets Examination Gloves (Latex Safe Gloves are preferred) and BSI Protection.
 - 19) One (1) each Bag Valve Mask- child and adult with appropriate mask (including sizes 0&00).
 - 20) One (1) each Kit large enough to carry the above equipment.
 - 21) One (1) each Bottle (500cc) sterile water normal saline.
 - 22) Two (2) each Cold Pack.

- 23) Two (2) each OB Kit.
- 24) One (1) each Thermal Blanket.
- 25) One (1) each Oxygen cylinder, tubing and regulator.
- 26) Two (2) each HEPA Masks.
- 27) Two (2) each Gowns through which blood and/or body fluids cannot penetrate.
- 28) Two (2) each Eye/face shields (Note: May be combined with HEPA masks).
- 29) One (1) AED.
- 30) One (1) Adult Epinephrine Auto Injector.
- 31) One (1) Pediatric Epinephrine Auto Injector.

4.0 Forms

4.1 Maintenance and Operation records

5.0 Revisions

SOP No: E005

Title: Watercraft Standards
Prepared By: Dennis Skinner

Effective Date: 7/1/2011
Approved By: President Dave Lewis

- 1.0 Purpose
 - 1.1 The purpose of this SOP is to establish the Watercraft standards for member companies of the Maryland State Firemen's Association.
- 2.0 Responsibilities
 - 2.1 Watercraft Committee- The MSFA Committee having the responsibility for formulating standards for watercraft operated by members of the MSFA.
 - 2.2 The Executive Committee- The MSFA committee having the responsibility of review and oversight of the Watercraft Committee and for reviewing the initial release and revision of the SOPs of the MSFA.
 - 2.3 MSFA President- The officer responsible for final approval of the MSFA SOPs.
- 3.0 Procedure
 - 3.1 PFD's Must Be Used On All Marine Units When On The Water
 - 3.2 Inland Water Marine Utility Units
 - a) Inland water marine utility units shall consist of a powerboat with carrying capacity of not less than six hundred (600) and draft not to exceed twelve (12) inches. Total power shall not exceed the BIA rated capacity for the boat.
 - b) They shall conform to all appropriate regulations of the U.S. Coast Guard and the Maryland Marine Police for boats of the above class, including fire extinguishers, floatation devices, signaling devices and safety gear.
 - c) Inland water marine units shall be equipped with the following items, which may be carried on the tow vehicle:
 - 1) One (1) standard first aid kit/bag mask.
 - 2) Marker buoys with fifty (50) feet throwing line.
 - 3) One (1) anchor with line.
 - 4) One (1) grappling or drag bar with line.
 - 5) One (1) emergency motor tool kit with spark plugs.
 - 6) One (1) bailing device.
 - 7) One (1) waterproof hand light.
 - 8) One (1) line throwing gun (optional).
 - 9) One (1) full backboard (optional).
 - 10) Two (2) twenty-five foot (25') mooring lines.
 - 11) One (1) Fire Department Portable Radio.
 - 3.3 Open Water Rescue Units
 - a) Open water marine fire/rescue units shall consist of a power boat not

exceeding BIA capacity and the following specifications:

- 1) Sixteen (16) up to twenty-five (25) feet in length.
- 2) Seventy-four (74) inch minimum beam.
- 3) One thousand four hundred (1,400) pound minimum carrying capacity.
- 4) Eighteen (18) inch maximum draft.

b) Safety equipment- They shall conform to all appropriate regulations of the U.S. Coast Guard and the Maryland Marine Police for boats of their class, including fire extinguishers, floatation devices, signal devices and the following safety gear:

- 1) Minimum of one (1) 15 lb ABC fire extinguisher and/or minimum one hundred fifty (150) GPM water pump.
- 2) One (1) bailing device.
- 3) Binoculars (7X50).
- 4) Marine compass.
- 5) Fathometer (Optional).
- 6) Global Positioning System (Optional).

c) Radio equipment:

- 1) One (1) marine VHF radio; twelve (12) channels and to include channels sixteen (16) and twenty-two (22).
- 2) One (1) Fire Department Portable Radio.

d) Open water marine rescue units shall be equipped with the following additional equipment, which may be carried on the tow vehicle:

- 1) One (1) trauma kit.
- 2) Two (2) marker buoys with line and anchors.
- 3) Four (4) mooring/utility lines thirty feet (30') by three/eights inch (3/8") nylon.
- 4) One (1) anchor with line one hundred twenty-five feet (125') by one/half inch (1/2") nylon.
- 5) One (1) rescue throwing bag with seventy-five feet (75') nylon line.
- 6) One (1) grappling hook or drag bar.
- 7) One (1) emergency tool kit.
- 8) One (1) ring buoy or rescue tube with line.
- 9) One (1) waterproof hand light.
- 10) One (1) spot/search light.
- 11) One (1) boat hook or eight (8) foot pike pole.
- 12) One (1) pair of oars or paddles.
- 13) One (1) full backboard or rescue sled.
- 14) One (1) bag mask resuscitator or oxygen kit.
- 15) One (1) portable pump (150 GPM minimum with one hundred feet (100') of one and one/half inch (1 1/2") fire hose and combination nozzle (Optional).

