



Standard Operating Guideline	
SOG Name:	Incident Safety Officer
SOG Number:	100.2
Standard:	TBD
Guideline Owner:	Emergency Operations – Incident Operations
Implementation Date:	July 31, 2017
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Authority:	Larry H. Williams, Jr, Fire Chief

PURPOSE: The Incident Safety Officer (ISO) position is integral to the safety of all members operating at an emergency incident scene. This guideline is prepared so that department members have a reference to perform their position as an ISO if assigned based upon current Dothan Fire Department (DFD) Standard Operating Guideline (SOG) and/or DFD policy, assigned by an incident commander (IC), or as required by incident type (hazardous materials incident, member of an Incident Management Team during deployments, etc.). *This guideline in no way diminishes the responsibility of each member’s commitment to safe work behaviors and to work within SOGs at all times.*

A. GENERAL

SECTION 1

An ISO should be appointed to manage the incident safety program at all emergency scenes.

SECTION 2

The IC is the ISO until the ISO responsibilities are delegated either by SOG and/or assigned by the IC. The incident commander has overall responsibility for the safety of responders working at an emergency incident.

SECTION 3

The ISO is a member of the command staff working at a particular emergency incident. Based on the complexity and/or the geography of the incident, assistant ISO’s may be assigned. The ISO is responsible for developing the risk assessment and safety plan for that incident.

- The assigned ISO has the authority to alter, suspend and/or terminate any unsafe acts, which involve imminent hazard occurring at the incident scene. The ISO shall immediately notify the IC of any actions requiring corrections.
- The assigned ISO that identifies an unsafe condition, operations or hazards that do not present an imminent hazard shall take appropriate action through the IC.
- Assistant ISO’s (AISO) shall be granted the same authority for the incident.

B. POSITION QUALIFICATIONS

SECTION 1

Prior to serving as an ISO, members shall meet the following criteria:

- A Fire Sergeant/Engineer for more than one (1) year or above
- Certified as a Fire Officer I (NFPA 1521)
- Completed the 40-hour Alabama/Pro-Board Incident Safety Officer certification course or NFA ISO course (16 hours)

- Have the knowledge, skills, and abilities (KSAs) to manage incident scene safety to include KSAs of the IAFC Rules of Engagement for Structural Firefighting and the NFFF Life Safety Initiatives)
- Have and maintain a knowledge of safety and health hazards involved in emergency operations
- Have and maintain a knowledge of building construction
- Have and maintain a knowledge of the personnel accountability system
- Have and maintain a knowledge of incident scene rehabilitation

C. RESPONSE GUIDELINES

SECTION 1

The designation of an ISO shall follow DFD SOG's and policies.

- Structure Fire Responses: normally the second-in engine company officer will assume ISO unless changed by the incident commander (i.e. need for immediate rescue, additional water supply, etc) OR the second-in company officer identifies a shortfall (i.e. only three members on unit)
- Multi-Story/High Rise Fire: An ISO will be designated by the IC
- EMS (multiple unit responses): An ISO will be designated by the IC
- Technical Rescue (Rope, Confined Space, Trench, Structural Collapse, Water and Extrication): An ISO will be designated by the IC
- HazMat Level II Response: two safety officers will be identified by the IC: An ISO and a HazMat Group Safety Officer
 - Level I HazMat incidents will be designated by the IC

SECTION 2

Training & Safety Division members and staff officers may be appointed to ISO positions as required based on incident needs. Every Officer should be prepared to function as the ISO when assigned by the IC.

D. ISO FUNCTIONS

SECTION 1—INCIDENT MANAGEMENT SYSTEM

NFPA 1561 states, "The IC shall ensure that adequate safety measures are in place." In the DFDs Command and Control Incident Management System, the IC is responsible for the safety and welfare of all members, other first responders, and citizens that are on-scene at an incident. Based on the size, complexity, and Operational SOGs, the IC must delegate responsibilities that include safety. The incident command system can be expanded to include functions necessary to effectively command and control an incident. Though the IC is still responsible for the safety and welfare of all on-scene at the incident, this responsibility is delegated to the ISO.

The ISO is a member of the incident management command team and should complete safety strategies & tactics based upon the incident type and DFD guidelines. The ISO is responsible for developing and managing the incident safety plan based on the hazards (or possible hazards) at the incident. The ISO should be readily identifiable at the scene and should utilize available tactical worksheets and/or checklists (see Addendums 1 & 2).

