

NUCLEAR DETONATION – 10-KILOTON IMPROVISED NUCLEAR DEVICE

SCENARIO

Your hospital is located approximately 15 miles from the center of a major metropolitan area and is near a major highway and evacuation route for the city. The Universal Adversary terrorist group detonates a 10-kiloton improvised nuclear device in the middle of the city. The detonation causes major destruction in the downtown district and there is widespread radioactive fallout. The electrical power grids have been damaged by the electro-magnetic pulse of the detonation and there is no power in the city or the surrounding areas. Normal communication systems (land lines, internet) are non-functional. People in the immediate area are heavily exposed and are contaminated with large doses of radiation. Thousands of victims are self-evacuating the city along the major highways.

Your hospital sustains superficial damage to the exterior of the building, but the integrity of the structure is intact. You have no external power, and generators are providing emergency power to critical areas and systems. Normal communication systems are non-functional. Many patients, visitors, and staff sustain injuries from flying glass and other debris due to the blast impact.

Current weather conditions and wind direction put your hospital in the projected path of the radioactive plume. You are notified by local fire officials that you must shelter-in-place immediately and prepare for eventual evacuation of the facility.

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INCIDENT PLANNING GUIDE

Does your Emergency Management Plan Address the following issues?

Mitigation & Preparedness

1. Does your hospital have defined criteria to determine whether to shelter in place or evacuate (partial vs. complete evacuation of facility)?

2. Does your security department receive regular training on managing facility security and personal protection during a radioactive event?

3. Does your hospital have a plan for decontamination of radiologically contaminated victims and equipment, including monitoring of staff and decontamination of the facility?

4. Does your hospital have a procedure for individually controlling HVAC and return air for impacted areas?

5. Has your hospital identified key equipment and system to remain operational when your facility is solely relying on generator power?

Response & Recovery

1. Does your hospital have a procedure/system to obtain current information from local officials about the detonation (e.g., plume direction, weather considerations, damage assessments, progress reports, etc.)?

2. Does your hospital have a plan and alternate communication systems in place to communicate with and determine status of other area hospitals and maintain contact with officials?

3. Does your hospital have a protocol to regularly re-evaluate shelter-in-place vs. evacuation, and coordinate decision-making with local officials?

4. Does your hospital have a process to contain or divert water run off collection and disposal in conjunction with local EPA and local water authority, and appropriately notify authorities when decontamination is activated?

5. Does your hospital have a plan and system to decontaminate radiologically contaminated victims?

6. Does your hospital have a security plan to secure/lockdown the facility and to manage the influx of victims?

7. Does your hospital have a procedure to perform a detailed physical assessment and inspection of the facility to determine damage from the bomb blast, radioactive fallout and other system damage?

8. Does your hospital have a plan and adequate supplies to maintain generator emergency power for an extended period?

9. Does your hospital have a plan to address fatality issues (i.e., mass fatalities, contaminated remains) in conjunction with the medical examiner and the local emergency management agency?

10. Does your hospital have procedures to re-evaluate infrastructure's ability to continue to maintain/continue medical mission and take corrective actions?

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11. Does your hospital have a procedure to obtain services of local or regional Critical Incident Stress Management (CISM) team or equivalent?

12. Does your hospital have a recovery plan and procedures to prioritize system recovery activities, including repair and decontamination of the facility, communicating, educating and monitoring staff, restoration of communication and power systems, repatriation of patients (if evacuated)?

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INCIDENT RESPONSE GUIDE

Mission: To safely manage in the aftermath of a 10-kiloton improvised nuclear device detonation that occurs within the region.

Directions

- Read this entire response guide and review incident management team chart.
 - Use this response guide as a checklist to ensure all tasks are addressed and completed.
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Objectives

- Obtain incident specific details.
 - Consider shelter-in-place vs. evacuation.
 - Obtain radiation survey meters.
 - Obtain information on contamination zone locations or potential radioactive plume or fallout path.
 - Identify patient/staff decontamination area.
 - Identify patient triage and medical management area.
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Immediate (Operational Period 0-2 Hours)

COMMAND

(Incident Commander):

- Activate the Emergency Management Plan and the Hospital Command Center.
- Assess the incident and facility needs and activate HICS Command staff and Section Chiefs.

(PIO):

- Communicate the local PIOs and other officials to gather information and status of the event.
 - Establish a media staging area.