3.4 Open Water Marine Fire/Rescue Units

- a) Open water marine fire/rescue units shall consist of a power boat with the following specifications:
 - 1) Twenty-five feet (25') minimum length (may be larger).
 - 2) Eight feet (8') minimum beam.
 - 3) Twenty inch (20") maximum draft.
 - 4) Seventy (70) gallon minimum fuel capacity.
 - 5) Two thousand two hundred (2200) pounds minimum load capacity. Load capacity shall be in excess of motor and fire pump weights.
- b) Power- Total power shall not exceed the BIA rated capacity for the boat.
- c) Safety Equipment- The hull shall be manufactured with floatation and shall comply with all regulations of the U.S. Coast Guard and the Maryland Marine Police for boats of the above class.
- d) The following additional equipment shall be carried:
 - 1) One (1) fifteen (15) lb ABC fire extinguisher.
 - 2) Dual bilge pumps.
 - 3) Binoculars (7X50).
- f) Fire Equipment:
 - 1) Pump capacity five hundred (500) GPM minimum (to meet pump test rating from draft).
 - 2) Hard suction with strainer or thru-hull draft of appropriate size for capacity of pump.
 - 3) One (1) hose one and three-fourths inch (1 ¾") by one hundred fifty feet (150') with sixty (60) GPM nozzle.
 - 4) Two (2) lengths of hose one and one-half inch (1 ½") by fifty feet (50') with sixty (60) GPM nozzle.
 - 5) One (1) length of hose three inch (3") by fifty feet (50') supply line.
 - 6) Pre-piped monitor with fog nozzle.
 - 7) Dual gated two and one-half inch (2 ½") manifold with gauges.
 - 8) One (1) one inch (1") Navy nozzle with applicator and adapter.
 - 9) Foam educator with five (5) gallons of AFFF three percent (3%) foam.
- f) Optional Fire Fighting Equipment:
 - 1) Two (2) fire rated breathing apparatus.
 - 2) Two (2) Nomex marine firefighting suits.
 - 3) One (1) pickhead axe.
 - 4) One (1) pry bar.
 - 5) One (1) pike pole ten feet (10') long.

6) One (1) twenty (20) pound CO2 fire extinguisher.

g) Rescue Equipment:

- 1) One (1) full backboard or rescue sled.
- 2) One (1) bag mask resuscitator or oxygen kit.
- 3) One (1) trauma bag.
- 4) One (1) swim platform or boarding ladder.
- 5) One (1) flare kit.
- 6) One (1) emergency sea anchor.

h) Additional Required Equipment:

- 1) One (1) Danforth type anchor with five/eights inch (5/8") by one hundred fifty feet (150').
- 2) Ground tackle for anchor.
- 3) Four (4) mooring/utility lines one/half inch (1/2") by twenty feet (20').
- 4) One (1) boat hook eight (8) feet long.
- 5) One (1) ring buoy or rescue tube with line.
- 6) One (1) emergency tool kit.
- 7) Four (4) fenders eight (8) inches by twenty (20) inches.
- 8) Four (4) Type II adult Personal Floatation Devices.
- 9) One (1) Type II child Personal Floatation Device.
- 10) Four (4) Type III commercial grade Personal Floatation Devices for crew members.
- 11) One (1) marine compass.
- 12) Two (2) windshield wipers.
- 13) Two (2) floodlights.
- 14) One (1) spot/search light.
- 15) One (1) red and amber emergency light.
- 16) One (1) marine VHF radio (all channel capability).
- 17) One (1) portable Fire Department Radio.
- 18) One (1) electric whistle.
- 19) One (1) six (6) foot paddle.
- 20) One (1) color display depth meter.
- 21) Four (4) marker buoys with anchor and line.
- 22) One (1) rescue line bag.
- 23) One (1) grappling hook or drag bar or drag line system.
- 24) One (1) power hailer (Ten (10) watt minimum).
- 25) Two (2) waterproof hand lights.

i) Optional Equipment:

- 1) One (1) Global Positioning System.