SECTION 2—INCIDENT SCENE SAFETY

The ISO is responsible for the following at an incident scene:

1. Upon arrival, conduct a 360 degree evaluation/reconnaissance of the incident and report to IC to verify/confirm:
 - 1) Overall situation status and resource status
 - 2) The current mode of operation (Strategy) and Incident Action Plan (IAP)
 - 3) Known hazards and concerns and the establishment of control zones
 - 4) Leave personal accountability tag and conduct face-to-face communication with IC.
2. Don the Personal Protective Equipment (PPE) appropriate for the potential hazards that he/she will be exposed to.
3. Monitors conditions, activities, and operations to whether they fall into the criteria of the department's risk management plan
4. Ensures that an incident rehab has been established in accordance with department guidelines and policies
5. Will monitor the scene and report the status of conditions, hazards, and risk to the IC
6. Will ensure that the personnel accountability system is being utilized
7. Will ensure that established control/safety zones, collapse zones, hot zone and other designated hazards areas are identified and communicated to all members present on the scene. Hazard tape will be used whenever at all possible.
 - Yellow—keep non-firefighters, responders out of hazard zone
 - Red—all personnel do not enter without explicit permission from IC
8. One of the important functions of an ISO is to offer judgment about the collapse potential of buildings during incidents.
9. Will evaluate motor vehicle scene traffic hazards and apparatus placement and take necessary actions to mitigate hazards
10. Will monitor radio transmission barriers that could result in missed, unclear or incomplete communications
11. Will communicate to the IC the need for assistant ISO's due to need, complexity or duration of the incident
12. Will survey and evaluate the hazards associated with the designation of a landing zone.
13. **Any designated ISO must perform these functions, duties and responsibilities when assigned by the IC or SOG. Member's must remove themselves' from the thought process of being a tactical officer and concentrate on safety concerns.**

SECTION 3—FIRE SUPPRESSION

The ISO upon arrival at the incident scene will:

1. Will ensure that a rapid intervention crew (RIC) is established and that the RIC has the appropriate number of crew members and appropriate equipment to meet the needs of the incident
2. Advise the IC of hazards, collapse potential, and any fire extension within the involved building or buildings

3. Evaluate visible smoke and fire conditions and advise the IC, tactical management officers, and company officers for the potential of a hostile fire events (flashover, backdraft, smoke explosion, and rapid fire spread) or other fire event that could pose a threat to operating teams
4. Will monitor the accessibility of entry and egress of structures and the effect it has on the safety of members to conducting interior operations
5. The ISO assumes the role of initial RIC Leader in the case of a MAYDAY

SECTION 4—EMERGENCY MEDICAL SERVICES OPERATIONS

The ISO, upon arrival and designation at the incident scene will:

1. Follow the provisions as outlined in Section D.1 & D.2 of this SOG
2. Ensure compliance with the DFD Infection control plan
3. Ensure that critical incident stress management is considered and established as needed, especially with mass casualty incidents

SECTION 5—HAZARDOUS MATERIALS OPERATIONS

The ISO, upon arrival and designation at the incident scene will:

1. Meet the provisions as outlined in Section D.1 & D.2 of this SOG
2. Hazardous Materials ISO will meet the requirements of NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*
3. Attend strategic and tactical planning sessions and provide input on risk assessment and member safety
4. Ensure a safety briefing, incident action plan (IAP) and an incident safety plan are developed and made available to all members on scene
5. Verify that all members are in correct PPE for the operation and the IAP/Safety Plan is being adhered to at all times.
6. Ensure that all zone designations (hot, warm, cold and other) are clearly marked and communicated to all members

SECTION 6—TECHNICAL RESCUE OPERATIONS

The ISO, upon arrival and designation at the incident scene will:

1. Meet the provisions as outlined in Section D.1 & D.2 of this SOG
2. If a technical rescue operation, the tech rescue ISO will meet the requirements of NFPA 1670, *Standard for Professional Competence of Responders to Technical Rescues* and, if possible be a member of the DFD Technical Rescue Team
3. Attend strategic and tactical planning sessions and provide input on risk assessment and member safety
4. Ensure a safety briefing, incident action plan (IAP) and an incident safety plan are developed and made available to all members on scene
5. Ensure that all zone designations (hot, warm, cold and other) are clearly marked and communicated to all members

SECTION 7—ACCIDENT INVESTIGATION & REVIEW

1. Upon notification of a member injury, illness or exposure, the ISO will immediately communicate to the IC to ensure EMS care is provided

2. The ISO will initiate the accident investigation procedures as indicated in DFD Operations SOG 120.4 and DFD Policy #11
3. In the event of a serious injury, fatality, or other harmful occurrence, the ISO shall notify the Chief of Training & Safety by voice (radio and/or phone) and request assistance.

