

NOTIONAL ACCIDENT SITE

1. GENERAL

a. Effective nuclear weapon accident response will rely heavily upon the response force footprint at and around the accident site. While responding forces clearly will not have the luxury of dictating where the accident occurs, leadership may have some flexibility in determining the location of key facilities they will use in managing response activities. The paragraphs that follow are designed as considerations for leadership to use in determining facility and activity locations. **These considerations are intended as a guide – not requirements; the differences and dynamics of each nuclear weapon accident may render them moot. The actual accident site set up is situational and will be determined by the Incident Commander or Unified Command.**

2. JURISDICTION. In determining the appropriateness of establishing a National Defense Area (NDA), the DoD IC must consider the jurisdiction where the nuclear weapon accident occurs and where any classified residue may be located. The jurisdiction will determine the authority the DoD Incident Commander (IC) has in conducting and commanding tactical accident management activities. If the jurisdiction does not provide the DoD IC the authority to manage the accident response operation, an NDA should be established. At the onset of all response operations, the DoD IC should work closely with legal advisors to determine relevant jurisdiction and authorities. Further, the status of local mutual aid agreements should also be evaluated. Jurisdiction is the power, right, or authority to interpret and apply (enforce) the law. Jurisdiction typically falls into one of three categories: exclusive, concurrent, or proprietary. In a nuclear weapon accident, the type of jurisdiction at the accident site will determine the relationship between DoD and other officials (Federal, State, local, and tribal) who may also have jurisdictional equities. Since a domestic accident site, either on or off a DoD installation, may potentially fall under any of the three types of jurisdiction, it is imperative that the DoD IC know the type of jurisdiction in effect. Similarly, the DOE will have exclusive jurisdiction within the boundaries of a declared National Security Area (NSA).

a. Exclusive Jurisdiction. In designated areas under exclusive jurisdiction, a single government (Federal, State, local, or tribal) has sole jurisdiction over the area. Many DoD installations have exclusive Federal jurisdiction. On those installations, the Federal government exercises executive, legislative, and judicial authority. To facilitate exclusive jurisdiction and to avoid the difficult task of enacting and maintaining a code of criminal laws appropriate for areas under its jurisdiction, Congress passed Title 18, Assimilated Crimes Act, *United States Code*, Section 13. This statute provides that all acts or omissions occurring in an area under Federal jurisdiction, which would constitute crimes if the area were under the State jurisdiction, shall constitute similar crimes, similarly punishable, under Federal law¹. On exclusive jurisdiction DoD installations, the DoD IC shall have sole authority over the accident site. Outside the boundaries of a DoD installation, DoD will have exclusive jurisdiction within the boundaries of a declared NDA but will rarely have exclusive jurisdiction outside the NDA.

¹ http://www.tpub.com/content/USMC/mcwp3341/css/mcwp3341_29.htm

b. Concurrent Jurisdiction. In areas under concurrent jurisdiction, multiple governments (e.g., Federal and State or local governments) exercise simultaneous authority over the area. Essentially, this is dual jurisdiction. Under concurrent jurisdiction, State criminal laws are applicable in the area and can be enforced by the State as well as the Federal Government under the Assimilated Crimes Act (reference (ah)).² In nuclear weapon accident situations, both on and off DoD installations, where concurrent jurisdiction applies, the DoD IC must work with State, local, and tribal civil authorities and conduct collective accident management activities. An NDA will normally be established in an accident outside the boundaries of a DoD installation. It may also be necessary to establish an NDA if the accident is inside the boundaries of a DoD installation to ensure proper safeguarding of classified components and materials. In an accident that is within the boundaries of a DoD installation, the DoD IC should consult with local military legal professionals to determine the advisability of establishing and declaring an NDA.

c. Proprietary Jurisdiction. Proprietary jurisdiction applies in situations where a government entity has ownership of an area but has not retained jurisdiction. Under these circumstances, the owning government entity has the same rights as any other landowner. The State, local, or tribal government retains jurisdiction over the area and has the authority to enforce laws in the area. The Assimilated Crimes Act does not apply to areas of Federal proprietary jurisdiction. In such areas, military police exercise authority in compliance with the instructions of the appropriate commander.³ In a nuclear weapon accident on Federal land under proprietary jurisdiction, the DoD IC can be held liable for issues involving law enforcement activities. Although very few installations fall into this category, if a nuclear weapon accident occurs in an area where the DoD has proprietary jurisdiction, the DoD IC should establish an NDA and a Unified Command relationship with designated officials from the agencies with jurisdictional authority (see Enclosure 2, paragraph 2.c.(1)(b) of DoD 3150.08-M).

