**Title**: Doctrine for Joint Urban Operations

**Performing Organization**: Joint Chiefs of Staff Washington, DC

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**Supplementary Notes**: The original document contains color images.
1. Scope

This publication addresses the planning and conduct of joint urban operations and explains how they differ from other operations. It focuses on the operational level of war and addresses issues across the range of military operations. It provides doctrinal guidance focused on capabilities and tasks that are unique to, or significantly challenged by, the urban environment at the operational level of warfighting. It does not attempt to replace or reiterate doctrine in overlapping areas; instead, it examines the special considerations required when conducting operations in the complex modern urban environment.

2. Purpose

This publication has been prepared under the direction of the Chairman of the Joint Chiefs of Staff. It sets forth doctrine to govern the joint activities and performance of the Armed Forces of the United States in joint operations and provides the doctrinal basis for US military involvement in multinational and interagency operations. It provides military guidance for the exercise of authority by combatant commanders and other joint force commanders (JFCs) and prescribes doctrine for joint operations and training. It provides military guidance for use by the Armed Forces in preparing their appropriate plans. It is not the intent of this publication to restrict the authority of the JFC from organizing the force and executing the mission in a manner the JFC deems most appropriate to ensure unity of effort in the accomplishment of the overall mission.

3. Application

a. Doctrine and guidance established in this publication apply to the commanders of combatant commands, subunified commands, joint task forces, and subordinate components of these commands. These principles and guidance also may apply when significant forces of one Service are attached to forces of another Service or when significant forces of one Service support forces of another Service.

b. The guidance in this publication is authoritative; as such, this doctrine will be followed except when, in the judgment of the commander, exceptional circumstances dictate otherwise. If conflicts arise between the contents of this publication and the contents of Service publications, this publication will take precedence for the activities of joint forces unless the Chairman of the Joint Chiefs of Staff, normally in coordination with the other members of the Joint Chiefs of Staff, has provided more current and specific guidance. Commanders of forces operating as part of a multinational (alliance or coalition) military command should follow multinational doctrine and procedures ratified by the United States.
For doctrine and procedures not ratified by the United States, commanders should evaluate and follow the multinational command’s doctrine and procedures, where applicable and consistent with US law, regulations, and doctrine.

For the Chairman of the Joint Chiefs of Staff:

JOHN P. ABIZAID
Lieutenant General, USA
Director, Joint Staff
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EXECUTIVE SUMMARY
COMMANDER’S OVERVIEW

- Introduces the Nature and Challenges of Military Operations in Urban Areas
- Discusses the Fundamentals for Planning and Conducting Joint Urban Operations (JUOs)
- Describes Operational Tasks and Considerations for JUOs
- Discusses the Special Considerations of Noncombatants and Infrastructure

Introduction

Joint urban operations (JUOs) are all joint operations planned and conducted across the range of military operations on, or against objectives within, a topographical complex and its adjacent natural terrain, where manmade construction or the density of noncombatants are the dominant features.

All urban areas share three main interrelated characteristics — a complex manmade physical terrain, a population of significant size and density, and an infrastructure that supports the population and perhaps the region or nation.

Rapid urbanization is changing the physical and political face of nations. Demographic studies indicate a vast increase in the number and size of urban areas throughout the world; medium-sized towns have become large cities, and large cities have become the modern megalopolis. In many places, this rapid urbanization has overburdened already weak infrastructure, scarce resources, and fragile economic bases.

This population concentration has ensured that many future military operations will be taking place in urban areas. US forces must be prepared to conduct effective joint urban operations (JUOs) more than ever before.

Urban areas are complex, dynamic environments. However, three distinguishing characteristics — an “urban triad” — can be identified. The physical terrain of an urban area consists of three-dimensional surface areas; internal and external space of buildings and structures; subsurface areas; and the airspace above the topographical complex. The noncombatant population is characterized by the interaction of numerous political, economic, and social activities. This population is, in turn, supported by the urban area’s physical and service infrastructure.

Military operations in urban areas span the range of military operations. Although these operations may vary considerably in detail, they tend to share common characteristics, which provide a number of operational lessons.
Urban operations span the levels of war. Urban areas may be strategic centers of gravity and will probably contain a number of operational centers of gravity and decisive points. The nature of urban areas affects operational art.

Urban battlespace contains elements significantly more complex than those of many other operational areas. Understanding the urban battlespace calls for different ways of visualizing space and time.

The framework for planning and conducting JUOs can be described in terms of the following activities: understand, shape, engage, consolidate, and transition. These activities function as an interdependent, continuous, and simultaneous cycle and are applicable for urban operations across the entire range of military operations.

In war, urban operations are often difficult and costly in terms of personnel and equipment, and require a full suite of military capabilities; urban areas are also increasingly the sites of military operations other than war (MOOTW). Often, these operations on opposite ends of the range of military operations can occur simultaneously and in close proximity.

A number of operational considerations and requirements influence the decision to conduct JUOs, and, once decided, the methods to be employed.

Urban operations strain the command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) capabilities of military forces, requiring flexibility and innovation on the part of commanders and planners. C4ISR are hampered by urban structures, clutter, background noise, and the difficulty seeing into interior spaces. Thus, human intelligence is essential in understanding local psychology and developing situational understanding.

The constrictions of urban areas may inhibit tactical movement and maneuver above, below, and on the ground, as well as within or among structures. However, operational maneuver in JUOs...
must be multidimensional, aimed not only at geographic decisive points, but also key event, or systemic decisive points.

Fires may be used to isolate the urban area and, particularly with precision munitions, to engage adversary targets within the urban area. Noncombatant casualties and collateral damage have the potential for adversely affecting operational objectives and thus fires require careful planning and coordination.

Urban operations increase support demands due to the high level of injury and exhaustion of personnel, damage to equipment, and to the potential need to provide support to noncombatants and host nation and civilian agencies. All facets of logistic support are more difficult in urban operations.

Urban areas pose significant force protection problems. The nature of urban terrain decentralizes and channelizes friendly forces, while adversaries engage a variety of targets — friendly forces, infrastructure, and noncombatants — behind the shield of the civilian population. Commanders must make thorough risk assessments, develop appropriate rules of engagement, implement strict antiterrorist measures, and execute well-designed deception plans to prepare for these problems.

Due to the concentration of economic and political targets, urban areas are logical locales for terrorist use of weapons of mass destruction. Consequence management in urban areas may require all available resources of a commander to rescue, treat, feed, and control a large civilian populace. Space operations provide platforms for information operations as well as necessary communications and navigation links, but accurate surveillance from space platforms, as with other surveillance methods, suffers in some cases from the urban clutter and difficulty in penetrating interior spaces. Special operations forces can be highly valuable in JUOs for their ability to perform missions with precision, gather intelligence, and enhance cultural awareness. They are also crucial to conducting personnel recovery in the difficult urban environment. The key to success in urban operations may lie in the ability to control the information environment and influence the thoughts and opinions of adversaries and noncombatants through information operations, in particular, psychological operations. Civil-military operations may be crucial to accomplishing operational objectives in urban warfare as well as MOOTW, although the sheer magnitude of these operations could be overwhelming. Because urban areas contain the potential for significant noncombatant suffering and physical destruction, urban operations can involve complex and
potentially critical legal questions and issues, requiring strong support from military legal advisors.

Noncombatants

In urban operations, any action can have far-reaching effects. Large numbers of noncombatants will affect military operations, and military operations will affect the lives of the noncombatants.

The commander should consider two overall objectives regarding the civilian populace of an urban area: to minimize interference with military operations, and to observe the necessary legal, moral, and humanitarian obligations. This will likely require the commander to take certain actions with regard to noncombatants, including protection, control, support, and influence. These actions can be accomplished by a number of means such as information operations, populace and resources control, health service and logistic support, civil-military operations, and foreign humanitarian assistance.

Infrastructure

Individual services, facilities, or systems have an impact on urban operations, and operations will have an impact on key infrastructure.

Infrastructure holds an urban area together and allows it to function. It is the foundation upon which a city is built, and each interrelated component affects the population, the functioning of the city, and the nature and success of urban operations. The commander should determine the role and importance of key infrastructure for each phase and for the end state of the operation through an analysis of key facilities. This analysis examines each infrastructure system individually and in relation to others and determines a course of action toward it. The commander can then consider and address such issues as protection and joint usage, collateral damage, and environmental considerations.

CONCLUSION

The challenges inherent in urban operations are significantly different from other types of military operations, and their complexity affects all aspects of the planning and conduct of such operations. Urban operations should only be initiated with full awareness of the characteristics of urban areas and the way these characteristics affect the many aspects of theater planning and operations throughout the range of military operations.
1. General

a. US military operations, whether war or military operations other than war (MOOTW), are inherently joint, and the last two decades of the 20th century show that military operations will continue to occur with some frequency. Cities have played a strategic role in military campaigns throughout history, from the Trojan War to the fall of Berlin and up to the present day. Whether because of their geographic location, concentration of wealth and power, or symbolic value, cities have been strategic objectives in most of history’s conflicts. Trends in world demographics indicate a significant increase in the number and size of urban areas throughout the world, ensuring that many future military operations will take place in urban environments. In fact, that trend has already begun. US military operations in the 1990’s (such as Baghdad, Khafji, Kuwait City, Monrovia, Mogadishu, Port-au-Prince, and cities in Bosnia, Serbia, and Kosovo) indicate the frequency with which joint US forces operate in urban areas. US experience in these operations, and that of other military forces, shows that urban areas offer significant operational challenges across the range of military operations, but particularly for combat. Further, the great complexity of the urban environment requires military forces to pay particular attention to the unique and demanding requirements of operations in those areas. It is therefore imperative that commanders and staffs understand those requirements and consider them in the planning and conduct of operations in the urban environment.

b. Joint urban operations (JUOs) are defined as all joint operations planned and conducted across the range of military operations on, or against objectives within, a topographical complex and its adjacent natural terrain, where manmade construction or the density of noncombatants are the dominant features. This definition is similar to that of military operations on urbanized terrain (MOUT), which is used by the Army and Marine Corps, but MOUT has strong connotations of urban ground combat at the tactical level. The term “joint urban operations,” on the other hand, connotes an operational-level approach that considers the use of joint forces across the range of military operations.

c. The following are general characteristics of JUOs.

• JUOs take place in an environment influenced by complex natural and manmade terrain.
Chapter I

- JUOs are also heavily influenced by populations of significant size and density and by an infrastructure on which that population depends.

- A joint force commander (JFC) may conduct JUOs either as a major operation or as part of a campaign.

- JUOs may include almost any type of military operation, singly or in combination.

- Although at times one Service or functional component may predominate, urban operations are inherently joint in nature.

- JUOs can be conducted across the range of military operations (war and MOOTW) and will require the synchronization and integration of all instruments of national power (diplomatic, economic, military, and informational) to achieve strategic and operational objectives.

2. Characteristics of Urban Areas

a. General

- Urban areas present the most complex physical terrain that exists. This physical terrain consists of manmade structures of varying types, sizes, materials, and construction arranged sometimes orderly and sometimes randomly. Urban areas are frequently defined according to size, from villages of fewer than 3,000 inhabitants to large cities with populations of over 100,000. But large cities vary enormously in size, ranging in population from 100,000 to over 20,000,000 and in area from several to hundreds of square miles. Cities vary in ways other than size: a city may be the only large urban area in a nation or one of many; its physical layout may be orderly or chaotic; it may be modern or built around an ancient core; it may contain towering buildings or none over three stories. A city will certainly have a significant influence beyond its boundaries on the region or even the nation in which it exists.

- All urban areas, though, share three main characteristics, an urban triad, that are generally so intertwined as to be virtually inseparable.

  • A complex manmade physical terrain is superimposed on existing natural terrain and consists of structures and facilities of various types.

  • A population of significant size and density inhabits, works in, and uses the manmade and natural terrain.

  • An infrastructure upon which the area depends may also occupy manmade terrain and provides human services and cultural and political structure for the urban area and often beyond, perhaps for the entire nation.
Introduction

• These three characteristics interact to make each urban area a complex and dynamic system of systems, with a unique physical, political, economic, social, and cultural identity. Considered in isolation from the other elements of the urban triad, the physical terrain of urban areas presents significant challenges to military operations. However, physical terrain, both natural and manmade, is only the foundation upon which the population and infrastructure of the urban area are superimposed. Rather than terrain considerations, it is the impact of military operations on the urban population and vice versa that fundamentally distinguishes JUOs.

b. Physical Terrain

• Cities vary immensely depending on their location, history, economic development, climate, available building materials, the natural terrain on which they are built, the culture or cultures of their inhabitants, and many other factors. This variety exists not only among different cities but also within any particular urban area. A single city may incorporate high-rise business or administrative sections, suburbs, shantytowns, industrial areas, extensive parklands or other open areas, waterways, and various patterns of street grids and other transportation infrastructure. City patterns may consist of a central hub surrounded by satellite areas to form complex networks, or they may be linear or shaped by dominating natural terrain features. They may contain street patterns that are rectangular, radial, concentric, or irregular. The city itself probably consists of a city core surrounded by various commercial ribbons, peripheral and industrial areas, residential areas, and perhaps poverty belts of shantytowns. Buildings may range from single-story wooden or mud dwellings to high rise apartments and office buildings, from galvanized
metal shops to petro-chemical plants. They may be closely packed where land space is
at a premium or spread out for miles. The infinite ways in which these features can be
combined make it necessary to approach each urban area as a unique problem.

- Understanding the physical characteristics of urban areas requires a different way of
  thinking about terrain. It requires the comprehension of the multidimensional nature of
  urban terrain, its general forms and functions, and size. The total size of the surfaces and
  spaces of an urban area is usually many times that of a similarly sized piece of natural
  terrain because of the complex blend of horizontal, vertical, interior, exterior, and
  subterranean forms superimposed on the natural landscape. Like other terrain, urban
  areas consist of **airspace** and **surface areas**. But in addition to those are manmade
  ‘**supersurface**’ and ‘**subsurface**’ areas.

**Airspace.** The area above the ground usable by aircraft and aerial munitions. In
urban areas, airspace is broken up at low levels by manmade structures of different
heights and densities in addition to the irregularities in natural terrain. This produces an
“urban canyon” effect that can adversely impact operations.

**Surface Areas.** Exterior ground level areas of streets and roads, parks and fields,
and any other exterior space. These surface areas follow the natural terrain and are
themselves broken up by manmade features.

**Supersurface Areas.** The roofs and upper floors of buildings, stadiums, towers, or
other structures that can be used for movement, maneuver, firing positions, or other
advantage.

**Subsurface Areas.** Areas below ground level that consist of sewer and drainage
systems, subway tunnels, utility corridors, or other subterranean spaces. These areas
can be used for cover and concealment, movement, and engagement, but their use requires
intimate knowledge of the area.