(Liaison Officer):

- Contact appropriate local and state authorities to provide hospital status and request information and technical assistance from radiation experts and resources.
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INCIDENT RESPONSE GUIDE

COMMAND

(Safety Officer):

- ❑ Conduct ongoing analysis of existing response practices for health and safety issues related to staff, patients, and facility, and implement corrective actions to address.

(Medical/Technical Specialist – Radiological):

- ❑ Identify radiological exposure agent. Coordinate treatment and decontamination procedures with Operations Section Chief.
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OPERATIONS

- ❑ Activate the Medical Care Branch and implement the hospital's mass casualty receiving plan.
 - ❑ Activate the HazMat Branch and implement the hospital's victim decontamination plan, establish triage and decontamination areas with warm and cold zones.
 - ❑ Activate the Infrastructure Branch to:
 - Implement the hospital's shelter-in-place plan including HVAC shutdown and "sealing" of the facility.
 - Conduct a damage and structural integrity, and utilities assessment of the facility.
 - Maintain alternate/emergency generator power to critical areas in the facility.
 - ❑ Prepare evacuation plan for possible evacuation of facility.
 - ❑ Conduct a hospital census and determine inpatient and outpatient capacity required to handle the patient surge given the shelter-in-place conditions.
 - ❑ Provide personal protective equipment of personnel with immediate risk of exposure to radiation (i.e., conducting outside duties.)
 - ❑ Activate the Security Branch to lock down the facility, establish crowd control and traffic plan and secure the facility.
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PLANNING

- ❑ Prepare and implement patient and personnel tracking procedures.
 - ❑ Establish operational periods and develop initial Incident Action Plan:
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INCIDENT RESPONSE GUIDE

LOGISTICS

- Activate internal and external alternate communication systems.
 - Assess IT/IS system functionality.
 - Inventory equipment, supplies and medications on hand and prepare to ration materiel as needed (may be unable to be re-supplied for an extended period due to the event.)
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Intermediate (Operational Period 2-12 Hours)

COMMAND

(Incident Commander):

- Review with Section Chiefs overall impact of the ongoing incident on the facility.
- Re-evaluate the need to shelter-in-place vs. evacuate.

(Safety Officer):

- Continue to implement and maintain safety and personal protective measures to protect staff, patients, visitors and facility.

(PIO):

- Establish a patient information center, coordinate with the Liaison Officer.

(Liaison):

- Contact area hospitals and healthcare partners through local emergency management to assess their capabilities.

(Medical/Technical Specialist - Radiological):

- Continue to coordinate treatment and decontamination procedures with Operations Section Chief.
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OPERATIONS

- Ensure patient care and management activities
 - Continue security of the facility, traffic and crowd control
 - Activate fatalities management plan
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PLANNING

- Continue patient tracking planning.
 - Revise and update the Incident Action Plan for the upcoming operational period.
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INCIDENT RESPONSE GUIDE

LOGISTICS

- Continue to assess surge capacity and need for supplies.
 - Ensure communications are functional and IT systems are online, if possible.
 - Provide for staff food and water.
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Extended (Operational Period Beyond 12 Hours)

COMMAND

(Incident Commander):

- Evaluate all operational reports. Is the Incident under control and normal operations ready to resume.
 - Re-evaluate facility's ability to continue its mission.

(PIO):

- Distribute information bulletin for patient and staff families.

(Safety Officer):

- Assess crowd control plan and any other safety issues.
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OPERATIONS

- Continue medical mission, infrastructure maintenance and hazmat activities
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PLANNING

- Continue tracking of personnel, materiel, patients and beds.
 - Revise and update the IAP.
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Demobilization/System Recovery

COMMAND

(Incident Commander):

- Ensure demobilization and recovery is in progress.
 - Announce termination of event or "all clear" when able.