4.0 Forms

4.1 Maintenance Forms

SOP No: S001

Title: Pumpers Standards
Prepared By: Dennis Skinner

Effective Date: 7/1/2011
Approved By: President David Lewis

1.0 Purpose

- 1.1 The purpose of this SOP is to establish the pumper standards for member companies of the Maryland State Firemen's Association.

2.0 Responsibilities

- 2.1 Standards Committee- The MSFA Committee having the responsibility for establishing standards for pumpers operated by members of the MSFA.
- 2.2 The Executive Committee- The MSFA committee having the responsibility of review and oversight of the Standards Committee and for reviewing the initial release and revision of the SOPs of the MSFA.
- 2.3 MSFA President: The officer responsible for final approval of the MSFA SOPs.

3.0 Procedure

- 3.1 A motor pumper of at least 750 GPM capacity (500 GPM if ordered prior to July 1, 1984) listed by ISO or its successors. The vehicle shall meet D.O.T. specifications and shall not exceed chassis manufacturer's G.W.V. The vehicle shall be registered as an emergency vehicle and meet all codes of the Maryland Motor Vehicle Administration or its successors. All apparatus shall be in the preventive maintenance inspection program. Records of inspection under this regulation shall be kept at the location where the vehicle is garaged, assigned, or maintained. The vehicle shall be equipped with NFPA Standards for emergency warning lights and emergency audible devices, including audible back-up alarm, and safety devices. This pumper shall be qualified for acceptance by means of an acceptance test, if new, and a service test, if used. If canopy cab is present, there shall be safety devices at canopy entrance: i.e., door, gate, bar, chain, etc. The pumper shall be in good operational condition, not loaded beyond the maximum allowable gross weight. It shall be equipped as follows:
 - 1) Twenty (20) feet of hard suction and strainer to comply with N.F.P.A. recommendations in existence at the time the apparatus was built. Where adequate water supply exists, twenty (20) feet of soft suction, sized to pump capacity of the pump, with 4 ½" female coupling on one end and pump barrel size on the other end. (MSFA recommends all pumpers carry at least twenty (20) feet of soft suction.)
 - 2) Booster tank to be full and have a minimum capacity of three hundred (300) gallons for companies with approved water

supply and five hundred (500) gallons capacity for companies without approved water supply. Apparatus purchased after July 1991, must have a minimum five hundred (500) gallon booster tank.

- 3) One thousand (1000) feet 2 ½" or larger (NST or twist lock coupling) hose for companies with approved water supply, five hundred (500) feet 2 ½" or larger (NST or twist lock coupling) for companies without approved water supply. Apparatus purchased after July 1991 will carry One thousand two hundred (1200) feet 2 ½" or larger fire hose.
- 4) Two hundred fifty (250) feet 1 ½" to 2" hose (NST coupling). Apparatus purchased after July 1991 will carry four hundred (400) feet 1 ½" to 2" (NST coupling) fire hose.
- 5) One hundred fifty (150) feet ¾" or larger hose, preconnected to apparatus and equipped with combination fog and straight stream nozzle. Thread for any chemical booster hose shall be NST, if apparatus is equipped with booster line. (Items 3,4, and 5 to be tested annually to manufacturer's specifications and carried on pumper at all times).
- 6) One (1) 14 foot minimum roof ladder with folding hooks.
- 7) One (1) 24 foot minimum extension ladder (fire service approved) and one (1) 10 foot folding ladder with bracket.
- 8) Two (2) pike poles, 6 foot and 8 foot minimum.
- 9) One (1) forcible entry bar, 30 inch minimum.
- 10) One (1) pick head axe and one (1) flat head axe (fire department type).
- 11) Two (2) 2 ½" or equivalent nozzles, shut off type with fog tip or combination, 200 GPM and one (1) play pipe with 1", 1 1/8", and 1 ¼" tips.
- 12) Two (2) 1 ½" nozzles, shut off type, with combination fog and straight stream, 95 GPM.
- 13) Two (2) 2 ½" double female couplings.
- 14) Two (2) 2 ½" double male couplings.
- 15) One (1) 2 ½" wye reducer with two 1 ½" shut-off discharges.
- 16) One (1) reducer, 2 ½" female to 1 ½" male.
- 17) One (1) reducer, double female from suction hose size to 2 ½" NST, with swivel.
- 18) Four (4) 2 ½" spanner wrenches.
- 19) Two (2) adjustable hydrant wrenches with bracket.
- 20) Two (2) salvage covers, 12 feet X 14 feet minimum.
- 21) Four (4) ladder straps or rope or chain hose tools.
- 22) One hundred twenty-five (125) feet 9,000 lb. Tensile strength life line kernmantle. All other utility ropes at the discretion of the department.
- 23) One (1) broom.
- 24) One (1) mop.
- 25) One (1) shovel.