- Equally important are considerations of **exterior and interior space**: what is visible
  from outside buildings or subsurface areas, and the significant range of people,
  infrastructure, and activity that occurs unseen in the interior of those structures.
  Understanding the full physical nature of an urban area requires a multidimensional
  approach, with an appropriate awareness of the lateral, horizontal and vertical, and interior
  and external nature of the city. Figure I-1 illustrates the types of space found in urban
  terrain.

c. Population

- The primary difference between urban areas and other environments is the large **numbers
  and density of noncombatants**. The concentration of noncombatants has its own
demographic characteristics: population density, neighborhoods and their make-up,
etnicity, race, age considerations, the daily movement in and around the city, and a host
of other considerations tied to the nature and behavior of the populace. Other socio-cultural characteristics may include religion, political leanings and activity, economics, clan or tribal affiliation, criminal organizations and activities, and class divisions.

• Understanding the population of an urban area entails knowledge of its size, location and density, and composition. These elements may be examined in terms of the city as a whole, but complete understanding will only come by examining those same elements for each geographical area and each demographic group within the urban area.

d. **Infrastructure**

• Urban areas will contain varying degrees of **physical infrastructure**. This infrastructure will at a minimum include a transportation network, utilities, government buildings, hospitals, schools, food processing and distribution centers, and communications facilities. The infrastructure may be relatively simple or it may be highly complex and sophisticated. For example, transportation infrastructure in one city may be a simple network of streets; in another city it may consist of sophisticated port facilities, rail networks, airports, large highways, subways, and other modes of public transportation. In the latter case, such a city would be the transportation hub for the region in which it is located — if not the entire nation.
• In addition to the physical infrastructure of power plants, transportation networks, and the like, cities also have a **service infrastructure**: police, fire, and other government services; food and water availability and distribution; medical services; fuel and electricity; the news media and information flow; and others. This sort of infrastructure may be quite sophisticated and an integral part of the city’s life, it may be virtually nonexistent, or it may exist in a state of ineffectiveness.

e. **A city is dynamic — in a constant state of motion.** There exists a continuous flow of goods and services, people, and information to, from, and within the city. To understand a particular city, it is necessary to comprehend the underlying dynamics of the city and the surrounding area.

3. Characteristics of Military Urban Operations

   a. **Historical Characteristics.** Military thinkers and planners have long been aware of the pitfalls of fighting in urban areas. As early as circa 500 B.C., Sun Tzu advised that “the worst policy is to attack cities,” and that advice has been echoed in military writings and doctrine to this day. However, despite that sensible advice, wars have been fought in cities repeatedly throughout the centuries, from the sack of Troy to the battles of Grozny. The control of political, industrial, commercial, transportation, and communication centers may decisively affect the outcome of battles, campaigns, and wars, and urban battle has become particularly common in the 20th century. The “total” wars of the first half of the century saw war being waged on whole cities — physical terrain, populations, and infrastructure. Revolutionary insurgencies have frequently found cities to be fertile ground for action. Technological advances, particularly in

*Berlin, May 1945, after the battle.*
aviation, have made it possible to take war to the cities in a more precise manner with significantly fewer combatant and noncombatant casualties and less collateral damage. Cities themselves have increased in number, size, and strategic importance, and with urbanization has come an increase in military operations that fall short of full-scale war. This late 20th century increase in MOOTW in urban areas has been accompanied by a corresponding increase in the constraints placed upon military forces conducting these operations.

b. Significant Characteristics of Modern Military Urban Operations

- Since the beginning of World War II, military operations in urban areas have run the full operational gamut: full-scale ground combat with huge numbers of casualties (Stalingrad, Manila, Seoul); aerial carpet bombing producing hundreds of thousands of casualties in a single day (Dresden and Tokyo); civil war (Beirut, Monrovia); revolution (Managua, Budapest); precision bombing (Baghdad, Belgrade); counterterrorism (Belfast); noncombatant evacuation (Monrovia); peacekeeping (Sarajevo); foreign humanitarian assistance (FHA) (Mogadishu); nation-building (Port-au-Prince); and others. Figure I-2 compares urban operations with those in other environments.

- Although these urban operations vary greatly in detail, they share a number of common characteristics.

  - Cities reduce the advantages of the technologically superior force. The physical terrain of cities tends to reduce line of sight (LOS) and the ability to observe fires, inhibits command, control, and communications capability, makes aviation operations more difficult, and decreases the effectiveness of naval surface fire support and indirect fire support. It also degrades logistics, and often reduces ground operations to the level of small unit combat. In

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Figure I-2. Comparison of Operations in Urban Areas and Other Types of Environments
addition, the constraints imposed by a need to minimize civilian casualties and preserve infrastructure further reduce technological advantage. During the 1968 battle for Hue, US forces had a distinct technological advantage yet were unable to bring the full weight of that advantage to bear on the North Vietnamese and Viet Cong in the city. The result was a drawn out street battle that was won only at a high cost.

- **Ground operations become manpower intensive.** While the mission often requires the military force to control the vast horizontal and vertical spaces of a city, it also frequently includes the need for additional personnel to feed and succor its civilian population and protect or restore its infrastructure. In combat operations the need to secure cities building by building, room by room, requires large numbers of infantry. The 1942-43 battle for Stalingrad resulted in the loss of the entire German 6th Army, with 200,000 killed and wounded and 100,000 taken prisoner. Soviet losses were higher (over 700,000).

> “Fighting in a city is much more involved than fighting in the field. Here the ‘big chiefs’ have practically no influence on the officers and squad leaders commanding the units and subunits.”

**General Chuikov, During the Battle for Stalingrad, Aug 1942 – Feb 1943**

- **Ground operations become decentralized.** The difficulties of communication and control that arise from the dispersal of units into buildings, underground passages, streets and alleys force command and control (C2) to devolve toward the smaller unit level.
Introduction

**Operations are time-consuming.** Nearly all operations in urban areas, including predominantly air operations, take significantly longer than originally expected. The prolonged battles for Stalingrad, Aachen in 1944, and Khorramshahr during the Iran-Iraq war (1980-1988) all delayed the attacker longer than was estimated, resulting in the modification of operational or strategic plans. During the battle for Hue, it took US Marines 3 weeks of door-to-door fighting to clear a 7-block area.

**Combat operations in urban areas result in large ratios of civilian to military casualties.**

**Operations in urban areas are conducted under more restrictive constraints than operations elsewhere.** The presence of noncombatants and the need to preserve infrastructure greatly influence operations and help shape the rules of engagement (ROE). Operations-specific ROE are often clarified and refined as required by the situation to allow flexibility in accomplishing the mission while limiting civilian collateral damage and friendly casualties. The majority of urban battles since 1967 have had one or more of the following constraints imposed on the forces engaged: limiting friendly casualties; minimizing civilian casualties and/or collateral damage; or restrictions in the use of ground or air weapons.

**Physical terrain changes weapons and munitions effects.** Targets are easily masked by structures. The composition of buildings and surrounding structures changes weapons effects. In urban battles from World War II to Lebanon, artillery, anti-tank weapons, and anti-aircraft weapons have proven more valuable in a direct fire role against structures than in their primary roles.

**Logistic support requirements are different and often more demanding in urban areas.** Urban operations result in a significant increase in ammunition expenditure, need for personnel replacements, medical personnel and supplies, casualty evacuation, and food and water. Vehicles often cannot be evacuated for maintenance. Clothing and equipment are damaged at higher rates. During the 1978 siege of Beirut, Syrian forces required up to 120 truckloads of artillery ammunition per day.

**Urban areas provide advantages to defenders, insurgents, and terrorists.** Urban areas reduce the advantages in numbers and equipment of attacking forces. In both combat and less conventional operations, they provide asymmetrical benefits to those who could use the civilian population and infrastructure to their advantage. In the 1973 battle for Suez City, irregular Egyptian defenders lacked organic artillery, air support, and armor support, yet stopped the attacking Israelis while inflicting significant casualties.
c. **Operational Lessons Learned**

- The human dimension of the urban environment is important and has the potential for affecting the conduct of urban operations.

- Although there will be many circumstances under which JUOs may be undertaken, while planning campaigns and major operations the JFC must consider whether JUOs are required to accomplish operational and strategic objectives.

- As with other military operations, tactical objectives in urban operations should be directly linked to strategic and operational objectives.

- Despite its many disadvantages, ground combat may be the most effective and efficient way for a commander conducting JUOs to accomplish operational or strategic objectives.

- Isolation of an urban defender affords the attacker a significant, often decisive advantage.

- Precision munitions offer a significant advantage in urban operations.

- Urban ground operations, although infantry intensive, require effective combined arms integration at all levels.

- The requirements to protect and/or aid noncombatants and to preserve and/or restore infrastructure can prove to be highly significant constraints in urban operations.

- The presence and involvement of nongovernmental and international organizations, the media, and other civilians in urban areas will impact military operations.

- Operations in urban areas will be conducted under increased visibility of the media.

- Nonlethal weapons and chemical control agents may have greater utility in urban operations.

- Forces conducting urban operations face increased exposure to communicable diseases and industrial and chemical accidents.

- Logistic support requirements for military urban operations are different and often more demanding than those for non-urban operations.
1. General

a. Planning for JUOs generally follows the same basic process as planning for other operations. However, the challenges inherent in urban operations are sufficiently different and complex to require that commanders and planners give due consideration to urban requirements.

b. JUOs should not be contemplated without an awareness of the characteristics of military urban operations and the lessons derived from past operations. The unique nature of urban operations will affect many aspects of theater planning and operations throughout the range of military operations.

c. Prior to the conduct of JUOs, the joint force can significantly enhance its capabilities and competencies through a program of professional education, training exercises, modeling and simulations, and rehearsals. The focus of this effort should be on urban situational awareness; general knowledge and understanding of urban areas; cultural awareness; understanding of the nature of urban combat; and tactics, techniques, and procedures of urban combat.

2. The Strategic and Operational Context (Unified Action)

a. General. Urban operations span all levels of war. Events at the tactical level may (because of media coverage, effects on noncombatants, or other reasons) have significant ramifications at the operational or even strategic levels. Often, the decision whether or not to undertake urban operations is itself a strategic one, taken to control, dominate, or otherwise accomplish objectives and desired effects in a strategically significant area. Such a decision may also occur at the operational level of war, as part of a campaign plan. In any case, as recent history indicates, urban operations will likely have implications at all levels of warfare — strategic, operational, and tactical.

b. The Strategic Context

- Urban areas may be strategic centers of gravity (COGs), and as such will be significant strategically, operationally, and tactically. Major urban areas are frequently the locations for the airports, harbors, and major road junctions vital for the sustainment of a campaign. Major urban areas also house the centers of government, communications, and culture.
In the summer of 1942, the Germans launched a strategic offensive in southern Russia. The ultimate goal of this offensive was the valuable oil fields of the Caucasus. Capture of the city of Stalingrad would anchor the German defense and simultaneously interdict the critical flow of supplies from the Caspian Sea via the Volga River into central Russia. Stalingrad, by virtue of its name, also had important political and cultural value to the Germans and Soviets.

The opening phases of the German offensive were very successful: German forces — the 6th Army and 4th Panzer Army — entered the outskirts of Stalingrad in late August 1942. By late September, after a month of intense fighting, the Germans possessed 90 percent of the city. The Soviet 62nd Army’s defense was reduced to a front only a few hundred meters deep and a couple of kilometers long on the banks of the Volga. The Soviet defense hinged on fortress-like concrete industrial buildings and the fanatical bravery and tenacity of Soviet soldiers and civilians fighting within the remnants of the city. Regiments and divisions fought for a few square blocks or even single factories. Some were swallowed whole by the intense fighting, suffering nearly 100% casualties. Beginning in mid-September the Soviet command began looking at how to convert the defense of Stalingrad into an operational opportunity. Throughout October and November, the 62nd Army held on to its toehold in Stalingrad.

While maintaining the defense of Stalingrad, the Soviets secretly began to build up strength on both flanks of the German 6th Army. Powerful German divisions were moved into the city and rotated with German divisions that were largely exhausted by urban combat.

On 19 November, the Soviets launched a counteroffensive that attacked two Romanian Armies with seven Russian Armies. Simultaneously an eighth Russian Army attacked to aid the 62nd Army in further fixing the Germans in Stalingrad. Within five days the Soviet encirclement of the German 6th Army in Stalingrad was complete, due to the German high command’s refusal to allow it to withdraw. On 12 December, the German LVII Panzer Corps launched an offensive north to break through to Stalingrad. This offensive made progress until another Soviet Offensive on 16 December forced its cancellation. This ended any hope of recovering Stalingrad and the 6th Army. On 31 January 1943, the 6th Army surrendered after sustaining losses of almost two-thirds of its strength. The Soviets took over 100,000 prisoners.

Numerous lessons emerge from the successful defense of Stalingrad, but foremost among them are the strategic and operational ramifications of the battle. The entanglement of the German forces at Stalingrad bought time for the Soviets to mobilize their own forces and launch a powerful counteroffensive. Operationally, the Germans’ tactical failure resulted in the destruction of the 6th Army, over 300,000 men. The strategic consequences

STALINGRAD — THE STRATEGIC CONTEXT
JFCs must carefully consider the full implications of urban operations on their strategic responsibilities. They must determine whether an urban area itself is a COG or whether any strategic and operational COGs are located within that urban area. Once JFCs identify the COGs, they must decide how the military power at their disposal can be applied in the most effective manner.

- Because strategy is the basis for all operations, decisions whether to initiate urban operations are linked to national or theater strategic objectives.

- Support to noncombatants, if required, may strain the ability to support US forces, allies, regional governments, nongovernmental organizations (NGOs) and international organizations. In short, urban operations may impact the abilities of national and theater strategic assets and can easily affect coverage of other geographical areas.

c. The Operational Context

- At the operational level, commanders plan, conduct, and sustain campaigns and major operations to accomplish strategic objectives within theaters or other operational areas. A JFC may conduct JUOs either as a major operation or as part of a campaign. The requirements and nature of urban operations will make unified action more difficult and complex, influence the organization and capabilities of forces and functions, and present the JFC with significant challenges in the practice of operational art.

- Because of their physical and human complexity, urban operations tend to be extremely demanding in terms of time, manpower, and certain types of information, equipment, and supplies. The synchronization and integration of time, space, and purpose within the theater or joint operations area (JOA) thus becomes more difficult. Commanders must carefully analyze urban areas in relation to the overall campaign and determine how best to synchronize and integrate operations and prevent urban areas from disrupting the tempo of operations or diverting attention from the accomplishment of higher priority operational objectives.

d. Operational Art in JUOs. With proper application of operational art, a JFC can successfully conduct urban operations, even in situations where an adversary has been able to use the urban environment to achieve a temporary asymmetrical advantage. Such a temporary
advantage can still have lasting strategic effects. Commanders can mitigate this situation by an appropriate use of operational art as applied to the urban environment. In addition, since asymmetric advantages are not exclusively the domain of the adversary, commanders should employ friendly asymmetric advantages to fully leverage joint force capabilities.