(PIO):

- Issue final information bulletin, including long term goals and terminal condition.
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INCIDENT RESPONSE GUIDE

OPERATIONS

- Continue medical management of patients.
 - Conduct or facilitate facility repairs and return of facility to normal operating conditions
 - Ensure decontamination of facility.
 - Return traffic flow and security forces back to normal services.
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PLANNING

- Prepare a summary of the status and location of all incident patients. Disseminate to appropriate agencies.
 - Conduct after-action review with the following:
 - Command personnel
 - Administrative personnel
 - All staff
 - Volunteers
 - Write after-action report and corrective action plan to include the following:
 - Summary of actions taken
 - Summary of the incident
 - Actions that went well
 - Area for improvement
 - Recommendations for future response actions
 - Improvement plan
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LOGISTICS

- Inventory all HCC and hospital supplies and replenish as necessary and appropriate.
 - Conduct debriefings and offer stress management services to staff, families and patients, as appropriate.
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FINANCE

- Finalize all expense and time reports and summarize the costs of the response and recovery operations for the Incident Commander.
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INCIDENT RESPONSE GUIDE

Documents and Tools

- Hospital emergency operations plan and decontamination plan

- Disaster plan call list

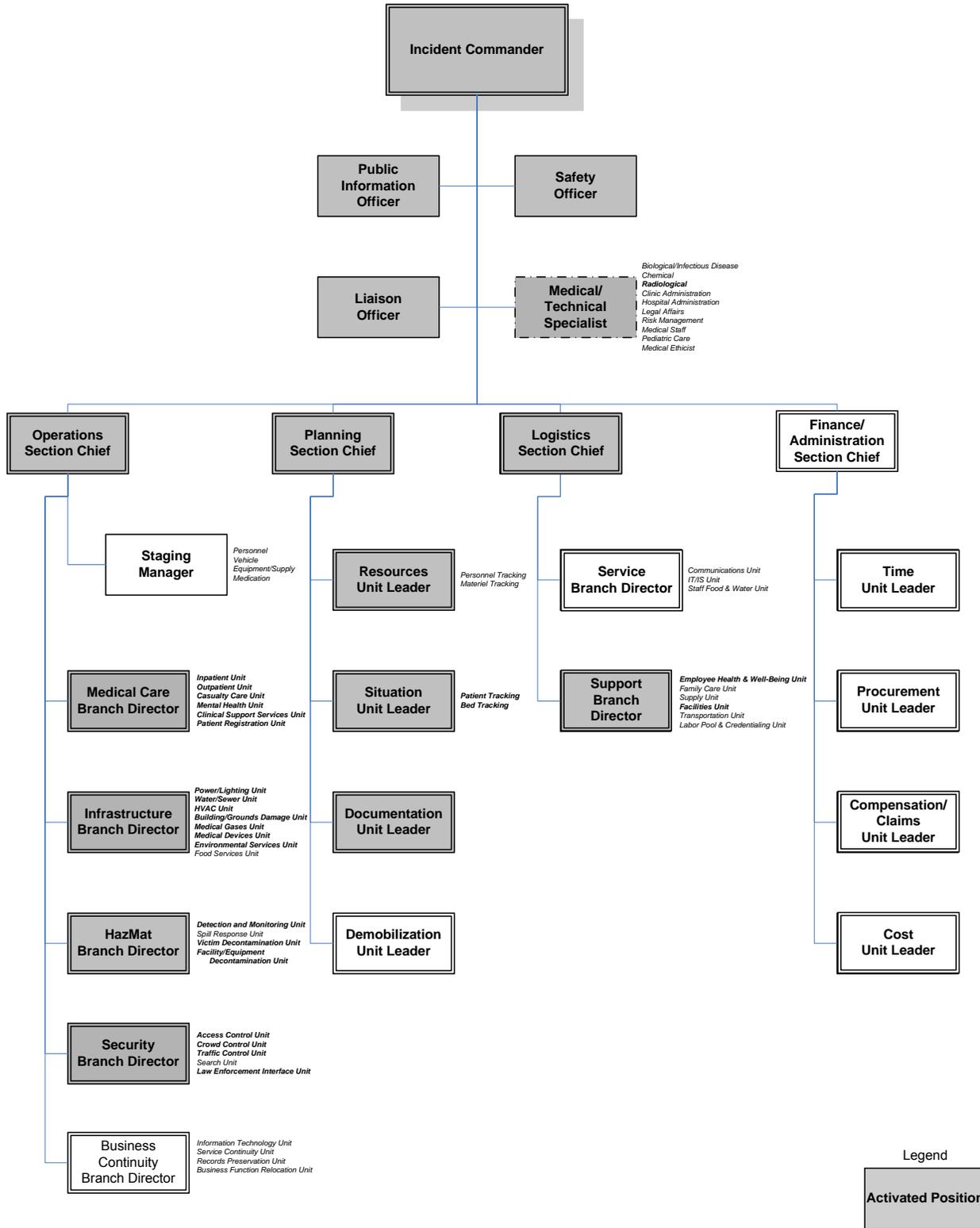
- Hospital damage assessment procedures and forms