- 26) One (1) First Aid Kit per NFPA Pamphlet 1901 or revised editions.
- 27) Two (2) portable electric hand lanterns with mounting brackets.
- 28) Two (2) portable extinguishers, one (1) 80 BC rating powder type, one (1) 10 BC rating CO2 type.
- 29) Four (4) self-contained breathing apparatus (meeting NFPA 1981 requirements), certified for thirty (30) minutes or more of operation, with alarms or timers and spare cylinders for each.
- 30) Warning signals (Light, bell, siren, whistle) to be in good working condition.
- 31) Apparatus shall have a means of communications from rear step to driver (buzzer, bell or intercom).
- 32) A minimum of twelve (12) sets of turn out clothing (coats with liners, boots, gloves, Nomex hoods, and helmets). Boots to have puncture-resistant insoles. Coats, gloves, and helmets to be heat resistant, as approved for fire service. This equipment need not be kept on pumper.
- 33) Audible back-up alarm on all new apparatus.
- 34) All equipment to be maintained ready for service at all times.
- 35) One (1) 2 ½" Underwriters relay fitting with shut off gate and 2 ½" swivel, female threads NST, preconnected to pump.
- 36) Eight (8) thirty minute safety flares.
- 37) All apparatus shall meet Maryland State Department of Transportation standards; lighting, axle loads, tire size, frame capacities, height, length, width, etc.
- 38) One (1) set emergency road triangles (3).
- 39) One (1) each per crew member: Respirator and gloves as recommended by the Center for Disease Control and Prevention, for airborne pathogens.
- 40) One (1) Bio-Hazard Kit, consisting of: four (4) surgical masks, four (4) eye protection devices, four (4) protective gowns, two (2) red bio-waste bags, two (2) yellow bio-waste bags, ten (10) plastic trash bags, twenty-four (24) paper towels, twenty-four (24) clean towelettes, two (2) water-soluble bags, and two (2) cans of foam alcohol scrub.
- 41) Each person riding on the apparatus shall have a Public Safety Traffic Vest with them.

3.2 Annual testing of all Class "A" pumpers and fire hose to meet NFPA 1901 or revised edition. Annual compliance to be handled by County Fire Authorities and results submitted to Standards Committee on forms as provided by MSFA.

4.0 Forms

4.1 Annual Pump Test Form

5.0 Revisions

SOP No: S002

Title: Tanker Standards
Prepared By: Dennis Skinner

Effective Date: 7/1/2011
Approved By: President David Lewis

1.0 Purpose

- 1.1 The purpose of this SOP is to establish the tanker standards for member companies of the Maryland State Firemen's Association.

2.0 Responsibilities

- 2.1 Standards Committee- The MSFA Committee having the responsibility for establishing standards for Pumper Tankers and Tankers operated by members of the MSFA.
- 2.2 The Executive Committee- The MSFA committee having the responsibility of review and oversight of the Standards Committee and for reviewing the initial release and revision of the SOPs of the MSFA.
- 2.3 MSFA President- The officer responsible for final approval of the MSFA SOPs.

3.0 Procedure

3.1 PUMPER-TANKER MINIMUM STANDARDS:

- a) A motor pumper of at least 1,000 GPM pump capacity. The vehicle shall meet D.O.T. specifications and shall meet all codes of the Maryland Motor Vehicle Administration, or its successors, as a registered emergency vehicle. All apparatus shall be in the Preventive Maintenance Inspection Program. Records of inspection under this regulation shall be kept at the location where the vehicle is garaged, assigned or maintained. The vehicle shall be equipped with NFPA Standards for emergency warning lights and emergency audible devices, including audible back-up alarm, and safety devices. If canopy cab is present there shall be safety devices at canopy entrance, i.e. door gate, bar, chain, etc. The safety devices shall be in working order. Standards for pumps are primarily based on NFPA 1901, Standards for Pumper. These pumps are required to have slow closing valves on larger intake and discharge valves, and intake relief system, interlocks to prevent the accidental movement of the apparatus during pumping operations. Gauges should be NFPA approved.