In Hue, for example, the North Vietnamese Army took advantage of US and South Vietnamese reluctance to bombard a place of national cultural importance inhabited by a friendly population. When the heavy ground fighting made it necessary to use air and artillery against targets within the city, all carried out under the lens of the news cameras, the US tactical victory of Hue became part of the strategic defeat resulting from the Tet offensive.

- **Synergy** becomes more complicated, requiring the synchronization and integration not only of military forces both inside and outside the urban area, but also of civilian agencies and organizations both local and international.

- The reduced speed of urban operations, the presence of noncombatants, and the constriction of the urban battlespace affect **simultaneity and depth**. Simultaneity will mean not only the conduct of combat operations against an adversary, but also the simultaneous conduct of FHA and other actions within the battlespace. Depth in urban operations can extend outside the actual urban area or be measured in a matter of city blocks.

- **Anticipation** is just as important as planning, but the information required to correctly anticipate events is more difficult to obtain. Human intelligence and an understanding of the social and political fabric of the area may outweigh technical means of gathering information.

- **Balance** is more difficult to achieve, and may require combining forces and capabilities in ways outside the normal organization of forces.

- Urban areas can affect the ways in which **leverage** is achieved. **US forces frequently use technological superiority to achieve leverage. However,** the advantages afforded by technological superiority may not be as significant in urban combat as in other types of operations. Activities such as information operations (IO) and civil-military operations (CMO) can provide a force with greater leverage in JUOs.

- **Timing** and **tempo** are potentially the factors most affected by urban operations. Slowing down the pace of operations and buying time are often priorities of the urban defender. More time may lead to more casualties and a greater chance of an intervening event influencing strategic objectives. The JFC must recognize that the speed of urban operations, particularly ground operations, will probably be slower than that of other operations, but the operational tempo may be very high. The JFC must still achieve a synchronization and integration of timing and tempo that leaves the opponent unable to
act effectively. The tempo with which the commander can react to events, take action, and maneuver the force is key to success in urban operations.

- **Operational reach and approach** are often significant aspects of urban operations. Urban operations may be conducted initially for the seizure of lodgments (e.g., ports, airfields, and railheads) that facilitate future operations; they may also be conducted to secure lines of communications (LOCs) that extend the operational reach of the force. In either case, the urban area must be within the operational reach of the joint force, and the extent of that reach will be affected by the demands of the urban operations to be conducted. The approach may be direct, either through secure points of debarkation or forcible entry, or indirect, by the seizure of terrain from which urban operations can be undertaken. Once urban operations commence, operational reach may be foreshortened and approach significantly affected by the nature of the urban area.

- **Forces and functions** provide the greatest dilemmas for the JFC, who must defeat adversary forces without causing unacceptable noncombatant suffering and must destroy or disrupt adversary functions that may be deeply intertwined in the area’s infrastructure. To this end, the ability to take precise action is critical, whether that entails fires using precision munitions, direct action against very specific targets, use of nonlethals against selected infrastructure, or some other type of action.

- JFCs must determine the best arrangement of major operations, including JUOs, to achieve dimensional superiority. This arrangement will often be a combination of simultaneous and sequential operations to dominate and achieve the desired end state conditions. Commanders consider such factors as geography of the operational area, logistic buildup and consumption rates, adversary reinforcement capabilities, and public opinion. These factors are often intensified in urban operations and, along with the urban triad, can significantly affect considerations for arrangement.

- Operational COGs within the urban area may be physical or psychological. They may be adversary forces and capabilities, key infrastructure, the civilian population, or aspects of each. The JFC must use knowledge and understanding of both the adversary and the urban area to identify and then destroy or neutralize them. The JFC must also anticipate and influence those events that may affect friendly COGs, such as public opinion.

- To the extent possible, commanders attack adversary COGs directly. The JFC conducts direct attacks on COGs using symmetrical and asymmetrical actions to exploit friendly strengths and adversary vulnerabilities and to preserve freedom of action for future operations. However, adversary COGs will frequently be well protected, making direct attack difficult and costly. This situation may require indirect attacks until conditions are established that permit successful direct attacks, and technological or psychological means may be preferred. In considering whether to opt for direct or indirect attack of COGs, the JFC needs to understand the nature of the COG and its relation to the urban area.
• **Decisive points (DPs)** may be geographical, but are not necessarily traditional military terrain features, particularly in urban operations. They are not COGs; they are the keys to attacking protected COGs. They may be key cultural or political locations or locations for key infrastructure. They may also be psychological, such as the co-opting of a key tribal leader in order to undermine the influence of the main adversary leader or the molding of public opinion in friendly favor.

• The nature of urban operations requires careful consideration of **culmination**. The severe drain that urban operations can have on resources can cause either attacker or defender to exhaust capabilities earlier than anticipated. This may lead to an early culmination both on the operational and strategic levels.

• Urban areas have their own underlying political, cultural, and religious forces that can affect conditions for **termination**. Particularly in urban operations, termination requires an orderly transition to civilian control, either local or otherwise, and such considerations as FHA and restoration of services will influence the nature and timing of that transition.

3. **Urban Battlespace**

a. **General**

• Battlespace is defined as “the environment, factors, and conditions that must be understood to successfully apply combat power, protect the force, or complete the mission. This includes the air, land, sea, space, and the included enemy and friendly forces; facilities; weather; terrain; the electromagnetic spectrum; and the information environment within the operational areas and areas of interest.” **Urban battlespace includes the above factors, but focuses on the urban triad of complex manmade physical terrain, population, and infrastructure.**

• The concept of battlespace gives commanders a vehicle for expanding their thinking in order to develop a vision for dominating the adversary and operational area. Battlespace extends outside the urban area of operations and includes the urban triad and all friendly combat power and support that can be brought to bear, and the dimensions of military operations such as time, tempo, depth, synchronization, and integration.

• Understanding the urban battlespace allows commanders to develop their options, protect and sustain their forces, and achieve unity of effort by synchronizing and integrating the full power at their disposal. It allows them to visualize the relationship of friendly forces to the adversary and the area in terms of time, space, and resources.

b. **The Nature of the Urban Battlespace**

• **In the context of JUOs and the joint definition of battlespace, urban battlespace includes the urban triad.** The urban physical terrain adds new supersurface and subsurface dimensions to the normal ones of surface and air and significantly affects
force capabilities. The civilian population forms perhaps the most significant part of the urban battlespace, since most actions taken will have a noticeable effect on noncombatants and may require a diversion of resources. Some adversary personnel may pose as noncombatants and easily move from one group to the other. Infrastructure will influence both the types of action taken and the synchronization and integration of those actions. All will affect the commander’s own forces and functions.

• The type of threat present in a particular urban area may vary. The threat may consist of a conventional hostile military force, an unconventional militia or guerilla force such as those found in Beirut or Mogadishu, terrorists, criminal organizations or gangs, an opposing political group, or a phenomenal threat such as a force of nature, hunger, or disease. Friendly forces conducting JUOs may encounter these threats in isolation, but the nature of urban areas makes it increasingly likely that these threats will be found in combination. Combat operations may lead to hunger and disease in the civilian population; natural disaster may produce enough instability to encourage action by guerillas or militia groups; destruction of infrastructure may lead to increased criminal activity. In any case, the existing and potential threats must overlay the characteristics of the urban area in the commander’s thinking concerning the urban battlespace.

• An overriding characteristic of urban battlespace is that of density — density of structures, density of noncombatants, density of infrastructure, density of adversary forces, density of targets. In open terrain, units of certain sizes can be expected to control or influence thousands of meters of space. Fires can easily result in collateral damage. Distances are compressed to direct LOS, often only a few meters. A very small linear area can contain
a large adversary force, occupying in three-dimensional depth. The dense urban
geography changes the nature of spatial and temporal relationships and our concept of
them. Depth may be measured in city blocks instead of kilometers. Airspace will
consist of layers, with the lower layer perhaps punctured by high-rise buildings or
canalized by “urban canyons.” The urban tangle can slow down all movement to a far
slower pace than in other types of terrain. A ten-story building may take up the same
linear space on a two-dimensional map as a small field, but the building has eleven times
the actual defensible space — ten floors plus the roof. Manmade terrain features can
also easily mask other manmade features.

• Understanding the urban battlespace is a prerequisite to shaping it, and both are crucial
for the conduct of urban operations.

4. Concept for Joint Urban Operations

a. General

• All campaigns strive for unity of effort among air, land, sea, space, and special operations
forces. Additionally, they serve to coordinate and focus the activities of all participating
agencies, allied and US Government (USG) departments and coalition forces, and
international organizations and NGOs. A campaign plan describes the commander’s
intent and arrangement of major operations to achieve strategic and operational objectives
that will lead to success. As with any other type of operation, there is no single prescription
for success in urban operations, but there are recurring themes which can serve as an
overall framework for applying the principles of war.

• A framework for planning and conducting urban operations is provided by the activities
of “understand,” “shape,” “engage,” “consolidate,” and “transition.” Although
discussed sequentially, they function together in an interdependent, continuous, and
simultaneous cycle. Understanding is continuous, and while shaping, engagement,
consolidation, and transition may be considered as sequential, these activities are strongly
interrelated, with the joint force potentially conducting several activities at the same
time. Depending on the specific contingency, some activities may take on greater or
lesser significance. This framework also illustrates how a JFC might arrange operations
through phasing. Phases may be sequential or concurrent, they may overlap, and the
point where one phase stops and another begins is often difficult to define in absolute
terms. So it is with the concept for JUOs. In some cases, all five phases may not be
required. In others, activities of the concept may have to be conducted more than once,
in different parts of the urban area, and at different times.

b. Understand

• Understanding is continuous. The JFC evaluates the urban battlespace, including the
urban triad and the threat, to determine the implications for military operations. This
evaluation extends from complex terrain considerations to the even more complex impact
of the sheer number of actors operating in an urban battlespace. On one hand there may be adversary military troops, criminal gangs, vigilantes, and paramilitary factions operating among the noncombatant population. On the other hand, especially in MOOTW, the situation may be further complicated by the presence of nonmilitary government departments and agencies, to include intelligence, law enforcement, and other specialized entities. Crucial to planning urban operations is the understanding gained by both intelligence preparation of the battlespace (IPB) and mission analysis.

For additional information, see Joint Publication (JP) 2-01.3, Joint Tactics, Techniques, and Procedures for Joint Intelligence Preparation of the Battlespace.

- **IPB for JUO** will involve numerous agencies, some of which are not only external to the Department of Defense (DOD) but the USG well. Joint forces must have the technical capability and the operational acumen to use multi-source information and intelligence fusion, rapid analysis, and dissemination down to the lowest level in the command chain. Before and during hostilities within the theater, ground, airborne, maritime, and space-based intelligence, surveillance, and reconnaissance (ISR) assets may bridge the information gap often present in an enclosed and quickly changing environment such as urban terrain. Key to understanding the urban area is understanding the urban triad. IPB must particularly consider the impact of the noncombatants, whose presence in the urban area may be substantial and dynamic. Determining the ethnic and religious composition of the population and, if possible, their intent (for example, to flee or remain in the urban areas) may prove crucial. Human behavior is difficult to control on a mass scale; to do so with persons of a different culture under the strains of conflict can be nearly impossible. The availability of highly trained individuals who understand the culture and the language will prove indispensable to commanders at all levels in sorting out combatants and noncombatants. These intelligence needs in an urban setting highlight the importance of human intelligence (HUMINT).

- **During mission analysis**, commanders and staffs review their organization and available assets. The complexities and demands of urban operations will likely require a complete understanding of the friendly situation. JUOs require unique unit combinations; larger numbers of certain types of assets, units, and equipment; and a specific level/type of unit training. The JFC should accurately determine the capabilities of friendly forces, to include units’ proficiency in urban operations and the availability of specialized equipment. Through all phases of the joint campaign, the JFC and staff should consider the following questions as a minimum.

  - Must the joint force physically enter the urban area?
  - What operational objectives must be achieved in urban areas to support the overall campaign plan?
  - What activities and events, and sequencing of these events, are needed to achieve operational objectives?
• What resources and application of resources are required to bring about and sustain these activities and events?

• What degree, if any, of political and/or military control of the urban area is necessary?

• Should the joint force encourage noncombatants to leave the city, or to remain behind? If the noncombatants leave, planning should include designated evacuation routes that will not interfere with joint operations. If they remain behind, efforts should be made to ensure that they are persuaded to at least remain neutral. Basic emergency services should be planned for those noncombatants under the JFC’s control.

c. Shape

• Shaping includes all actions that the JFC takes to seize the initiative and set the conditions for decisive operations to begin. The JFC shapes the battlespace to best suit operational objectives by exerting appropriate influence on adversary forces, friendly forces, the information environment, and particularly the elements of the urban triad. Methods of shaping may include the following.

  • The phased deployment and employment of joint forces. Rather than deploying combat forces initially, the JFC may, in many cases, need to deploy non-combat forces early, such as civil affairs (CA), public affairs (PA), medical support, and psychological operations (PSYOP) units.

  • The use of fires to create conditions favorable for operational movement and maneuver.

  • The use of operational movement and maneuver to create conditions favorable for employing fires.

  • Conducting operational movement and maneuver to set forces in place for decisive operations to begin. Depending on the forces used, operational movement and maneuver may be dependent on the availability of strategic transportation (e.g., intertheater airlift and sealift) and the availability of ports of debarkation. Depending on the situation and objectives, operational movement and maneuver may require forcible entry, which could include conducting urban operations.

  • Establishing and operating the ISR architecture in support of the JFC’s mission. Special emphasis should be given to joint forces whose mission, equipment, training, and organization are focused to conduct shaping operations. The JFC’s ISR system must be in place and able to support subsequent missions.

  • The establishment of camps or sanctuaries for noncombatants. Included in this task is the establishment of emergency services for noncombatants that are under the control of the joint force.
Critical to shaping operations is the isolation of the urban area to support the campaign. Shaping operations can lead to physical, informational, and moral isolation and have a major effect on the ultimate success of JUOs. At the operational level, isolate means cutting the adversary off from the functions necessary to be effective. Isolation has both an external aspect of cutting off outside support and information and an internal aspect of cutting off mutual support. Isolating the adversary also includes precluding any retreat.

The physical isolation of a large urban area clearly has ground, air, space, and likely naval implications for the identification and control of the movement of personnel and equipment. The capabilities provided by space-based command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) support systems may also be used to isolate urban areas.