- HICS forms

- Mutual assistance agencies protocol

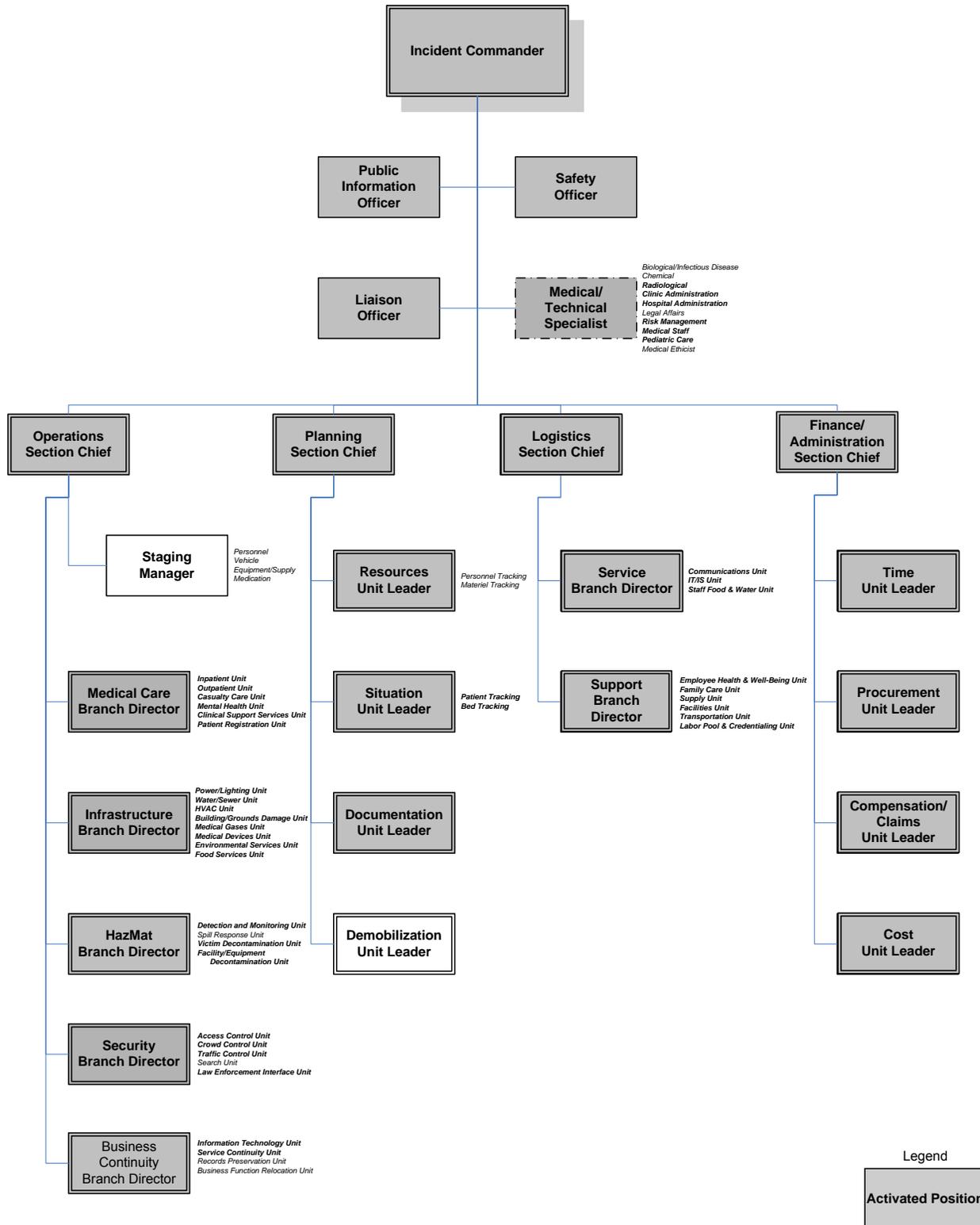
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INCIDENT MANAGEMENT TEAM CHART - IMMEDIATE