SECTION 8—POST INCIDENT ANALYSIS

1. The ISO will participate in the post incident analysis—informal and formal.
2. The ISO will prepare a written report (See Addendum 2) for the formal post incident analysis that includes pertinent information about the incident in relation to safety and health issues.
3. The ISO will include information about issues relating to the use of PPE, accountability system, rapid intervention crews, rehab operations and other issues affecting the safety and welfare at the incident scene

E. SAFETY INTERVENTION**SECTION 1**

Intervention at incident operations involves three approaches: Life threatening, non-life threatening, and on-going incident planning process

SECTION 2—Life Threatening Conditions

Life-threatening (imminent) conditions will be corrected immediately and directly by the ISO. Where time permits, the IC must be notified and corrective action will be initiated by Command immediately.

1. In situations where there is not enough time to notify the IC, the ISO shall immediately stop any action or countermand any order under these circumstances by DIRECT and IMMEDIATE intervention (i.e. orders crews out of a building, countermands an order for crews to go to the roof, etc). Such action may be taken with the understanding that the ISO works for the IC and is accountable to the IC for actions taken. **COMMAND MUST BE IMMEDIATELY ADVISED OF ANY DIRECT INTERVENTION BY THE ISO UNDER THESE CIRCUMSTANCES**
2. A change of strategy and/or tactics by Command or Division/Group/Unit leaders may be required as a result of the ISO's actions. All operating on the incident scene must be notified of hazards, required safety corrections or an updated IAP (objectives, strategies, tactics & tasks)
3. Also known as Firm Intervention—immediately stop, alter or suspend an action or operation due to imminent threat¹

SECTION 3—Non-Life Threatening Conditions

Non-Life threatening situations involve a more “one-on-one” correction of safety problems with individuals--firefighters, company officers, and/or division/group leaders. This is the most frequent type of intervention and normally does not affect incident strategy.

¹ Imminent threat—an activity, condition, or inaction that will most certainly lead to injury or death

1. Examples include but are not limited to: wear of SCBA (including the mask); correct ladder position, wear of a safety vest
2. Where corrective action does not affect the strategy; the IC may not have to be notified. Corrected items should be noted for discussion at a post incident analysis
3. Also known as a soft intervention—aware that a hazard exists

SECTION 4—On-going incident planning

During long duration, higher complexity, larger area operations are on-going, several assistant safety officers may be needed and utilized. The ISO will need to ensure that a safety plan is in place and/or review or establish a safety plan. The IC based on the incident may ask the SO to develop a proposed plan and recommendations for the IC.

1. Command must be kept aware of any adjustments that affect overall incident site operations through frequent and timely progress reports
2. Consideration for a Safety Section within the IMS may be considered (span of control of Assistant ISOs (AISO))
3. Safety must remain a part of the on-going planning process with Command and/or the SO
4. Utilize NIMS compliant planning process (Planning P) and forms (ICS 215A, etc)

(Signature on File)

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Fire Chief

DOTHAN FIRE DEPARTMENT

Addendum 1
Incident Safety Officer Worksheet—Fire Suppression

Incident Name: _____
 Incident Date: _____
 Incident Time: _____
 Location: _____

Incident Type:
Fire Residential Commercial
 Outdoor Fire Vehicle
 Other _____

Elapsed Time on Scene
 10 20 30 40 50 60 2hr 3hr 4hr

Weather Conditions
 Time: _____ Wind Direction: _____
 Temp _____ Wind Speed: _____
 Wind Chill: _____ Precipitation: _____
 Humidity: _____ Heat Index: _____

Incident Potential
 Incident Under Control Incident needs Additional resources

Personnel
 ___ Appropriate PPE in use
 ___ SCBA in use? Adequate supply of bottles
 ___ Air monitoring for Overhaul
 ___ Any personnel / team free lancing
 ___ All personnel in teams or crews
 ___ Personnel assigned, in staging or rehab
 ___ # of personnel on scene
 ___ # units on scene
 ___ Injuries / exposures / fatalities
 ___ CISM

The Building
 Occupancy Type: _____
 Occupied Unoccupied

Collapse Signs
 ___ Truss Construction
 ___ Under construction/renovation
 ___ Older Building
 ___ Special hazards What? _____

Utilities: Gas _____ Electric _____
 Master Streams in Place? How long? _____
 Burn time? _____
 HazMat? What _____

Diagram of Incident
Wear full PPE & Stay Upwind

NOTES:

Safety Officer Check-In
 Report to IC

Command Post <input type="checkbox"/> Set Up <input type="checkbox"/> Visible <input type="checkbox"/> Safe Location	<input type="checkbox"/> Briefing on IAP <input type="checkbox"/> Appropriate Risk <input type="checkbox"/> Resources sufficient for IAP
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Is strategy clear? Offensive Defensive
 Safety Officer ID Vest Helmet
 360 Recon—stop, alter, or suspend any operation posing imminent threat to personnel—report these to IC immediately
 ___ Conditions
 ___ Hazards
 ___ Risks

Check in with Div / Group / Unit Officers
 Utilities secured
 Accountability system in place
 RIC briefed, equipped & in place
 Adequate lighting
 Medical unit established for personnel
 Rehab established
 Develop Incident Safety Plan

Zones of Control Entry
 ___ Collapse Zones Egress
 ___ Safety Zones Roof Ops
 ___ Zones Identifiable

Apparatus placement Traffic control/hazards
 Monitor Communications

Fire Conditions
 Smoke: Color _____ Volume _____
 Velocity _____
 ___ Backdraft potential ___ Smoke Explosion
 ___ Flashover potential ___ Rapid Fire Spread
 ___ Structural integrity

Review and revise IAP & incident safety plan
 Provide safe location for media

Addendum 2
ISO Incident Checklist/Report

Safety Officer: _____ Incident Number: _____ Date: _____
Response Type: _____ Location: _____
Incident Commander: _____ Div/Group Leaders: _____
Time of Incident (1): _____ ISO on Location (2): _____ Elapsed Time (2-1): _____

ISO Duties

- (1) Assume ISO per SOG and/or report to IC. Discuss incident (strategy, IAP & safety plan)
- (2) Complete 360° of incident & establish a parameter (yellow fire line tape), checking the following items as they relate to safety. Advise IC of risk assessment.

√ = **OK** **X** = **issue** ○ **Circle applicable items**

Strategy & Tactics

- Offensive / Defensive / Marginal
- Crews following IC strategy
 - Ventilation (vertical, horizontal, fans, crew locations, means of egress—windows/doors, smoke conditions—volume / velocity / density / color)
- Incident layout (site drawing, crew locations, RIC locations)
- Risk management (is the action necessary)

Hazards

- Utilities: Water / Gas / Electric / LP gas tanks
- Environmental: heat / cold / rain / wind / snow / ice
- Structural Conditions: roof / walls / floors / facades / signs / other construction features

- (3) After the initial incident assessment, continue to observe all listed items as well as others that might affect the safety of personnel, include the following (periodically check back with IC):

- Accountability: PAR / RIC in place /
- PPE: Helmets / Gloves / SCBA / SCBA Masks / Turnouts
- Communications: radios / face-to-face / crews / divisions/ groups / sections
- Hazard Control Zones: Red-collapse zone / yellow-limited access zone
- Rehabilitation: location / fluids / active cooling / shelter / EMS / crew rotation (2 bottles)
- Ladders: selection / placement / secured / hazards—wires, footing / two means of egress
- Equipment/Appliance use: selection/placement of hoselines / water supply / tools / lighting / safety
- Apparatus: placement / collapse/heat zone / staging / effectiveness, enough resources

- (4) **Exercise emergency authority to immediately stop, alter or suspend an action or operation due to imminent threat or unsafe acts—notify IC immediately/ as soon as practical—ensure all personnel are aware of any special circumstances or imminent threat**

(5) Other Considerations:

- a. In other non-imminent (non-life threatening) unsafe acts, one-on-one intervention may be best to fix the issue. IC may or may not be notified if it does not impact strategy; post incident analysis process may be a good place to review.
- b. Be aware of the need for CISM
- c. In the event of an accident/injury, the ISO is responsible for initiating the investigation process per DFD SOG #23 and DFD Policy #11. The following actions should be considered and completed if necessary:
 - i. Treat and transport as necessary
 - ii. Scene preservation
 - iii. Secure PPE/equipment, consider evidence
 - iv. Document scene with photos
 - v. Scene sketch
 - vi. Witnesses & statements

(6) Resources

- | | | | | |
|---------------------------------------|--|------------------------------------|-----------------------------------|--------------------------|
| <input type="checkbox"/> Investigator | <input type="checkbox"/> Police | <input type="checkbox"/> Ambulance | <input type="checkbox"/> Electric | <input type="checkbox"/> |
| SEAL Gas | | | | |
| <input type="checkbox"/> Engineer | <input type="checkbox"/> Heavy Equipment | <input type="checkbox"/> HazMat | <input type="checkbox"/> TRT | |

Scene Sketch (street names, apparatus, hose lines, hydrants, direction, etc)