While physical isolation is very difficult, this is only one aspect of a larger issue. The JFC may also isolate the urban area in terms of information. The JFC should have the capability to achieve and sustain information superiority over adversaries and potential adversaries. As quickly as possible, and to the maximum extent possible, information going into and out of the urban area should be under the control of the JFC. The joint force may not only cut off internal and external adversary communications, but may also control indigenous radio, television, and other media. IO are critical to isolation and shaping. To control the information flow into and out of an urban area is to separate the adversary C2 system from its operational and strategic leadership. Informational isolation also can prevent the adversary from communicating with the civil population through television, radio, telephone, and computer systems. The overall result is to prevent adversary unity of effort within the urban area.

Moral isolation is a function of both physical actions and IO and can both deny the adversary political and military allies and separate the political leadership from the civil populace. The presence of legitimate international news organizations places special importance on the JFC’s PA operations. The JFC’s goals are thus to physically and psychologically isolate the adversary force and to ensure that the noncombatants in the area receive the JFC’s messages and reject any messages from the adversary force.

Precision effects can enable joint forces to deny the adversary the protection that may be gained from the urban environment. These fires must provide reasonable certainty of achieving the desired effect on the adversary, but with reduced risk of injury to noncombatants and collateral damage. Every attempt must be made to reduce the likelihood of fratricide. Operational fires and maneuver outside the urban area can deny the flow of reinforcement and supplies necessary to wage a protracted defense within the urban area. The JFC employs these capabilities early in order to shape the battlespace by expanding friendly freedom of action and degrading adversary capabilities.
d. Engage

- To engage, the JFC brings the full dimensional capabilities of the force to bear in order to accomplish operational objectives. **Engagement can range from full combat in war to FHA and logistic support for disaster relief operations.** It consists of those actions taken by the JFC against a hostile force, a political situation, or a natural or humanitarian predicament that will most directly accomplish the mission. In all cases, the speed and precision with which the JFC engages will largely determine any degree of success.

- In combat operations, successful engagement requires full spectrum dominance of the battlespace through the seizure, disruption, control, or destruction of the adversary’s critical factors, to include operational and strategic COGs. These critical factors include adversary capabilities, requirements, and vulnerabilities. Critical factors may include tangible components of the infrastructure such as power grids, communications centers, transportation hubs, or basic services. They may also be intangible socio-economic or political factors such as financial centers and capabilities, particular demographic groups and sites, and cultural sensitivities. Offensive engagement may also mean controlling key terrain or infrastructure, disrupting the adversary’s decision cycle, cutting or controlling inter- and intra-city mobility and communications, triggering an adversary response, or positioning forces to conduct another phase. Defensive engagement focuses on denying the adversary control of those same nodes and COGs. The goal is not just movement to positions inside a city. The goal is to apply strength against the adversary’s weakness, using tempo as a weapon to shatter adversary cohesion, organization, command, and psychological balance. Joint forces maneuver in time, as well as in space, to achieve decisive superiority. Similarly, joint forces must learn to organize and integrate ground, maritime, air, and special operations combat power in the city, and to design and execute the sustainment schemes that build and maintain tempo. Both offensive and defensive JUOs will probably entail heavy use of IO and CMO.

- In MOOTW, engagement will be controlled and limited, depending on the type of operation being conducted. Noncombatant evacuation operations will likely require brief engagement in a relatively small area, while peace operations can require engagement throughout the entire urban area for a long period of time. In other types of operations, such as FHA, engagement may be the role of forces normally designed to support combat forces. As in combat operations, IO and CMO can play a major role in the successful conduct of MOOTW in urban areas.

e. Consolidate. In war and MOOTW, the focus of consolidation is not just on protecting what has been gained, but also retaining the initiative to disorganize the adversary in depth. This calls for an ongoing process of organizing and strengthening the joint force position with respect to the city, combined with controlling the adversary within it, when required. Consolidation also requires activities geared at neutralizing bypassed adversary forces and processing adversary prisoners. Consolidation may place heavy emphasis on logistic support and CMO. The nature of the urban triad ensures that the JFC will have to contend with issues concerning physical
damage, noncombatants, and infrastructure as part of consolidation. CMO and PSYOP units may continue to be especially critical in this aspect, as well as engineering efforts ranging from destruction to repairs to new construction. Equally important are the expected issues of infrastructure collapse and the tasks of FHA and disaster relief.

f. Transition. In general, the end state of JUOs is the termination of operations after strategic and operational objectives have been achieved. This may include the transfer of routine responsibilities over the urban area from military to civilian authorities, another military force, or regional or international organizations. Transition planning is an integral part of operational planning and mission analysis. Transferring control of an operation is situationally dependent. Combat forces are redeployed for follow-on tasks and the JFC shifts support priorities toward accomplishment of CMO. In JUOs, transition may occur in one part of an urban area while engagement still is going on in another. In MOOTW, quick and efficient transition may be a critical mission objective, and thus a fundamental goal is setting the conditions for transition. In all operations, it is essential that routine activities such as providing sanitary services, food, law enforcement, and health services be returned to civilian agencies as quickly as possible because of the demand they can place on joint force resources. An exit strategy is usually thought of in terms of military redeployment. However, until the local authorities have established a relatively safe and secure environment, law enforcement unit, a judicial presence, and a recognized and functioning governmental office with oversight of civilian reconstruction efforts, US capabilities (both military and nonmilitary) may continue to be required.
Panama City. Every major PDF installation along the Panama City to Colón north-south axis and along the Fort Cimarron to Rio Hato east-west axis was either hit directly or PDF forces were blocked at these points from moving into Panama City. Task Force Bayonet, the major fighting force in Panama City, captured and neutralized La Comandancia — Noriega’s headquarters and the PDF’s largest weapons cache. With La Comandancia in US hands and reinforcement routes blocked, the possibility of organized resistance by the PDF collapsed.

On 3 January 1990, Noriega surrendered to US forces. After organized resistance in Panama ended, the transition from combat to stability operations required immediate assistance to the local population. Widespread looting and general lawlessness had reduced Panama City to a state of anarchy. No US civilian agencies were prepared to assume responsibility for post-combat nation-building programs, forcing combat units to establish law and order and provide food, water, healthcare, traffic control, and garbage collection to the local population. CA and PSYOP personnel were used to bolster support for the newly installed government of President Endara. By 31 January 1990, the situation had stabilized and the democratic process had begun to take hold. Operation JUST CAUSE ended, and US troops were withdrawn.


5. Range of Military Operations

a. General. Urban operations can take place across the entire range of military operations, from war to the most benign FHA operation. The activities making up the concept of urban operations remain viable across that range and have the strong potential for simultaneity — a single JUO may involve both war and MOOTW missions concurrently.

b. Urban Operations in War. Urban operations in war also cover a spectrum of possible actions. Ground combat — either offensive with the purpose of securing an urban area and destroying the adversary defending it, or defensive with the objective to deny the urban area to the adversary — is the most difficult and costly type of military urban operation. All those aspects of urban ground combat that have historically extracted a terrible price on attacker, defender, and noncombatant alike remain present today, multiplied by the increased size and complexity of urban areas and increase in the number of inhabitants. However, other types of operations exist in war that may accomplish strategic and operational objectives without ground offensive combat. Aviation assets can destroy and disrupt adversary forces and functions and the infrastructure on which they depend. Special operations can accomplish similar missions. Application of IO can lessen popular support for its leaders. If ground combat operations are necessary, appropriate shaping of the battlespace, identification of COGs, and application of
force may prevent full-scale urban combat. It is important that the commander consider forces and functions in unusual combinations and relations when planning urban operations, befitting the nature of the urban battlespace.

c. **Urban Operations in MOOTW.** MOOTW conducted by US forces increasingly take place in urban areas. These operations are typically categorized as either having or not having a threat or use of force. However, in many urban areas stability is tenuous at best, making the threat of some type of hostile action real in nearly all urban operations. As in Somalia in the early 1990’s, some MOOTW have begun as purely humanitarian operations and ended in urban combat. Throughout the range of MOOTW, the same principles for conducting urban operations apply. Whether strikes by air or special operations forces, raids, peace enforcement or peacekeeping, counterterrorism, noncombatant evacuation, relief operations, support to civil authorities, or others, the same need exists to understand and shape the battlespace, engage the adversary or problem, consolidate, and transition to civil authority.

d. **Multiple Operations.** The nature of modern urban operations often requires different types of operations to occur simultaneously or in rapid sequence, sometimes in close proximity. Referred to as multiple operations, a situation can easily arise where members of the same friendly unit may at one moment be feeding and clothing displaced refugees, at the next holding two warring tribes apart, and the next fighting a highly lethal battle — all within the same urban area. In a larger context, the joint force may have to conduct FHA and other operations at the same time and in the same area where combat operations are taking place. Such action may not wait for consolidation and transition, but may be an integral part of the overall urban operation synchronized and integrated with all other facets. **Urban combat will bring with it requirements normally associated with non-combat MOOTW; operations directed toward non-combat MOOTW may very well entail urban combat.**
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1. Operational Level Joint Tasks

   a. When necessary to accomplish strategic or operational objectives and with due consideration of the strategic environment and existing and potential constraints, the JFC designs, plans, and executes JUOs. As in other types of operations, during JUOs the JFC exercises authority and direction over forces assigned or attached and influences the outcome by, among other things, assigning missions, weighting the effort, allocating resources, making adjustments, controlling reserves, and meeting the needs of subordinates and seniors.

   b. JUOs may occur within the context of a larger campaign. A single JUO may also consist of a focused urban operation taking place entirely in a single urban area and its immediate surroundings. The JFC will need to determine whether or not urban operations are essential for the conduct of the campaign and, if so, where and when to conduct JUOs. A number of strategic and operational considerations and requirements may determine whether or not JUOs are necessary:

      • An opposing military force must be destroyed, and that force chooses to position itself in an urban area.

      • An urban area may have infrastructure or capabilities that have strategic or operational value, and these critical features must be seized.

      • It may be necessary to focus an adversary in an urban area to facilitate a larger operation or campaign plan and decisive battle in another location.

      • The geographical location of an urban area may cause it to dominate a region or avenue of approach.

      • The political and cultural significance of the urban area may be such that it is itself a strategic COG.

   c. When faced with the prospect of JUOs, the JFC should carefully consider whether or not the means are available to conduct the operation successfully considering the demands of urban operations. As outlined in Figure III-1, the JFC should consider force strength, force types, required munitions and equipment, potential casualties, the effects of time and momentum, the potential for collateral damage, the prospects of escalation, and alternative courses of action (COAs). These alternatives might include seizure or construction of alternate facilities (such as port or airfield) or bypassing and isolating the urban area rather than entering it.
d. The commander must set the conditions and accomplish certain tasks. These include the appropriate application of the concept for urban operations; collection of information and resulting understanding; isolating the urban area; tempo of operations; thorough understanding of operational objectives; the avoidance of “template” planning and predictability; accurate situational awareness; taking advantage of local expertise; and the use of disciplined troops, with applicable skills gained through realistic urban training and experience. Figure III-2 details some of the keys to minimizing the human and material cost of urban combat operations.

e. While planning and conducting JUOs, the commander should remember that the line between the tactical and the operational levels is neither fixed nor well-defined, but unfocused and changeable. Particularly in JUOs, the nature of urban operations at the tactical level may have a profound effect on the planning and conduct of operations by the JFC. Tactical actions can have significant operational as well as strategic consequences, sometimes immediately.

2. Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance

a. General

- The ability of the JFC to influence the outcome of JUOs is the result of leadership and ability to control forces and functions in order to execute the intent. C2 are supported by an intelligence infrastructure and a reliable and secure communications and computer system that processes and integrates information and passes it to where it is needed. This combination of C2 and the tools for its implementation — C4ISR — is fundamental to the conduct of modern military operations. The nature of urban operations accentuates
the difficulties of the commander both in war and in MOOTW, and offers significant hindrances to effective C2 and ISR.

b. **C4ISR and the Urban Triad**

- The concept of JUOs requires the JFC to understand and shape the urban battlespace and to engage any adversary standing in the way of accomplishing strategic and operational objectives. The key to understanding the urban battlespace at all levels is the ability to rapidly collect and disseminate information. Critical to shaping the battlespace is the ability to implement command decisions based on continually changing information. Since any urban operation contains a great deal of uncertainty, and since knowledge is a perishable asset, then speed and precision are necessary to get the right information in the right hands as expeditiously as possible.

- The complex physical terrain of urban areas inhibits the performance of some technologies associated with C4ISR, including LOS communications and overhead surveillance. Subterranean and interior space makes knowledge and understanding of the urban battlespace more difficult. The combination of exterior and interior space also does not lend itself to normal planning factors for personnel and support, and urban operations have frequently been manpower intensive. The presence of key political and cultural centers within the urban area affects planning in a number of ways, from the identification of key nodes and COGs to targeting and the development of ROE. See Figure III-3 for further information concerning C4ISR and the urban triad.
The presence of noncombatants further complicates C4ISR. All operational planning must consider the effects of operations on noncombatants, and their presence in large numbers will require great attention to areas such as interagency support and public affairs.

Existing infrastructure such as transportation and communication systems can both facilitate and hinder C4ISR. Service infrastructure such as police, fire, and medical services may offer control and intelligence opportunities, but its absence will certainly add to the requirements of the joint force.

c. Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance Operational Considerations in JUOs

- Command, Control, Communications, and Computers (C4)

- In urban areas, ground operations tend to become decentralized. It is therefore highly important that C2 be flexible, adaptive, and decentralized as well. Essential to decentralized C2 is the thorough knowledge and understanding of the commander’s intent at every level of command. To further enhance decentralized C2, commanders at all levels should issue mission-type orders and use implicit communications wherever possible.

- In JUOs, the commander’s critical information requirements (CCIR) categories of friendly, adversary, and environmental information must also include pertinent information concerning the urban triad. Friendly critical information may include items such as anticipated political actions by a host nation (HN), the ability of the HN to
Operational Tasks and Considerations

GROZNY — PROBLEMS IN COMMAND AND CONTROL

Command and control is especially important in a JUO when coordination of forces is required to negotiate a complex environment. Russian command and control was convoluted, resulting in poor synchronization of Russian forces during the 1994-95 battle for Grozny. Russian units had no unity of command; command was scattered between the Ministry of the Interior, the Ministry of Defense, and the Federal Counterintelligence Service, the successor to the KGB. Commanders did not coordinate with Russian units on their flanks. In fact, they moved in almost autonomous columns along four main routes. The organization and sequencing of force caused many command and control problems for Russian troops. For example, General Anatoly Kvashin commanded the Main Assault Force that entered Grozny from the north. As Kvashin advanced, Chechen rebels focused most of their firepower on his force because, unknown to Kvashin, the Russian commanders from the east and west gave false reports about their whereabouts. It was not until the second day of the operation that Kvashin realized that he was fighting in the city without the help of Groups East and West.