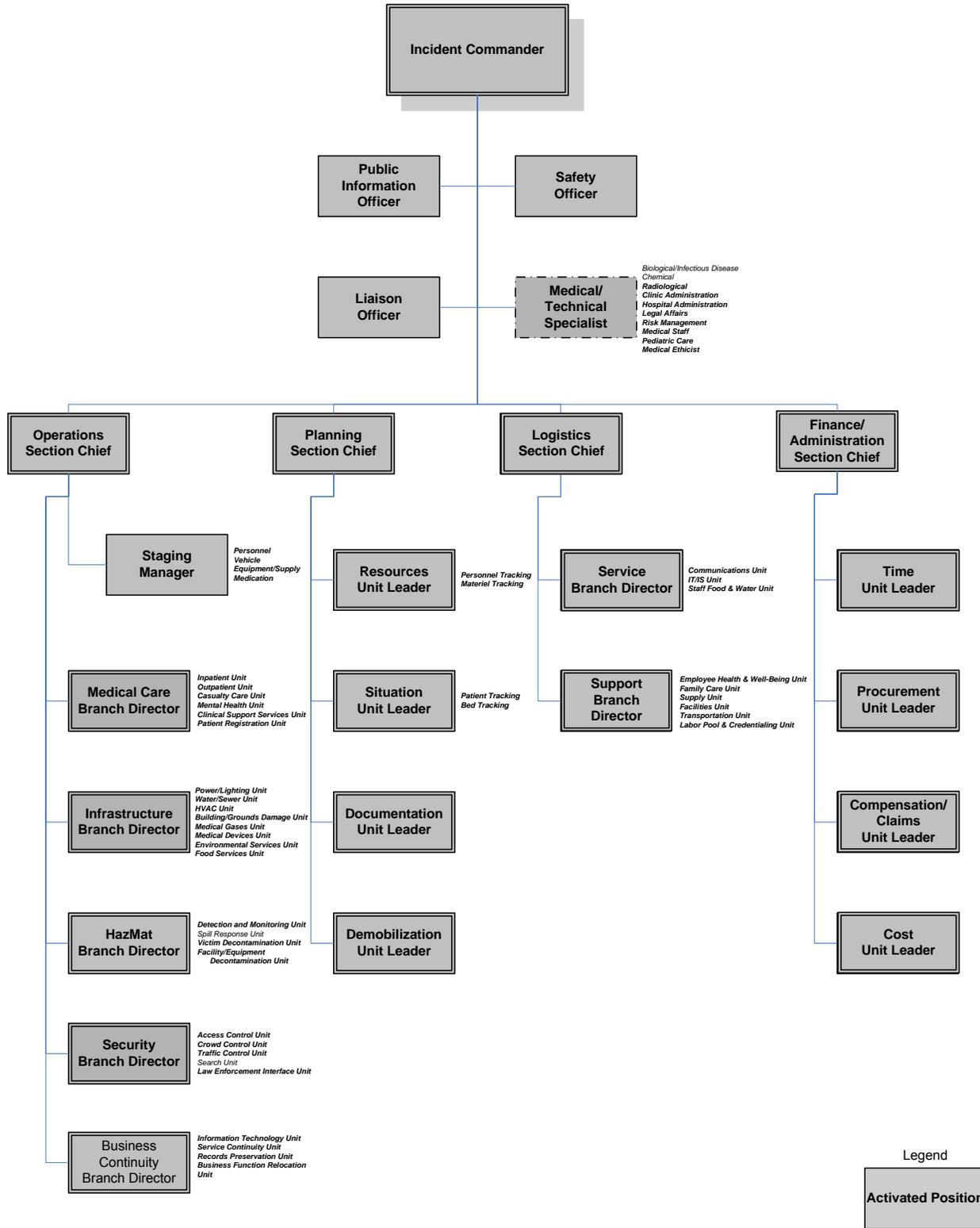
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INCIDENT MANAGEMENT TEAM CHART - INTERMEDIATE



NUCLEAR DETONATION – 10-KILOTON IMPROVISED NUCLEAR DEVICE

INCIDENT MANAGEMENT TEAM CHART - EXTENDED



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INCIDENT MANAGEMENT TEAM CHART – DEMOBILIZATION/SYSTEM RECOVERY