- b) The water tank size will be One thousand five hundred (1,500) usable gallons minimum. Other requirements added for the water tank include: sumps with cleanouts, piping vents and overflows to behind the rear axle, and provisions for quick filling and dumping of any tank over one thousand five hundred five hundred (1,500) gallon capacity. It shall be equipped as follows:

- 1) Two (2) 10 feet hard suction hose with a strainer, a double female swivel connection on one end of the suction hose and on

- the other end should be local large hydrant thread, to comply with NFPA standards in existence at the time the apparatus was built. Twenty (20) feet of soft suction, sized to pump capacity of the pump, with the local hydrant outlet connection on one end and the pump intake connection on the other end.
- 2) Booster tank to be full and have a minimum capacity of one thousand five hundred (1,500) usable gallons. Venting of the tank to capable of handling gallons discharged.
 - 3) Eight hundred (800) feet 2 ½" or larger (NST or twist lock coupling) hose.
 - 4) Four hundred (400) feet of 1 ½" to 2" fire hose. All hose is to be tested annually to manufacturer's specifications and is to be carried on pumper at all times.
 - 5) One (1) 14 foot minimum roof ladder with folding hooks.
 - 6) One (1) 24 foot minimum extension ladder (fire service approved) and one (1) 10 foot folding ladder, which either shall be mounted or compartmentalized.
 - 7) Two (2) pike poles, one (1) 6 foot and one (1) 8 foot minimum.
 - 8) One (1) 30" minimum forcible entry bar, which must be mounted.
 - 9) Two (2) axes, one (1) pick head and one (1) flat head (fire department type), which shall be mounted.
 - 10) Two (2) 2 ½" or equivalent nozzles shut off type with fog tip or combination, 200 GPM.
 - 11) One (1) play pipe 1 ½" with 1", 1 1/8", and 1 ¼" tips.
 - 12) Two (2) 1 ½" nozzles shut off type, with combination fog and straight stream, variable flow.
 - 13) Two (2) 2 ½" double female couplings.
 - 14) Two (2) 2 ½" double male couplings.
 - 15) One (1) hose clamp.
 - 16) One (1) 2 ½" wye reducer with 1 ½" shut-off discharges.
 - 17) One (1) reducer, 2 ½" female to 1 ½" male.
 - 18) One (1) reducer, double female from suction hose size to 2 ½" NST, with swivel.
 - 19) One (1) rubber mallet, suitable for use on suction hose connections.
 - 20) Four (4) combination spanner wrenches with brackets, to be mounted.
 - 21) Two (2) adjustable hydrant wrenches with brackets, to be mounted.
 - 22) Two (2) salvage covers, 12 feet X 14 feet minimum, water repellent.
 - 23) Four (4) ladder straps or rope or chain hose tools.
 - 24) One hundred twenty-five (125) feet 9,000 lb tensile strength lifeline kernmantle. All other utility ropes at the discretion of the fire department.
 - 25) One (1) long handle broom.
 - 26) One (1) long handle mop.

- 27) One (1) long handle shovel.
- 28) One (1) pair, insulated bolt cutters with 7/16" throat opening minimum cut, non-electric.
- 29) One (1) toolbox with hammers, wrenches, screwdrivers, and other assorted tools.
- 30) One (1) First Aid Kit per NFPA pamphlet 1901 or revised edition.
- 31) Two (2) portable electric hand lanterns, with mounting brackets, to be mounted.
- 32) Two (2) portable extinguishers, one (1) 80BC rating powder type, one (1) 10BC rating CO2 type with brackets, to be mounted.
- 33) Four (4) self-contained breathing apparatus (meeting NFPA 1981 standards) certified for thirty (30) minutes or more of operation, with an alarm and a PASS device and spare cylinders for each breathing apparatus. Each firefighter responding on the apparatus must have a set of turn out clothing consisting of a coat with liner, boots with puncture resistant soles, firefighter's gloves, Nomex hood, and helmet approved for fire service. In addition each responder must have a Public Safety Traffic Vest.
- 34) Two (2) wheel chocks mounted in readily accessible location.
- 35) Apparatus shall have a means of communication from rear step to driver (buzzer, bell, or intercom).
- 36) One (1) 2 1/2" underwriters relay fitting with shut-off gate and 2 1/2" swivel, female threads, NST, preconnected to pump.
- 37) Eight (8) thirty (30) minute safety flares.
- 38) One (1) set of three (3) emergency road triangles.
- 39) One (1) 2 1/2" quarter turn valve, relay valve.
- 40) One (1) siamese (2 1/2" female X 2 1/2" female X 2 1/2" male, clappered).
- 41) One (1) two-way radio to meet county standard with outside speaker and microphone or headset at the pump panel for convenience of the pump operator.
- 42) All equipment to be maintained ready for service at all times.
- 43) At the rear of the tank, 4 1/2" or greater size gated discharge gravity or jet dump NST. (Optional)
- 44) One (1) portable tank with capacity of holding the water of the pumper tanker. (Optional)