On the other side, Chechen mobility and innate knowledge of the city exponentially increased their ability to command and control their forces. The Chechens generally did not maintain strongholds, but remained mobile. Hit and run tactics made it very difficult for the Russian force to locate pockets of resistance and impossible to bring its overwhelming firepower to bear against the enemy force. Moreover, high-rise buildings and structures impeded Russian transmissions, especially those in the high frequency and very high and ultra high frequency ranges, making it difficult to communicate unit locations. The Chechens overcame this problem by using cellular phones and commercial scanner systems, which allowed them to communicate easily with one another and ensured the coordination of their combat operations.

SOURCE: Timothy L. Thomas, *The Battle of Grozny: Deadly Classroom for Urban Combat*

support noncombatants, or the presence of sufficient precision munitions in the joint force. Although the adversary may consist of a traditional armed force, it may also be necessary to obtain information on criminal elements, guerrillas, terrorists, and tribal or political factions. Environmental information requirements will probably include elements of the urban triad, such as the behavior and needs of noncombatants or the presence or likelihood of disease or hunger. In short, the JFC must ensure that CCIR encompass not only a strictly defined military operation but also the full range of urban considerations.

• If a major urban operation is to be undertaken as part of a larger campaign, then plans should address the difficult balance, synchronization, and integration between the JUO and the rest of the campaign — including differences in force requirements, tempo of
operations, types and quantity of fires and munitions, types and amounts of logistic support, and many other areas. Whether a JUO is conducted as a major operation during a phase of a campaign or throughout the entire campaign, planning must give appropriate weight to considerations of noncombatants, infrastructure, the cultural and political situation, demographics, and other urban characteristics that may affect the outcome of the operation. In MOOTW, those considerations are likely to assume even greater importance to the planner.

• In JUOs, the planning for branches and sequels should consider the potential effects not only of adversary action, but also of such events as political changes, public reaction to press reports, suffering among noncombatants, damage to infrastructure or culturally important structures, and breakdown of order. How well planners can anticipate and plan for branches and sequels may in large part determine how closely the JFC attains the desired end state.

• In either war or MOOTW, the end state normally includes the disengagement of the military instrument and the transition to HN control or to civilian agencies. In either case, the JFC must clearly understand the military conditions that will achieve the strategic objectives. Another military consideration is the follow-up political exploitation of completed military action and the military role in the transition to peace. This exploitation includes matters such as CMO and FHA, and requires planning, liaison, and coordination both at the national level and in theater among diplomatic, military, and political leadership.

• Commanders and planners should consider two aspects when addressing forces and resources. One aspect looks outward and one looks inward. The first aspect concerns how these functions can best support full spectrum JUOs. The second concerns the way the urban area affects the conduct of service support functions, particularly when those functions are located or performed within an urban area. JUOs normally will require more of many types of resources (e.g., personnel, munitions, subsistence, medical support, etc.) than other operations. Commanders and planners must make every effort to anticipate and specifically plan for these resources. It is important for the JFC to clearly specify appropriate supporting and supported relationships to ensure that subordinate commanders conducting JUOs will have sufficient forces and means. The JFC may also need to task organize forces in innovative formations depending on the characteristics of the urban area and the operational objectives. In order to preclude stripping other theater forces of assets required for JUOs, the JFC should identify early in planning those capabilities required from supporting commands.

• Crucial to the commander’s ability to organize, arrange, and employ forces in JUOs is the accurate identification and analysis of adversary COGs and DPs. These may be located within the urban area (in fact, the area may itself be a COG) or outside the urban area but with a strong influence on it. Since the JFC will base the operation plan largely on this identification, a thorough knowledge and understanding of all aspects of the urban area is of great importance.
• The JFC will probably establish operational areas within the theater of operations. In JUOs, it is likely that a JOA will be established that will include the urban area and sufficient surrounding area for the joint force to achieve its objectives. The area of interest should include any area from which influence can be exerted on the urban area. Other operational areas may be designated outside or inside the JOA. Maneuver and movement control measures must be carefully considered and delineated to allow maximum flexibility on the part of subordinate commanders and to prevent fratricide.

• The joint force headquarters should similarly be organized with a view toward the nature and requirements of JUOs. The JFC may need to establish centers or cells specifically tasked to deal with some aspect of urban operations. In particular, the JFC must coordinate with allies, coalition partners, and other government agencies to ensure cooperation, mutual support, and understanding. In JUOs, that coordination will include HN agencies, local elements, international organizations, and NGOs. The support of these organizations may be critical to the accomplishment of strategic and operational objectives. These groups can offer the JFC a wealth of information, knowledge, and insight concerning the particular urban area, and their cooperation may enhance the JFC’s understanding of the area and provide critical assistance in dealing with local groups and the civilian populace. In any case, close support and cooperation will help ensure uniformity in priorities, procedures, and objectives. The extensive liaison required by JUOs means that it is very likely that many of these organizations will be represented in the force headquarters. The force will also provide liaison to them, as well as to HN agencies such as police or local government, different tribes, clans, or factions, or any other of the myriad groups that may be influential in a particular urban area.

• Urban operations tend to be time-consuming in urban areas. The nature of the terrain and the presence of noncombatants slows down the actions of ground forces; constraints

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**CHECHNYA — IDENTIFYING CENTERS OF GRAVITY**

False assumptions based on a strategic intelligence assessment caused Russian commanders to incorrectly identify the rebel leadership as the Chechen strategic center of gravity — the primary source of their strength and power. In reality, ethnic nationalism, the true center of gravity, ran much deeper than the rebel leadership itself. Moreover, the Russians identified rebel leader Dudayev’s personal security as a critical vulnerability at the operational level. They believed that by removing Dudayev (which they felt was a relatively easy task), they could readily put an end to the Chechen separatist movement. As an extension of this reasoning, they viewed Grozny, Dudayev’s seat of government and the region’s major transportation and industrial hub, as a decisive point. Thus, Grozny became the initial operational objective.

**SOURCE:** Timothy L. Thomas, *The Battle of Grozny: Deadly Classroom for Urban Combat*
tied to civilians and infrastructure inhibits and delays fires, from the conduct of air operations to fires in support of ground forces; difficulties in communication make coordination difficult. Yet the complexity and demands of urban operations will likely result in a very high operational tempo. When JUOs are part of a larger campaign, this may result in two major operations being conducted at very different tempos and timings, making overall synchronization and integration difficult to achieve. The urban operation may be slow but intense, while a second major operation could take less time but have fewer demands. Within urban operations themselves, the effects of tempo and coordination on synchronization and integration must be taken into account by operational planners.

•• Depending on the type of urban operation being planned, there will almost certainly be operational constraints placed on the JFC in the accomplishment of the strategic and operational objectives. In the development of ROE, the President and Secretary of Defense will provide guidance based upon input from the operational commander and attempt to balance operational constraints, mission accomplishment, applicable law, and protection of the force. Recent operations have shown potential adversaries may try to take advantage of the fact that US military forces will comply with the requirements of the law of armed conflict (LOAC). The commander should anticipate the effects of ROE on operations and plan accordingly. In developing ROE, the commander must consider the effects on JUOs, particularly the potential for civilian casualties, collateral damage, or friendly casualties to adversely influence the accomplishment of operational objectives. See paragraph 15 of this chapter for a discussion of the legal aspects of JUOs.

•• The nature of urban operations presents certain challenges to C4 and particularly to communications. Planning must take into consideration the differences between communications requirements and capabilities in urban operations and other operations, and the communications architecture should be modified accordingly. The design and organization of joint force C4 architecture are influenced by decentralization, the three-dimensional nature of urban battlespace, urban hindrances to radio communications, and the existence of an urban communications infrastructure.

See JP 6-0, Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations, for a full discussion of C4 planning considerations.

•• The decentralization inherent in urban ground operations requires the ability to communicate quickly outside the normal communications patterns. Because of the complexity of the urban terrain, situational awareness and battlespace visualization is very difficult. The communications architecture should support representation of the entire battlespace — vertical and horizontal, exterior and interior, surface and subterranean, and airspace. In addition, the JFC may need to provide support for geopositioning, sensors, fire support, and other information. Radio communications are inhibited in the urban environment, where the proximity of tall buildings, power lines, and other urban features results in screening, shadowing, interference, and reduced ranges. Solutions include using more ground-based systems; relying on airborne relay or
retransmission assets; or using other platforms or equipment. The difficulty of communications in urban areas adds significantly to the equipment and manpower requirements of the forces engaged. At the very least, the JFC will need to provide a large amount of additional equipment to subordinate forces. Existing communications systems in an urban area may range from the very sophisticated to the rudimentary. However, all offer the possibility of use by the joint force to augment its communications capability, compensate for shortages, or meet early communications requirements during initial deployment. Particularly in MOOTW, the JFC may be able to make efficient use of existing communications infrastructure, from basic telephone lines to video and data transmission.

- As the single control agency for the management and operational direction of the joint communications network, the joint communications control center (JCCC) must be knowledgeable concerning the requirements of communications in the urban environment, especially in the specific operational area. The JCCC should be aware of the capabilities present in the urban area, their potential use, and any problems associated with that use.

- A critical aspect of effective C4 is the successful execution of IO. IO are discussed in paragraph 11 of this chapter.

- **Intelligence, Surveillance, and Reconnaissance**

  - Information superiority is an integral and necessary part of the concept for JUOs, and intelligence is one of the primary means to achieve that information superiority. During JUOs, the JFC relies on comprehensive intelligence to determine the social, political, and cultural environment, the physical terrain, adversary capabilities, demographics, and other characteristics of the urban battlespace.

  - Operational intelligence activities in JUOs are significantly different from other operations because of the vast number of variables found in urban areas in comparison with the conventional battlefield. These variables may be encountered in a multitude of combinations. Because of the complexity of the urban environment and the difficulty in achieving accurate battlespace visualization and situational awareness, IPB takes on considerably different focus, with emphasis on elements not normally found or emphasized in a conventional IPB. In JUOs, intelligence on the state of noncombatants or the friction between rival clans or factions may be as important as that of adversary force capabilities.

  A detailed discussion of joint IPB for JUOs is found in Appendix A, “Joint Intelligence Preparation of the Battlespace in Urban Areas.”

- Information requirements normally focus on adversary forces and the physical environment, but for JUOs they must include detailed information concerning the nature and characteristics of the urban area — terrain, populace, and infrastructure as well as
MOGADISHU — INTELLIGENCE GATHERING

Every urban area is defined by a unique set of physical, social, economic, cultural, and historical circumstances. In Mogadishu, Somali social, economic, and political relations are mediated by an unwritten social code dictated by kinship and religious precepts. Even though Somalis share a single ethnic background, a single language, and a single religion (Sunni Islam), clan rivalry and a patrilineal hierarchy divide the country. These cultural differences contribute to a volatile political atmosphere in which clan personalities and historical relationships govern decisionmaking. Understanding this foreign system of government significantly helped the joint force commander (JFC) of Operation RESTORE HOPE to make use of local assets and provided him with the situational awareness necessary to achieve mission success. In comparison, during UNOSOM II, US leaders failed to take certain factors of Somali culture into consideration, contributing to the operation’s failure.

During Operation RESTORE HOPE, human intelligence (HUMINT) gathering took advantage of the humanitarian nongovernmental organizations (NGOs) that had been working on the ground in Mogadishu prior to the formation of unified task force (UNITAF). These organizations had developed relationships with official contacts, observed first-hand the dynamics of Somali politics, and were able to provide significant intelligence on militia activities. This type of HUMINT is essential in urban operations. Continuous monitoring of the local population’s disposition and the adversary’s intentions ensures that diplomatic and/or military efforts are appropriate to the situation and well received by relevant political leaders.

To track and disperse this type of intelligence, US forces established a civil-military operations center (CMOC) to serve as a clearinghouse for information between the humanitarian agencies and the multinational coalition force. The CMOC communicated daily with State Department Presidential Envoy Robert Oakley, a former US Ambassador to Somalia who knew most of the major Somali political players. Clearing a political path for the US-led relief effort, Oakley and a small staff traveled into southern Somalia explaining to local leaders what to expect as troops arrived at distribution sites.

The importance of understanding local politics and integrating indigenous decision makers into an urban operation cannot be overstated. Leveraging local support ensured that US-led forces would be welcomed and helped sustain a calm political atmosphere in Somalia throughout the entire relief effort. UNITAF units tried to build on local leadership and reestablish elements of the Somali National Police — one of the few respected national institutions in the country that was not clan-based. The police force staffed checkpoints throughout Mogadishu and provided crowd control at feeding centers. The local police force provided both security and valuable HUMINT to UNITAF.
In contrast, as the mission in Somalia changed from peacekeeping to peace enforcement during UNOSOM II, the UN failed to develop a full awareness of the local population’s disposition and did not obtain adequate intelligence on the adversary’s intentions and capabilities. In-depth intelligence gathering could have helped the JFC to predict the proclivities of adversaries, their method of operation, and the way in which they interacted with their environment. For example, a greater commitment to intelligence during UNOSOM II would have uncovered the fact that many militia officers had extensive training from the Soviet military academy in Odessa and from Italian military schools. The JFC underestimated the military capabilities of rival factions, and as a result, UN forces were not adequately prepared for contingency situations.

Intelligence gathering is essential to developing operational awareness in the urban environment. A JFC planning an urban operation should attempt to understand the social norms and political customs that define the urban area. A range of HUMINT sources exists to assist the JFC in developing an understanding of the adversary in relation to the urban area. It may be necessary for a JFC planning a joint urban operation to call upon a variety of nontraditional human sources, such as NGOs, foreign experts, anthropologists, regional specialists, expatriates, civil affairs personnel, and special operations forces, for vital information on the urban area.

SOURCE: Joint Military Operations Historical Collection

political, cultural, economic, and other considerations. These requirements will also have different priorities in JUOs, with intelligence concerning civilian population or infrastructure potentially as important as that concerning the adversary. Intelligence centers must concentrate on determining intelligence requirements, collecting information concerning the urban area(s) in the theater and JOA, and producing intelligence products that focus on a specific urban area for a specific operation. Among the areas for the centers’ attention might be the threat, biographic information on urban leaders, and economic, geographic, socio-cultural, and political factors.