3. SPECIFIC REQUIREMENTS. Figure 1. diagrams a notional accident site and assumes the NDA perimeter is synonymous with the inner perimeter of the accident site; in an actual situation, this may or may not be the case. The main point to consider when determining the location of each activity is to reduce, to the maximum extent possible, the number of people in close proximity to the accident site. This action will minimize the exposure to hazards of those involved in the accident response and aid in maintaining the integrity of the accident site for any subsequent investigation.

a. The initial size of the accident site will be driven in large part by the fragmentation distance(s) associated with the involved weapon(s). The fragmentation distance is a calculated distance within which 95% of the debris from a detonation of the conventional high explosive charge is expected to be contained. A nominal distance of 770 meters has been selected on which to base initial accident site considerations. Fragmentation distance impacts initial site setup in two ways. First, if there are essentially intact weapon(s) which are not yet rendered safe, it is the distance over which debris (including classified parts) could be thrown in the event of a subsequent detonation of the conventional high explosive. Second, if there has already been a detonation of the conventional explosives in an involved weapon, it is the distance within which hazardous debris and classified parts from that detonation are expected to be found. Therefore, the fragmentation distance serves both as a safety buffer for the exclusion of all non-essential

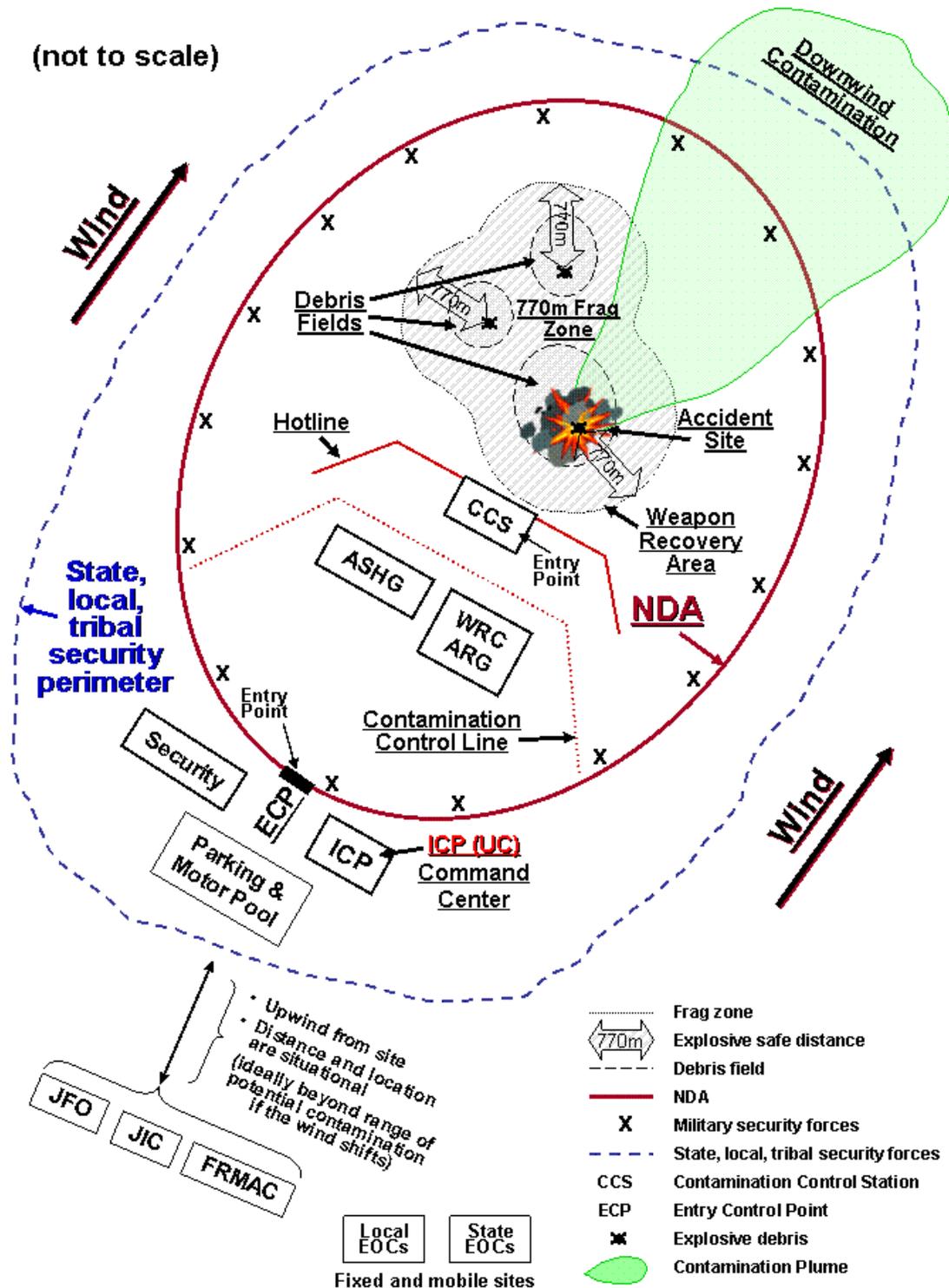
² http://www.tpub.com/content/USMC/mcwp3341/css/mcwp3341_29.htm