3.2 TANKER MINIMUM STANDARDS-TANKER WITH PUMP

a) The vehicle shall consist of a motorized piece of apparatus of minimum capacity to carry the equipment listed below without being overloaded. The vehicle shall meet D.O.T. specifications and shall not exceed chassis manufacturer's G.V.W. The vehicle shall be equipped with an audible back-up alarm and necessary warning devices. It must be registered as an emergency vehicle and meet all codes of the Maryland Motor Vehicle Administration or its successors. All apparatus shall be in the preventive maintenance inspection program. Records of inspection under this

regulation shall be kept at the location where the vehicle is garaged, assigned, or maintained. The vehicle shall be equipped with NFPA Standards for emergency warning lights and emergency audible devices, including back-up alarm, and safety devices. If canopy cab is present, there shall be safety devices at canopy entrance: i.e., door, gate, bar, chain, etc., in working order. The tanker should be in good operating condition. The vehicle must meet MSFA standards, which are primarily based on NFPA 1903. It shall be equipped as follows:

- 1) Tank capacity one thousand five hundred (1500) usable gallons, or larger.
- 2) Pump, five hundred (500) GPM with relief valve and one (1) 1 ½ inch gated inlet, and two (2) 2 ½ inch discharges, or P.T.O. pump used with jet dump capable of dumping at least five hundred (500) GPM. All threads to be NST. Apparatus purchased after July 1991, will have a seven hundred fifty (750) GPM pump.
- 3) Piping tank to pump, five hundred (500) GPM flow.
- 4) Tank refill, five hundred (500) GPM flow.
- 5) Venting of tank to be capable of handling gallons discharged.
- 6) Fill tower, top of tank, to be a minimum of 5" with quick release lid.
- 7) Two hundred (200) feet 1 ½" or larger fire hose and nozzle.
- 8) Two hundred (200) feet 2 ½" fire hose.
- 9) Two (2) wheel chocks mounted readily accessible locations.
- 10) Two (2) hydrant wrenches.
- 11) Two (2) spanner wrenches.
- 12) Two (2) hand lights.
- 13) One (1) rubber mallet.
- 14) Two (2) 2 ½" double females.
- 15) Two (2) 2 ½" double males.
- 16) One (1) 2 ½" female X 1 ½" male.
- 17) Assorted hose gaskets.
- 18) One (1) fire extinguisher, 80BC rated, powder type, and vehicle bracket.
- 19) One (1) shovel.
- 20) Eight (8) road safety flares.
- 21) One (1) first aid kit per NFPA Pamphlet 1903.
- 22) One (1) two way radio to meet county standards with outside speaker and microphone.
- 23) One (1) set emergency road triangles (3 each).
- 24) One (1) each per crew member: Respirator and gloves as recommended by the Center for Disease Control and Prevention, for airborne pathogens. Each firefighter, responding on the apparatus must have a set of turn out clothing consisting of a coat with liner, boots with puncture resistant soles, firefighter's gloves, Nomex hood, and helmet approved for fire service. In addition, each responder must have a Public Safety Traffic Vest.
- 25) One (1) Bio-Hazard Kit, consisting of four (4) each surgical

masks, four (4) each eye protection devices, four (4) each protective gowns, two (2) red bio-waste bags, two (2) yellow bio-waste bags, ten (10) plastic trash bags, twenty-four (24) paper towels, twenty-four clean towelettes, two (2) water-soluble bags, and two cans of foam alcohol hand scrub.

3.3 TANKER MINIMUM STANDARDS- TANKER WITHOUT PUMP

a) The vehicle shall consist of a motorized piece of apparatus of minimum capacity to carry the equipment listed below without being overloaded. The vehicle shall meet D.O.T. specifications and shall not exceed chassis manufacturer's G.V.W. rating. The vehicle shall be registered as an emergency vehicle and meet all codes of the Maryland Motor Vehicle Administration or its successors. All apparatus shall be in the preventive maintenance inspection program. Records of inspection under this regulation shall be kept at the location where the vehicle is garaged, assigned, or maintained. The vehicle shall be equipped with NFPA Standards for emergency audible devices, including back up alarm, and safety devices. If a canopy cab is present, there shall be safety devices at canopy entrance: i.e., door, gate, bar, chain, etc. It shall be equipped as follows:

- 1) Tank capacity: One thousand five hundred (1,500) usable gallons or larger.
- 2) Discharge at five hundred (500) GPM flow with capacity of connecting suction hose from pumper.
- 3) Venting tank to be capable of handling five hundred (500) gallons discharging and filling.
- 4) Fill tower at top of tank to be a minimum of five inch (5") width, with quick release.
- 5) One hundred (100) feet 2 ½" fire hose for refilling.
- 6) One (1) wheel chock.
- 7) Two (2) hydrant wrenches.
- 8) Two (2) spanner wrenches.
- 9) Two (2) hand lights.
- 10) One (1) rubber mallet.
- 11) Two (2) 2 ½" double females.
- 12) Two (2) 2 ½" double males.
- 13) One (1) extinguisher, BC rated, powder type, with vehicle bracket.
- 14) Eight (8) safety flares.
- 15) One (1) first aid kit per NFPA 1903.
- 16) One (1) set emergency road triangles (3 each).
- 17) One (1) each per crew member respirator and gloves as recommended by the Center for Disease Control and Prevention, for airborne pathogens. Each firefighter responding on the apparatus must have a set of turn out clothing consisting of a coat with liner, boots with puncture resistant soles, firefighter's gloves, Nomex hood, and helmet approved for fire service. In addition each responder must have a Public Safety Traffic Vest.

18) One (1) Bio-Hazard Kit, consisting of: four (4) each surgical masks, four (4) eye protection devices, four (4) protective gowns, two (2) red bio-waste bags, two (2) yellow bio-waste bags, ten (10) plastic trash bags, twenty-four (24) paper towels, twenty-four (24) clean towelettes, two (2) water-soluble bags, and two (2) cans of alcohol hand scrub.

3.4 TANKER EQUIPMENT-SUGGESTED-NOT MANDATORY

- 1) Folding tank.
- 2) Hard suction hose.
- 3) Soft suction hose.
- 4) Shallow drafting strainer.
- 5) Two (2) self-contained breathing units.
- 6) One (1) 2 ½" nozzle.
- 7) One (1) tool box and necessary tools.
- 8) Two (2) axes, one (1) flathead and one (1) pick head.
- 9) One (1) forcible entry bar.
- 10) One (1) ten foot pike pole.
- 11) One (1) ladder.
- 12) One (1) salvage cover, 12' X14'.
- 13) Rear of tank, a minimum 4 ½" gated discharge, gravity or jet dump, NST.
- 14) One (1) 2 ½" quarter turn valve.

4.0 Forms

4.1 Maintenance Records

5.0 Revisions

SOP No: S003

Title: Ladder Truck Standards
Prepared By: Dennis Skinner

Effective Date: 7/1/2011
Approved By: President David Lewis

1.0 Purpose

1.1 The purpose of this SOP is to establish the ladder truck standards for member companies of the Maryland State Firemen's Association.

2.0 Responsibilities

2.1 Standards Committee- The MSFA Committee having the responsibility for establishing standards for Pumper Tankers and Tankers operated by members of the MSFA.

2.2 The Executive Committee- The MSFA committee having the responsibility of review and oversight of the Standards Committee and for reviewing the initial release and revision of the SOPs of the MSFA.

2.3 MSFA President- The officer responsible for final approval of the MSFA SOPs.

3.0 Procedure

3.1 The vehicle shall meet D.O.T. specifications and shall not exceed manufacturer's G.V.W. The vehicle shall be registered as an emergency vehicle and meet all codes of the Maryland Motor Vehicle Administration or its successors. All apparatus shall be in the preventive maintenance inspection program. Records of inspection under this regulation shall be kept at the location where the vehicle is garaged, assigned, or maintained. The vehicle shall be equipped with NFPA Standards for emergency warning lights and emergency audible devices, including audible back-up alarm, and safety devices. If canopy cab is present the entrance must be equipped with a safety device, i.e.; door, gate, bar, chain, etc. The vehicle must meet MSFA Standards, which are primarily based on NFPA 1904, Standards for Aerial Apparatus.

The ladder truck may consist of a hydraulic aerial ladder or a hydraulic platform with a minimum of sixty-five (65) feet above ground level.

Testing of aerial and ground ladders and safety belts is to be done by authorized personnel and records are to be maintained.

The following equipment shall be maintained on the truck:

- 1) One hundred fifteen (115) feet of ground ladders (MSFA recommends one hundred sixty-three (163) feet).
- 2) Six (6) pike poles: two (2) 6 feet, two (2) 8 feet, and two (2) 12 feet.
- 3) Five (5) Axes: three (3) pick head and two (2) flat head.
- 4) Four (4) Electric Hand Lights