A large amount of the information needed to support JUOs is available well before a decision is made to commit US forces to a particular urban area. Information is often readily available on urban terrain, demographics, and infrastructure, but the precise and detailed information required to conduct operations may be more difficult to obtain. Imagery intelligence (IMINT) and signals intelligence (SIGINT) have often provided timely and fairly complete information to the commander, but both of these sources contain drawbacks when used to gather information in urban areas. IMINT can provide an accurate and up-to-date picture of the layout of a city, the functions of some structures, the location of communications sites, vehicular movement patterns, and other facilities and activities that can be viewed from the outside. However, IMINT has difficulty viewing the interiors of buildings and cannot view the subterranean areas of a city, and the sheer
volume of movement makes interpretation difficult. Measurement and signature intelligence could provide information concerning the presence of certain elements such as weapons of mass destruction (WMD) or other covert indications. The same is true of SIGINT. Experience in urban operations clearly indicates that HUMINT is essential in understanding the local behavior and psychology, pinpointing locations, identifying targets, and developing situational awareness. However, the reliability of information gained from some of these sources can be questionable.

- Special operations forces (SOF) and other joint reconnaissance assets can provide support to the JFC in the collection of operational information, including target intelligence. These assets may already be deployed to the JOA or can be deployed early to help bridge the gap between other forms of information and the current situation. The presence of these assets in the urban area can be beneficial in understanding and shaping the battlespace, target identification, and meeting critical information requirements. See paragraph 8 of this chapter for a discussion of SOF capabilities.

- Because urban terrain is primarily manmade, it is subject to frequent and substantial change, and hardcopy maps and other representations can easily become out of date. In addition, hardcopy maps and even near real time imagery are two-dimensional, making accurate visualization of the battlespace difficult. Additionally, the urban terrain hampers geo-positioning by making it difficult to determine at any given time the exact locations of friendly forces. There is a requirement for accurate maps of the urban areas, in a scale useful at the lowest levels, and visual representations in three dimensions. Defense Intelligence Agency and National Imagery and Mapping Agency gridded reference graphics are required to assist in the air-to-ground coordination that will be required for all combat air support missions such as close air support, resupply, air assault, infiltration, and exfiltration. These representations could take the form of line maps, images, image maps, three-dimensional perspective views, computer simulated fly-throughs, or other specialized representations of the battlespace.

- When conducting MOOTW in urban areas, identification of the threat must take into consideration the mission and all aspects of the urban area. In some operations, the threat may be environmental, as in the case of a natural disaster. In others, it may be hunger. In still others there may not be a direct adversary at the onset of operations, but the potential increases for numerous adversaries to arise as the operation develops. The threat may include organized military units, militia groups, clans or tribes, criminal elements, insurgents, terrorists, political factions, or a combination of two or more. For each potential threat, a determination should be made concerning the operational capabilities, COAs, and intentions.

For more information, see Appendix A, “Joint Intelligence Preparation of the Battlespace in Urban Areas,” and Appendix B, “Joint Fires for Urban Operations.”
3. Movement and Maneuver

a. **General.** Operational movement and maneuver allow the JFC to engage the adversary on terms most favorable to friendly forces. If movement positions forces to the best advantage, then maneuver leverages that position to accomplish operational objectives. Operational maneuver has an impact beyond the realm of combat, and can reduce the amount of combat necessary to achieve a successful outcome of the campaign or operation.

b. Once the decision has been made to conduct JUOs, movement can range from the disposition of forces to best conduct forcible entry into an urban area to advantageous positioning in preparation for an operation other than war unlikely to involve combat. Maneuver may consist of the tactical or operational actions of forces to engage or disrupt adversaries or to destroy their ability to achieve planned objectives.

c. **Movement and Maneuver and the Urban Triad**

• The physical terrain of most urban areas makes the movement of large forces difficult, even in times of peace and stability. In situations of turmoil, the difficulties are magnified. The patterns of streets and structures can be confusing to navigate, tend to break up large formations, are easily interdicted by fire, and can be easily turned into obstacles and barriers. Conventional avenues of approach in urban areas — highways, wide thoroughfares, railways, and rivers — are easily blocked or interdicted. Debarkation and staging areas, such as ports or airfields, may also be located within or close to significantly built-up areas and suffer the same difficulties.

• Noncombatants, by their sheer numbers, can act as an impediment to both movement and maneuver. LOCs and avenues of approach to and from assembly areas may be choked with noncombatants leaving the urban area. In MOOTW, normal civilian traffic can make it nearly impossible to conduct operational movement except during certain hours of the day. The same can be true of movement and maneuver within the urban area. In urban combat, the presence of noncombatants will certainly affect the ability to use fires in support of maneuver.

• Ports and airfields are frequently located within or adjacent to urban areas and may themselves be vulnerable to interdiction. Routes to and from ports and airfields often pass through the very densely populated and built up areas the joint force is trying to control. There may be no suitable areas for reception and staging near the debarkation points. Roads, railway lines, and rivers may also offer routes into the urban area, but they are also subject to interdiction and blockages. Air routes into the urban area may be less prone to obstruction. However, a determined adversary with even rudimentary air defense weapons can impede movement of aircraft during both operational strike and logistic support operations. The capabilities of required infrastructure may be insufficient for the introduction of joint forces and may require substantial improvement before being fully usable. Other infrastructure considerations such as dependable electric power,
water, and sanitation may also affect the movement of forces into the urban area. For operational
maneuver, the quality of the transportation system within the urban area can be key to the joint
force’s ability to maneuver. Adversaries with knowledge of the transportation system — roads,
subways, utility tunnels, alleys, sewers, and other routes — can both enhance their ability to
maneuver and prevent friendly maneuver from achieving its desired effects.

d. Movement and Maneuver Considerations in JUOs

• Forces designated to perform JUOs should, if possible, move to reception and staging
areas outside the urban area where they will conduct operations; however, that may not
be possible depending on the particular urban area.

• Since most ports and many airfields are located within or adjacent to large urban areas,
the only place for debarkation and staging may be within the urban area itself.

• Even if the debarkation points are part of the urban area, commanders should attempt to
find a secure area large enough to stage and posture operational forces. This is particularly
true for MOOTW, where forced entry into the JOA is not expected.

• Although airmobile operations offer another option for movement and maneuver in
urban areas, the close spacing of buildings and narrow streets may, in some circumstances,
 negate the joint force’s ability to conduct these operations. Consequently, the airdrop
and airland of personnel, equipment, and supplies may have to be conducted at a staging
area outside of the urban area.

• In MOOTW, debarkation will frequently take place within the urban area, and the
commander should be aware of the effect this influx of joint military force may have on
the local population. These effects may be in the form of resentment or anxiety, disruption
of normal movement patterns, displacement of port or airfield workers, overburdening
of services such as water and electricity, or other disruptions. The JFC should take steps
to lessen any adverse effects among the civilian populace during this initial deployment
of forces.

• The infrastructure required for debarkation and movement within the JOA may require
improvement or restoration before it can be fully utilized. Port facilities, runways, and
roads may be inadequate for the movement of forces and may require the early deployment
of assets capable of making the necessary modifications to enable full deployment to
occur.

• In MOOTW, the JFC should consider the physical and psychological effects on the
urban triad, particularly noncombatants, of the posturing and concentration of forces
within the urban area. Although the actual requirements will differ from those of combat
operations and from one urban area and mission to another, forces should be postured
with regard for those aspects of the urban operation that will require action by the joint force.
Operational Tasks and Considerations

- JUOs, like other operations, must be conducted in depth. Whether war or MOOTW, the JFC plans and conducts various types of operations throughout the theater or JOA to achieve a position of advantage. **Operations in depth may consist of attacks far beyond the urban area itself, on targets that can affect urban operations in some way, or they may take place within or near the urban area itself.** When the urban area itself is the focus of the campaign or major operation, the battlespace is constricted and operational depth may be measured in miles, not hundreds of miles. Even in that case, however, operations in depth may include such distant targets as water supply, power plants, communications relay sites, adversary C2 or assembly areas, or key transportation nodes. Within the urban area, an example of operations in depth could be the simultaneous seizure of key objectives in different parts of the urban area. Such operations may frequently be conducted by air, sea, space, or special operations forces in addition to land forces.

- While all forms of maneuver apply to urban combat, some have greater application than others. Key to maneuver in any form is the ability to disrupt the adversary’s decision cycle through a combination of surprise, speed, tempo, and precision. The JFC may use ground, air, maritime, and space-based assets to isolate the urban area. In addition, ground forces provide the capability to seize important objectives and DPs, to facilitate the removal of noncombatants, monitor and enforce desired behavior, and conduct systematic sweeps of the urban environment. Air assets can be employed to penetrate an area on multiple axes and rapidly project power. In any urban combat maneuver, the best approach is to use the full range of combined arms technology and weaponry available to the joint force, supported by information operations. Figure III-4 provides examples of operational maneuver and urban operations.

- **Maneuver Within the Urban Area.** The urban environment significantly affects the ability of the joint force to maneuver by canalizing, increasing vulnerability, reducing options, and slowing movement. Structures pose obstacles that force movement along streets and block movement between streets, thus canalizing and compartmentalizing units and exposing them to fires. This in turn affects the joint force’s ability to change directions, reposition, reinforce, bypass adversary resistance, and/or maneuver to the flank. Buildings and the urban population provide adversary cover and concealment and increase the vulnerability of the maneuvering forces, whether ground or air. The nature of urban terrain slows maneuver, partly because of the barriers and obstacles either already present or created during JUOs and because of the physical demands of JUOs. In addition, the urban defender generally has interior LOCs, allowing defenders to quickly react to maneuver on the part of an attacking force. Coordinated and integrated horizontal and vertical maneuver in the urban area can slow the defender’s ability to react and use interior lines.

  - **Envelopment** inside an urban area can be difficult to accomplish. The density of the adversary force and the physical terrain it occupies may make it difficult to find an exposed surface flank or make an airborne assault impractical. In those cases, it may require a frontal
assault to create an assailable flank. Effective employment of air, land, sea, space, and special operations forces can significantly increase the speed of maneuver to exploit the situation.
Operational Tasks and Considerations

- **Infiltration** depends on superior situational awareness and understanding of the urban area, careful selection of objectives, detailed planning, and efficient support and deception. Infiltration is not likely to be attempted by large conventional forces, but rather small units, and a hostile civilian population reduces the prospects for success.

- **Penetration** requires surprise and careful planning. Care must be taken to secure the flanks of the penetrating force.

- In JUOs involving combat, **frontal assault** by surface forces may be inevitable. The joint force’s chances of success in executing this form of maneuver can be greatly enhanced by its ability to apply overwhelming combat power against specific objectives with speed, firepower, and shock.

- As difficult as urban maneuver may be, there are several actions the JFC can take to reduce the cost and increase the likelihood of success.

- **Isolation of the urban area is nearly always a prerequisite for success.** The joint force can cut off or control outside support, information, and influence through air, space, land, and sea dominance by interdiction, physical presence, control of basic services, and control of lines and means of communications. The purpose is to control the flow of supplies, personnel, and information into and within the urban area and to physically and psychologically isolate the area. Within the urban area itself, isolation of selected areas may be a prerequisite for controlling them. The JFC should consider both the beneficial and detrimental effects of such control and isolation on the civilian populace.

- **Combined arms organization ensures that forces have all the elements at hand to conduct JUOs.** The difference between combined arms in JUOs and in other operations is the proportion and organizational level of different types of forces. For example, armored forces may not be required in the same strength and organization as in operations in open country, while need for engineer capability increases.

- In MOOTW, the JFC may employ maneuver options that are not appropriate in war. The early seizure of key operational objectives by urban penetration can facilitate control of the populace and local infrastructure. Shows of force throughout the urban area can discourage resistance. Accurate intelligence will enable joint forces to maneuver with speed and precision to disrupt the decision cycle of any potential urban adversary.

- It may be necessary to conduct **urban defensive operations**, either to deny the adversary strategic or operational objectives, to retain a key economic or political center, to control LOCs and avenues of advance, or for reasons of economy of force. Operational considerations in urban defense mirror those of offensive operations: the purpose of the defense; the degree of delay and denial desired; effect on noncombatants; acceptable friendly casualties; the type of defense; whether to defend inside or outside the city; whether to defend the entire urban area, a key sector, or COGs; and the amount of physical destruction anticipated and allowable.
The JFC must counteract the effects of natural and manmade barriers, obstacles, and mines. In JUOs, these may include ports and airfields and their approaches, transportation systems (roads, railroads, and canals), natural formations such as mountains or rivers, minefields, risks from industrial and chemical hazards, and even highly congested sections of the urban area itself. In order to overcome urban barriers and obstacles and provide operational mobility, the JFC may have to employ substantial engineering or other support assets immediately after initial seizure of the immediate area around the barrier or obstacle. Sea mines and some land minefields can be cleared prior to the introduction of land forces, but other barriers and obstacles require hands-on preparation, restoration, or improvement. These actions can be more difficult in urban areas because of the difficulty in securing areas dominated by vertical structures or natural terrain, and a substantial investment in forces may be necessary to protect the mobility effort.

Operational countermobility can be achieved by the employment of operational obstacles, the institution of embargo or blockade, or by maritime interception. In JUOs, any and all of these methods may be pertinent. Defense of an urban area in itself can constitute the employment of a system of obstacles. Joint forces can create urban obstacles in a number of ways: enhance natural or manmade choke points, destroy bridges and tunnels, establish minefields, or create other obstacles.

The JFC may take steps to dominate or control those aspects of the urban environment whose possession or command provides either side with an operational advantage. Aspects of the urban environment include the physical (land, air, sea, and space), the virtual (electromagnetic and information), and the social, cultural, economic, and political. Denial of an operational area can be accomplished either by occupying the key area itself or by limiting use or access to the area. For an area or environment to be operationally key, its dominance or control must achieve operational or strategic results or deny the same to the adversary. In JUOs, the key areas or environment may be approaches to the urban area, dominating physical terrain and airspace within or near the urban area, manmade features important to the success of the operation, or non-physical activities such as the social, cultural, economic, or political. The joint force can dominate or control an operationally significant land area by physical occupation, through fire, or through the threat of fires. It may be possible to dominate key areas without entering the urban area, or by entering only in selected places, through effective maritime, air, or IO.

Control over populace and resources consists of providing support to HN governments, but there can be instances where the joint force must provide that control with little or no help from local organizations. This control can range from the control of civil unrest to the restoration and provision of basic services such as police functions, water, electricity, sanitation, food, and medical care. In establishing this control, the JFC will need to provide HN and/or interagency support in the form of CA, military police, security, and logistics for the movement, collections, housing, feeding, and protection of noncombatants and displaced persons. Populace and resources control operations are also undertaken to deprive the adversary of support from the populace.
Operational Tasks and Considerations

4. Fires

a. General

- Fires play a key role in the JUO concept of operations. In the case of operations involving combat, the JFC can use fires to shape the battlespace and to engage the adversary, but perhaps the most important use of fires is in the isolation of the urban area or points within the urban area. The development of precision munitions makes attack on specific urban targets much more effective, and recent operations such as those in Yugoslavia and Kosovo have made operationally significant use of precision fires. Even if the urban operation is not likely to involve combat, fires are an essential tool in force protection and must be available to the JFC.