³ http://www.tpub.com/content/USMC/mcwp3341/css/mcwp3341_29.htm

personnel until the risk of further explosive hazard is mitigated and as the basis for establishing an NDA until all associated classified components that could have been thrown over this distance have been accounted for. In the case of a multiple-weapon scenario, a 770-meter fragmentation zone should be determined from the center of each intact weapon and from each site of detonation (as applicable) and a composite perimeter established which encompasses all of the individual zones. Within this perimeter, EOD escort should be required until hazards are identified and flagged and safe routes for working within the perimeter are identified. The complete fragmentation zone will be within the confines of the NDA. As hazards are made safe over the course of the nuclear weapon accident response operation, this zone is expected to shrink dramatically. As classified materials and government property are identified and retrieved, it is expected that the NDA would also shrink accordingly. No permanent facilities for the accident response operation should be established within a fragmentation zone. The outermost perimeter of the fragmentation zone is considered the initial hot line. It is clearly possible for contamination to extend beyond the boundary of either the fragmentation zone or the NDA in the downwind direction. It is also likely that, as the extent of contamination is assessed, some areas within the fragmentation zone or NDA may be determined to be uncontaminated and released from radiological controls.

b. On the upwind side of the fragmentation zone, a CCS will be created; it will be located on the hot line. The CCS must be portable in nature to facilitate rapid relocation should an unexpected shift in wind direction occur. All personnel moving into the accident site will pass through the CCS.

Figure 1. Notional Nuclear Weapon Accident Site



c. It is possible that contamination could spread outside the NDA/NSA. In this case, ensure sentries minimize their exposure time; further, these personnel should have the appropriate protective gear. Minimize the number of people needed within the contaminated area; for those required in the contaminated area, minimize their exposure time.

d. Located 100 meters upwind beyond the extent/spread of the known or suspected radiological contamination, a CCL is established. Immediately outside (side away from the accident site) of the CCL, the ASHG, the ARG, and the Weapons Recovery Center (WRC) will be established. These activities will be directly involved with monitoring radiation and contamination levels, as well as the actual recovery of the weapon. Thus, they must be located in a position as close to, but as safe as possible, with respect to the accident site. While there is no prohibition against conducting these functions in a permanent facility, the ability to rapidly relocate should the wind shift must be maintained.

e. All of the above functions are located within the NDA (in a DoD custody accident) or the NSA (in a DOE custody accident). Located on the perimeter of the NDA/NSA is the Entry Control Point (ECP). All personnel en route to the accident site will transit the area through the ECP. To aid in personnel accountability, the use of an exchange badge system is ideal; if not possible, sign in/out logs should be used. As the military guard controlling entry through the ECP will be posted there for long periods of time, it is recommended the ECP have some type of phone communication (to include a cell phone with the “call waiting” function). As the ECP will receive many visitors, it is paramount an adequate parking plan be developed. Immediately adjacent to the ECP should be two activities – a security activity and the Incident Command Site.

(1) Security. The Security Activity is responsible for overseeing the security and integrity of the accident site. For accidents occurring outside of DoD exclusive jurisdiction areas, DoD security forces will rely on SLT officials to aid in securing the NDA. For this reason, representatives from each law enforcement and security agency should be present. While a large facility is not required, space for a security control desk with telephone and radio communication is a consideration. Other capabilities required for a security area are an evidence holding facility, a personnel holding area, and latrine facilities. Ideally, the facility will have room for small arms storage. In the case of a DOE custody accident, DOE security forces will be integrated into the Security Area.

(2) Incident Command Post. The ICP is the command center at the accident site. This facility must be large enough to handle all command activities at the accident site.

f. Away and upwind from the accident site, a location must be selected to house the JFO, the JIC, and the FRMAC. The facility should be located far enough away from the accident site to preclude relocating should the wind shift. As all of these functions are extremely large, all will require a large physical space. The facility should have good communications capability, adequate latrine facilities, and ample parking. Further, the facility should have close proximity to restaurants and other conveniences. The facility should have space for conferences, private office space, and several larger rooms for each of the JFO coordination activities outside the accident site.

4. AUTHORITY. The authority the DoD IC enjoys at and around the exercise site depends largely on the jurisdiction and the relationship enjoyed between the DoD IC and representatives from SLT organizations.

a. Inside the NDA. Within the confines of the legally established NDA, the DoD IC has absolute authority to enforce entry into the NDA, as well as the establishment and enforcement of regulations dealing with the safe and secure conduct of activities within the NDA. DoD ICs are cautioned to remember, however, that while the NDA is a Federal exclusive jurisdiction area, the NDA is likely surrounded by other jurisdictions. Prudence dictates the establishment and maintenance of harmonious relations.

b. Outside the NDA. Outside the perimeter of the NDA, the DoD IC has no authority over any civilian from a Federal, State, local, or tribal organization. Additionally, the DoD IC may have to rely on civilians to enforce the sanctity of the NDA. For this reason, the importance of a UC in the area of the accident site is crucial for the success of nuclear weapon accident response operations.