- 5) Four (4) Shovels: two (2) scoop and two (2) dirt
- 6) Two (2) Brooms, two (2) Mops, and two (2) Squeegees.
- 7) One (1) Heavy Duty Staple Gun.
- 8) Two (2) Prybars, 50" minimum.
- 9) Forcible entry tools.
- 10) Two (2) Life Lines, One hundred fifty (150) feet 5/8" and One hundred fifty (150) feet 1/2", plus two (2) One hundred fifty (150) feet Utility Lines (Three thousand {3000} lb. tensile strength Kernmantle).
- 11) Two (2) rolls eight (8) mil. (.008) Plastic- Minimum fifteen lb. roll.
- 12) One (1) Bucket and mop wringer.
- 13) One (1) can (at least three (3) lbs.) assorted nails.
- 14) Six (6) Sprinkler stops, with wrench.
- 15) Four (4) Spanner wrenches, assorted sizes.
- 16) One (1) insulated, heavy duty Wire Cutter, #6 wire.
- 17) One (1) Carpenter's Hand Saw or Power Saw.
- 18) One (1) Hacksaw with three (3) blades.
- 19) One (1) Power Saw with carbide blade.
- 20) Assorted wood plugs.
- 21) One (1) "K" Tool Door Opener.
- 22) Four (4) Life Belts, assorted sizes.
- 23) Two (2) pitch forks, four (4) prongs.
- 24) One (1) First Aid Kit, to meet First Responder requirements.
- 25) Two (2) Sledge Hammers, minimum eight (8) lb.
- 26) Three (3) pairs Safety Goggles.
- 27) One (1) Generator (AC), minimum five thousand (5,000) watts.
- 28) Three (3) five hundred (500) watt Floodlights.
- 29) Five hundred (500) feet Electrical Cable, minimum 12-3.
- 30) Two (2) five thousand (5,000) CFM 16" or one (1) eleven thousand (11,000) CFM 24" Smoke Ejectors, explosion proof motors.
- 31) Two (2) 2 1/2" double female Hose Adapters.
- 32) Two (2) 2 1/2" double male Hose Adapters.
- 33) Six (6) thirty (30) minute Road Flares.
- 34) One (1) Chimney chain with Chimney Brush.
- 35) Two (2) Metal Buckets, minimum twelve (12) quart.
- 36) One (1) Chimney Shovel.
- 37) Four (4) Masks, self-contained, with audible alarm and four (4) spare bottles (NFPA 1981 Approved). (One {1} self-contained Breathing Apparatus complying with NFPA 1981, open circuit self-contained breathing apparatus for firefighters, for each seating position {see section 2-1} but not less than four {4}).
- 38) Three (3) Portable Fire Extinguishers, in mounting brackets, one (1) twenty (20) lb. ABC, one (1) fifteen (15) lb. CO2, and one (1) 2 1/2 gallon water.
- 39) Eight (8) Rope hose tools or ladder straps.
- 40) One (1) detachable or permanently mounted Ladder Pipe on end of ladder, with stack tips and fog nozzle, five hundred (500) GPM or more.
- 41) One (1) Hammerhead Wall Pick.
- 42) One (1) Bolt Cutter, minimum 36".
- 43) One (1) Two-way Siamese, with shut off valve, 2 1/2" or larger.

- 44) One hundred (100) feet three 3” fire hose for ladder pipe or have built-in piping.
- 45) Two-way communication from ground to tip of fly of ladder or basket.
- 46) Communication from rear step to cab.
- 47) Two-way radio with local county frequencies.
- 48) One (1) Tool box containing the following small tools for fireground operation (NFPA 1904): One (1) Hacksaw, with blades; One (1) Keyhole Saw, One (1) 12 inch (305mm) Pipe Wrench; One (1) 24 inch (610mm) Pipe Wrench; One (1) Ball Peen Hammer; One (1) pair Tin Snips; One (1) pair Slip Joint Pliers; One (1) pair Lineman’s Pliers; Assorted types and sizes of screwdrivers (flat blade and phillips); Assorted sizes of Adjustable Wrenches; and Assorted sizes of Combination Wrenches.
- 49) One (1) Hose Roller.
- 50) One (1) set Emergency Road Triangles (3).
- 51) One (1) each per crewmember: Respirator and gloves as recommended by the Center for Disease Control and Prevention, for airborne pathogens. Each firefighter responding on the apparatus must have a set of turn out clothing consisting of a coat with liner, boots with puncture resistant soles, firefighter’s gloves, Nomex hood, and helmet approved for fire service usage. In addition, each responder must have a Public Safety Traffic Vest.
- 52) One (1) Bio-Hazard Kit, consisting of: Four (4) each surgical masks, Four (4) each eye protection devices and Four (4) protective gowns, Two (2) red Bio-waste bags, Two (2) yellow Bio-waste bags, Ten (10) plastic trash bags, Twenty-four (24) paper towels, Twenty-four (24) clean towelettes, Two (2) water-soluble bags, and Two (2) cans of foam alcohol hand scrub.

4.0 Forms

4.1 Maintenance records

5.0 Revisions