- Even when the joint force employs precision weapons, fires can still adversely affect the achievement of the desired end state. Fires can cause displacement of the civilian population, destruction of critical infrastructure, alienation of local inhabitants and the international community, and increased determination on the part of the adversary.

- JUOs present unique considerations for the planning and execution of fires. In JUOs, both the ability to use fires to produce the desired effects and the ability to synchronize and integrate fires are considerably more difficult than in other operations. Direct fires sometimes become the firepower means of choice, and can have operational-level significance. In many urban operations, restrictive ROE and political constraints may compound these problems. In urban combat, experience has shown that a strong combined arms capability is necessary for success; fires and maneuver are complementary functions that are essential to achieving JFC objectives.

See JP 3-09, Doctrine for Joint Fire Support.

b. Fires and the Urban Triad

- The complex physical terrain of urban areas — horizontal and vertical surfaces, interior and exterior space, surface and subsurface areas — can severely limit the ability of joint forces to employ fires. The vertical surfaces of buildings can easily mask targets from surface attack and create urban canyons that diminish air capabilities. Height and proximity of surrounding buildings, different types of structures, construction materials, structural density — all may have an adverse effect on fires. Interior and subterranean spaces offer an adversary positions that are both difficult to locate and hard to reach. Damage caused by combat can create even more protection. The clutter of closely spaced structures can also adversely affect targeting and assessment. Communications difficulties caused by urban terrain can interfere with effective fire support and control. The characteristics of some weapons systems also make them less suitable in urban terrain than in other areas.
The presence of large numbers of noncombatants can also severely inhibit the use of fires. Since most JUOs will include constraints designed to minimize civilian casualties, the joint force will be required to use fires accordingly. These measures can take several forms: prohibiting attacks on targets located in heavily populated areas, restricting munitions used in attacks, restricting attacks to certain times of the day, giving warning prior to attacks so that noncombatants can evacuate the area, and aborting attacks unless precise accuracy can be guaranteed.

Preservation of infrastructure is a concern during planning and conduct of JUOs. The presence of critical infrastructure is common in urban areas and, depending on the operational objectives, the JFC may need either to preserve all infrastructure, render selected infrastructure temporarily unusable, or destroy some or all. In addition, urban areas probably contain a number of culturally significant sites that are also likely to have a protected status. In any case, the presence of significant infrastructure and protected sites increases the requirements for accurate identification and targeting, precise delivery of fires, and concern for collateral damage.

c. Fires Considerations in JUOs

The JFC should consider such matters as the potential for collateral damage, the possibility of hazardous material contamination, the effects on the civilian populace, and any other possibilities that may affect the achievement of operational and strategic objectives. Because JUOs contain the real potential for the elevation of tactical events to the operational or strategic level—particularly events such as civilian casualties or damaged infrastructure—the JFC must ensure that targeting guidance extends to the routine support of tactical maneuver.

For a detailed discussion of precision targeting, see Appendix B, “Joint Fires for Urban Operations.”
Operational Tasks and Considerations

- **Operational combat assessment** includes battle damage assessment on operational targets, munitions effects, and reattack recommendations. Assessment in JUOs is made difficult by the restrictive and crowded urban terrain on the ground — friendly forces, SOF, or local human sources. The same may be true for the assessment of munitions effects, but in urban areas an on-the-ground assessment can be highly important due to the different types of construction, materials used, structural dimensions, and other aspects of manmade construction that may affect weapons effects.

- Because the conduct and coordination of indirect fires in urban areas is difficult, fires in support of operational maneuver must be closely coordinated and planned in detail, to include considerations of weapons effects, psychological effects on the populace, and potential collateral damage. For air-delivered munitions, terminal control and guidance can help ensure the delivering platform has acquired the correct target, thus reducing the risk of fratricide. Effective airspace control measures can ensure other missions (for example, reconnaissance and strike packages) can transit or operate in the airspace above and around the urban area.

  *Ground and air control measures are discussed further in Appendix B, “Joint Fires for Urban Operations.”*

- The use of **nonlethal weapons** in JUOs may give the commander the ability to shape the battlespace while minimizing noncombatant casualties and collateral damage. As additional nonlethal capabilities are developed, their applicability to JUOs should be considered and they should be employed whenever they can contribute toward the achievement of operational objectives.


- **Interdiction** is a crucial step in isolating and shaping the urban area. Interdiction is an action to divert, disrupt, delay, or destroy an adversary’s surface military potential before it can be used effectively against friendly forces. Interdiction in JUOs can divert adversary forces intended for the urban battle, disrupt command, control, communications, computers, and intelligence (C4I) and other systems and capabilities, and delay or destroy forces and supplies.

5. **Logistic Support**

   a. **General.** The nature of urban operations creates unique support demands. The quantities of supplies required will differ from other types of operations, as will the types and amount of medical services required. Forces will need reconstitution more frequently. All movement will entail more risk and be more difficult to accomplish. Sustaining bases may not be possible, or may be difficult to secure. Support requirements to HN and civilian agencies will likely be much greater than in other operations,
and may be the focus of the urban operation itself. Support activities will play a large role in the transition phase of JUOs.

b. Logistic Support and the Urban Triad

- The complex physical geography of urban areas can have significant effects on support. Asphalt, concrete, and heights cause injuries not normally seen in large numbers in other types of terrain. The close spacing of buildings and streets can have an effect on mobility. There may not be large spaces available for bases. The need to operate in buildings, on streets, and in sewers offers a variety of medical challenges. Urban terrain can have restrictive natural terrain features such as rivers as well as narrow roads and closely built structures.

- The presence of large numbers of noncombatants can easily affect the ability to support joint forces. Sickness and injury can burden medical services. Crowds and congestion can inhibit vehicular movement. The sheer numbers can drain the support capability of the joint force if not considered beforehand.

- Infrastructure can help or hinder operations. Existing services may be able to support the joint force to some extent, but it is more likely that the joint force will need to support local services, to include food and water, health service, transportation management, and law enforcement. Local government can be of assistance in the contracting of services and supplies, but may be too ineffectual to help in a meaningful way. The failure of basic services can place on the joint force the burden for providing them. The presence of a capable local infrastructure means that the joint force must only support itself, but the likelihood in JUOs is that such will not be the case. Local infrastructure will likely either be incapable of fully meeting the demands of the population or absent altogether. Because of this, any JUO will probably see a significant presence of NGOs and international organizations. It is important that the JFC and staff coordinate fully with these agencies in order both to relieve any potential burden on the joint force and to ensure that the needs of the civilian population are met. The joint force is better able to accomplish its objectives with the active and efficient cooperation of the NGOs and international organizations.

See JP 3-08, Interagency Coordination During Joint Operations, Volume I, for detailed guidance on integrating civilian organizations and agencies with joint operations.

c. Support Considerations in JUOs

- Support requirements for JUOs can increase dramatically from those encountered in other types of operations. Add to that the potential requirement for the joint force to support noncombatants and the support burden can grow considerably heavier. In MOOTW, the JFC should plan for support of combat operations regardless of the original mission.
Operational Tasks and Considerations

- Historically in urban combat operations, ammunition expenditures (particularly for small-arms ammunition) increase dramatically. On the other hand, fuel requirements in JUOs are often less than for operations in open terrain. The operational planner must consider these different usage rates and plan accordingly.

- The JFC’s responsibility for equipment maintenance in the JOA usually entails the establishment of facilities in rear areas or offshore for the repair and replacement of materiel. In JUOs, the establishment of such facilities may not be feasible if there is no rear area as such or any area large enough for the repair of major items. In urban combat, it is difficult to evacuate damaged equipment, and in a constantly shifting urban battle there may be no secure routes to maintenance facilities. Maintenance service providers may be forced to come to the equipment rather than have the equipment come to them. In urban combat, it is often easier to replace than to repair, and planners should allow for increased replacement of what might normally be repairable equipment.

- Historically, it is necessary to pull units back for rest and reconstitution far more frequently in urban combat than in other types of operations. In intense fighting, units often can last only a few hours before needing relief. When that is coupled with the high casualty rates normally associated with urban combat, the problem of reconstitution becomes a serious one, requiring foresight and prior planning and preparation.

- In JUOs, water consumption can be particularly high. Water supply and delivery can be difficult.

- Personal clothing and equipment will need replacement on a regular and frequent basis. Tactical units will desire special urban equipment such as knee and elbow pads, ropes, goggles, gloves, small-unit radios, and others.

- Health services face potentially the biggest challenges in support for forces.

  - As previously indicated, urban combat produces high casualties due to adversary action. Urban operations in general also tend to produce a significant number of injuries due to the nature of the terrain — falls from walls or windows, vehicular injuries, injuries caused by contact with building walls. Because of the high concentration of people and often-poor sanitation, urban areas have the strong potential for the outbreak of disease among joint forces. More robust health service support will be required for all JUOs, but particularly for those involving combat.

  - Infectious diseases pose one of the greatest threats in JUOs. Planning for dealing with large numbers of noncombatants (and casualties) should include measures to protect friendly forces in the JOA from communicable diseases. Proper sanitation and preventive medicine, including animal, rodent, and pest control, should be part of all health service planning.
Combat stress reactions are magnified in urban combat and require effective psychological prevention and management. Urban combat is mentally, physically, and emotionally exhausting, and the psychological effects on all participants (including health care personnel) can be devastating. While rapid treatment and/or removal from the combat area can often enable combatants to quickly return to duty, it may be more difficult to take these actions with scarce medical personnel. JFCs must plan for the timely recognition and treatment of psychological casualties among both combatants and health care personnel and arrange for replacement of affected personnel.

The physical terrain of urban areas may preclude vehicular or aerial evacuation of casualties. Consequently, units may require more litter bearers to move casualties to collection points where they can be further evacuated by ground or air transport. Lengthy evacuation routes will increase the number of litter bearers required due to fatigue, so commanders may need to augment combat units with additional personnel to perform evacuation. Commanders and staff at all echelons must develop detailed medical evacuation plans, to include engineer support to clear routes for medical evacuation. The compartmented nature of urban operations, transportation restrictions, communications difficulties, and the finite number of combat medics increases the demand for self-aid and buddy aid. Commanders should plan and train their units accordingly.

Civilian medical facilities that joint forces can use may be present in the urban area, at least in the case of MOOTW. However, it is likely that these facilities will not have the required capabilities to even meet the medical needs of the local population. The joint force should include sufficient organic medical capability to treat its wounded, sick, and injured and either return them to duty or evacuate them from the theater or JOA.

Other support areas have particular requirements in JUOs:

When local capabilities or operations of port or air facilities are insufficient, the JFC provides that capability. There also may exist a need to expand the capabilities of these ports of debarkation early in the deployment process. The JFC may also need to provide rail and road management and control within and perhaps outside the urban area itself in order to ensure efficient movement.

Basing and Sustainment. Sustainment activities for JUOs should be located close enough to the urban area to ensure provision of adequate support. Yet, if they are located within the urban area, they are subject to actions by the adversary and the local populace and to the difficulties inherent in the urban infrastructure. There may not be a single area that can house a complete base, and it may be necessary to construct smaller bases for specific types of support. Engineer intelligence and early involvement of the joint force engineer are crucial to this element of mission planning.
**Operational Tasks and Considerations**

- The requirement to provide *law enforcement and prisoner control* can range from support only for the joint force to extensive support to the local government and populace. An increasingly likely scenario for an urban operation is one in which local law enforcement is ineffective, and criminal elements pose a threat to the HN or the joint force. Significant law enforcement support may be required.

- In some urban operations, the largest single operational task is the requirement to provide *support to other nations, groups, and agencies*. Actions in this area range from providing security assistance to the HN to CMO, from interagency support and coordination to transition to civil administration. These activities can occur in urban operations in both war and in MOOTW, and include the whole range of CMO support.

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**PSYCHOLOGICAL CASUALTIES IN BEIRUT AND GROZNY**

Recent urban conflicts suggest that the psychological casualty rates are much higher in urban operations than in other types. The tempo and experience of urban operations is so intense that soldiers tend to “burn out” quickly.

After-action assessments of Israeli Defense Force (IDF) performance during urban operations during the 1982 Lebanon war point out the difficulty the IDF had sustaining combat operations because of the high stress level urban combat imposed on individual soldiers. This observation is borne out by Israeli casualty figures: 10-24% of Israeli soldiers serving in Lebanon experienced psychological problems as a result of their battle experience. This, compared with a psychological casualty rate of only 3.5% to 5% in the 1973 war means that combat stress casualties suffered in Lebanon were two to five times more serious.

After Russia’s 1994-1996 conflict with Chechnya, one medical survey found 72 percent of the soldiers screened had some sort of psychological disorder symptoms. Further, 46 percent of the soldiers exhibited asthenic depression (a weak, apathetic, or retarded motor state) and the other 26 percent exhibited psychotic reactions such as high states of anxiety, excitement or aggressiveness, and a deterioration of moral values or interpersonal relations. The statistics also revealed that the percentage of troops with combat stress disorders was higher than experienced during their 1980s war in Afghanistan. One of the primary differences was that, in Chechnya, Russian forces conducted combat mostly in cities rather than in mountains, valleys, and other rural areas.

**SOURCE:** *MOUT Lessons Learned: Operation Peace for Galilee,* and Timothy L. Thomas, *Combat Stress in Chechnya*

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*For more information, see paragraph 13 of this chapter, “Civil-Military Operations.”*
6. Force Protection

a. General

- Protection of forces will often constitute a friendly COG, and nowhere is this more likely than in MOOTW operations — where minimizing friendly casualties is often an operational constraint. Although force protection will not ensure the success of JUOs, failure to take adequate protection measures can cause the operation to fail. The requirements of operational protection vary from one operation to another, but their general aspects are the same: protection of operational forces, means, and noncombatants; protection of systems and capabilities; the conduct of deception operations; and security for operational forces and means.

- As is the case with other operational tasks, force protection can be substantially more difficult in JUOs due to the urban triad. Operational threats to the force can include the range of military activities of a sophisticated adversary, hard-to-detect indigenous unconventional forces, or a single terrorist with a car bomb.

b. Protection and the Urban Triad

- The physical urban terrain makes protection more difficult in many ways. The vertical terrain means that observation of friendly formations, movement, and bases is much easier. Urban terrain breaks up friendly formations and canalizes movement, inhibiting with both protection and identification. It becomes difficult to secure LOCs, rear areas, bases, and installations when the nature of urban terrain means that they are easily observed and interdicted. Taller structures may overlook and provide observation of bases and installations. Dispersion within the urban area means that more sites and nodes require hardening and defense.

- Noncombatants pose an even more severe problem. Their large numbers and their presence in all parts of the urban area make operations security challenging. Adversaries may use noncombatants as camouflage, shields, and even targets. Their presence inhibits protective fires and adds to the difficulty of evasion and personnel recovery. The effects of attacks using WMD, terrorism, or conventional attacks on friendly forces are magnified by the presence of noncombatants. Their suffering, even when controlled, can have operational and strategic consequences.

- Some HN infrastructure can aid in the protection of the joint force. However, local infrastructure — when used by the joint force — may become a protection responsibility that can be more difficult than military infrastructure. Civilian buildings are more difficult to defend and maintain security for. Civilian communications facilities are difficult to secure. The often large and sprawling nature of water systems, power plants, transportation systems, and government buildings make their protection a challenging proposition. Communications security and electronics security should take into consideration the presence and potential use of local communications and electromagnetic radiation.
c. Force Protection Considerations in JUOs

- The first priority in planning for protection is risk management. The JFC must identify and control hazards to provide the most appropriate means and degree of protection, including a review of approved ROE to ensure they are adequate for the circumstances.

- Urban operations offer a unique set of actual or potential hazardous conditions. The JFC must identify hazards, actual or potential, that can result in injury, illness, or death to personnel or noncombatants, damage to equipment, property or infrastructure, or any other condition that can degrade the operational mission.

- To assess the identified operational hazards in terms of probability and severity, the JFC must have an accurate understanding of the threat, the urban area itself, and the current conditions within the urban area. The JFC can then determine the risk level of each identified hazard or condition that can adversely affect the achievement of operational or strategic objective, either directly or through branches or sequels. An urban hazard such as terrorist use of a WMD would likely have catastrophic effects on operations, so despite the fact that such an event is not considered likely, the commander is alerted to take protection measures against it. A sniper attack on joint force personnel in the urban area may only marginally degrade operational capability, but since its likelihood is judged to be frequent, again the commander is obliged to take preventive measures.

- Based on the assessment of hazards in the urban area, the JFC develops controls to either eliminate the hazard or reduce the risk. Some hazards can be partially controlled by a thorough understanding of the urban area and urban operations by members of the joint force. Other controls may take the form of barriers and defenses, IO, increased security precautions, population and movement control measures, personnel rotation, development of response plans and capabilities, drills, warning systems, communications, or intelligence. Despite control measures the residual risk is likely to be high due to the inability to fully control all conditions in such a large and complex area.

- Faced with the superiority of US forces, most adversaries seek an asymmetrical advantage. Urban areas are the natural battleground for terrorists: the effects of terrorist acts are greater and more noticeable and the terrorist groups more difficult to locate and identify.

- Urban areas offer terrorists both a variety of means of attack and a wide range of targets. Terrorists conduct sabotage, direct actions (DAs) with conventional munitions, or attacks using WMD. Targets may include barracks and bases, military movement routes, small units, individual personnel, USG agencies, NGOs, civilian or military infrastructure, or noncombatants. US forces have been frequent victims of terrorist actions in recent history, and remain so. Terrorists receive significant operational and strategic results from even a low-level attack. Further adding to the protection problem is the presence of large numbers of noncombatants and key civilian infrastructure. Attacks on
civilians may provide terrorist organizations with similar benefits and less risk than attacks on US forces.

- The JFC should include terrorism prevention, deterrence, and response measures in force protection, including full implementation of the Antiterrorism Program Concept. This concept includes threat estimations, vulnerability assessments, prevention and crisis management planning, and prevention measures. To add capability to antiterrorism measures, the JFC should coordinate early and continuously through the intelligence directorate to tap into organizations specifically concerned with terrorism, members of the national intelligence community, organizations such as the Department of State (DOS), and local sources of information.

- In order to establish and maintain this coordination of effort, the geographic combatant commander, through the commander’s intelligence directorate Joint Intelligence Center and Counterintelligence Support Officer, in consultation with Defense Intelligence Agency, Central Intelligence Agency, embassy staff, country team, and applicable HN authorities, obtains intelligence and counterintelligence specific to the urban area. The commander then issues intelligence and counterintelligence reports, advisories, and assessments to the units within the combatant command’s control or operating within the combatant command’s area of responsibility. This network is the backbone for communicating intelligence and counterintelligence information, advisories, and warning of terrorist threats throughout the region.

*See JP 3-07.2, Joint Tactics, Techniques, and Procedures for Antiterrorism, for more information.*

7. Consequence Management

a. General

- Consequence management (CM) comprises those measures taken to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of a chemical, biological, radiological, nuclear, and high-yield explosive situation. In urban areas, this may include population evacuation, decontamination, transportation, communications, public works and engineering, firefighting, information and planning, mass care, resource support, health and medical services, urban search and rescue, hazardous materials control, food distribution, and energy provision. CM continues until casualties become patients, the threat of further casualties becomes minimal, humanitarian assistance is provided, and public safety is reestablished.

- In most cases, the JFC will not conduct unilateral CM operations, but will participate in collaboration with the HN, either with allies or as part of a multinational relief effort. CM may be the primary focus of an urban operation, or an event may occur during an ongoing urban operation that requires the joint force to conduct CM. The joint force, if not on the
scene, may be the first capable force to respond. In any case, combatant commanders should develop and maintain regional CM plans, including urban CM, in coordination with the DOS CM program and appropriate embassies.

Refer to Multiservice Tactics, Techniques and Procedures: NBC Aspects of Consequence Management, for detailed considerations when WMD events require the JFC to conduct unilateral CM operations.

- **Possible triggers for urban CM operations include natural disasters and WMD events.** Each of these events poses unique and challenging problems to the JFC. WMD events are likely to take place in urban areas for the simple reason that they are meant to kill large numbers of people. Potential terrorist use of WMD in an urban setting would likely be directed against civilian as well as military targets. In the decade of the 1990's, terrorists conducted a number of failed or limited chemical or biological attacks in large urban areas, and for this reason commanders should consider the aspects of urban areas and operations when planning CM response.

b. **CM and the Urban Triad**

- The complex physical urban terrain works against the joint force in CM operations. The physical destruction wrought by a natural disaster or nuclear detonation can make any CM efforts extremely difficult. Subways and interior spaces offer ideal areas for limited chemical or biological attacks. Nuclear attacks can produce catastrophic results due to the effects of collapsing structures, flying debris, and fires. The urban terrain can hinder rescue and relief efforts, either because of destruction or simply because of urban complexities, and significant engineering efforts may be required as part of CM.

- The key factor in urban CM is the civilian population. A large-scale event has the potential to produce casualties in the hundreds of thousands, and even a limited attack may require the evacuation and screening of huge numbers of noncombatants. Panic or civil disorder may accompany an event, bringing a requirement to restore order as well as provide relief services. Sizable numbers of refugees can clog the transportation system and overload support capabilities. The size of the event, the capabilities of the HN, and the effects on the civilian population will have an influence on the type and amount of response a joint force will provide.

- Infrastructure also affects the CM requirements. An event involving physical destruction may affect civilian infrastructure such as medical services, sanitation, power, communications, and law enforcement. Even if physical damage is limited, casualties and displacement of noncombatants may overload local and regional capabilities, particularly in less developed nations. The HN and local government may be able to respond effectively to an event or to provide only limited response, or it may only be able to provide limited response in only certain areas and none in others. Services may be tenuous to start with and they may become quickly overwhelmed. There may be a lack of basic necessities such as power, safe food and water, as well as reliable health and law
enforcement services. In fact, the entire service infrastructure normally found in urban areas may not function, potentially affecting hundreds of thousands. Even if safe food, water, and medicines are available, the HN and relief organizations may not have the capability to distribute them. Supporting physical infrastructure may be unusable due to contamination or destruction, and streets and roads could be blocked. On the other hand, in the case of a limited event, the HN may have relatively sophisticated response ability and require only materiel and manpower support.

*JP 3-07.6, Joint Tactics, Techniques, and Procedures for Foreign Humanitarian Assistance,* details the critical response tasks that must be considered during foreign CM operations.

c. **CM Considerations in JUOs**

- Incidents requiring CM operations may occur in two situations: when the joint force is located elsewhere, necessitating movement to the operational area; and when the joint force is located in the area of the event, perhaps even the target. In the first case, the geographic combatant commander is responsible for providing a headquarters and assessment element to serve as the initial DOD response to an incident and for functioning as the initial C2 element for the initial DOD assets committed to a particular foreign CM operation. In the latter case, the joint force will certainly be among the first to respond, but its own abilities may be affected by the incident. In any case, the joint force will not be the only respondent. It is necessary to establish liaison with appropriate government agencies, NGOs, international organizations, and allies and coalition partners.

- The initial response to an incident can be critical in gaining control of the situation. A number of factors may affect urban CM planning, as indicated in Figure III-5.

- Although immediate response to save lives is authorized, foreign CM must be directed by the Secretary of Defense upon request from the Secretary of State. When authorized, foreign CM operations can be designed around the basic phases of CM — situation assessment and preparation, immediate assistance, extended CM operations, disengagement and handover of CM efforts, and redeployment. If the incident occurs when US or allied forces are already in the urban area, then immediate assistance may begin while assessment and preparation are still taking place. As in other types of operations, the JFC will make certain determinations prior to committing forces, such as strategic and operational objectives and desired end state.

- A number of special considerations are important in urban CM.

  - Port and airfield facilities may be affected and therefore unusable until repaired.

  - Dispersion patterns are affected by the urban terrain and more difficult to predict and monitor.

  - C2 is complicated both by the nature of the urban area and by the presence of HN and
Requirements for decontamination, medical services, and basic life support may overwhelm the force’s capabilities, even with augmentation of personnel and equipment from the continental United States.

8. Special Operations

a. General

- SOF give the JFC the flexibility to tailor a response to meet a wide range of potential urban requirements. Unique SOF capabilities can support the JFC’s campaign by identifying and destroying critical nodes, seizing key terrain or facilities in denied areas, securing or capturing key personnel, countering adversary urban insurgencies through an active foreign internal defense (FID) initiative, or conducting unconventional warfare (UW) activities in an adversary-held urban area. SOF can emplace sensors, provide clandestine intelligence collection, and provide target acquisition information in the highly restricted terrain of the urban environment. In these ways, SOF can achieve results not always attainable with the application of a larger conventional force. SOF can enhance the JFC’s unity of effort by providing coalition support teams with trained, culturally aware, language proficient, military liaison personnel with communications connectivity that can offer the commander a conduit to multinational forces operating under the JFC or in concert with the operation. The day-to-day regional access SOF maintains provides the JFC accurate information and area assessments to enhance situational awareness in preparation for JUOs.
• PSYOP and CA capabilities provided by SOF can also shape the urban environment, isolate adversary forces, and help set the conditions for transitioning the urban area back to civilian control. This may be accomplished through DA against adversary critical target systems or through strong PSYOP designed to isolate the adversary mentally and emotionally from the populace. Isolation may also involve those actions taken to deny outside influences on the urban environment, such as logistic resupply, media, or the influx of additional adversary forces. This may involve restricting air traffic into urban airfields, denying road and rail access into the urban area, or shutting down or manipulating all sources of media information broadcast toward the populace. CA forces are instrumental in this effort through the conduct of populace and resource control (PRC) operations.

See Chapter IV, “Noncombatants,” for a discussion of PRC operations in urban areas.

• Although the complexities of the urban environment change the way missions are conducted, SOF can perform their nine primary missions, along with collateral activities, in an urban environment unilaterally and in conjunction with conventional forces. These missions categorize potential SOF activities conducted throughout the range of military operations, from war to the vast range of MOOTW.

b. Special Operations and the Urban Triad

• The physical terrain of the urban area hinders SOF less than other forces or technologies. The ability of language-proficient, culturally astute SOF to blend into the local population facilitates their ability to traverse the urban area more readily than conventional forces. SOF can gain timely and first-hand knowledge of the urban terrain difficult to obtain from imagery or overhead observation, and their ability to position themselves to observe key targets in detail facilitates precision actions against those targets. In doing so, SOF offers a critical surveillance and intelligence source, a reliable form of HUMINT.

• Some other primary SOF missions directly relate to noncombatants — combating terrorism (CBT), DA, and IO. Some collateral missions, such as counterdrug and countermine activities as well as FHA, may directly benefit noncombatants.

• SOF can aid in both the preservation and neutralization or destruction of urban infrastructure. In FID, CA activities, PSYOP, and HN support operations, SOF can support the provision of basic service and communications. The capability to mount or support precision strikes against key infrastructure is a critical tool for minimizing collateral damage.

c. Special Operations Considerations in JUOs

• SOF can contribute to each element of the concept for JUOs. The nine primary SOF missions lend themselves to urban operations, from understanding the battlespace through local familiarity and direct observation to transition support gained by habitual contact with NGOs. In the often politically charged environment of urban operations,
Operational Tasks and Considerations

SPECIAL OPERATIONS FORCES IN PANAMA, 1989

Special operations forces (SOF) were involved in Panama throughout the entire campaign, and included Army Special Forces, Army Rangers, Army Special Operations Aviation, Naval Special Warfare, and Air Force Special Operations Forces. SOF participated in almost every action during Operation JUST CAUSE including infiltration, special reconnaissance, precision strike, and underwater demolition. These small, highly skilled units conducted attacks, often supported by AC-130 gunships, and were able to penetrate densely populated operational areas successfully as quick reaction forces. Before the airborne landing, SOF helped to prepare the battlefield and then reinforced the main effort once the airborne attack was over. Other uses of SOF included the attachment of psychological operations and civil affairs personnel to various task force units to serve as advisors, translators, liaisons, and assist in refugee control. This proved highly effective and aided in reestablishing law and order, promoting stability, and assisting in the establishment of a new Panamanian government. SOF capabilities can be force multipliers in the multifaceted urban environment of JUOs.

SOURCE: Joint Military Operations Historical Collection

the ability to have eyes on the ground with local and regional expertise can help the JFC control the effects of operations.

• **Combatting Terrorism.** The role of SOF in CBT is both in antiterrorism (AT) and counterterrorism (CT). In CT, SOF can provide indications and warning of impending hostile actions against friendly forces and preclude, preempt, and resolve terrorist incidents. CT missions in JUOs may include hostage rescue, recovery of sensitive material from terrorist organizations, and attack of terrorist infrastructure. In AT, SOF can aid in the protection of people and facilities from terrorist attacks in urban areas by providing training and advice on reducing vulnerability and on a limited basis when directed, by providing highly specialized and technical assistance to existing security forces.

• **Direct Action.** The JFC’s combat effectiveness is also enhanced by SOF’s DA capabilities. The ability to penetrate denied areas in all weather, day or night, and to precisely strike a designated target with minimal collateral damage using a small highly trained tailored force, can achieve significant strategic or operational level results. In the urban environment, this precision strike capability is invaluable when the desire is to limit collateral damage and noncombatant casualties. A number of DA missions are directly applicable to JUOs, such as raids, ambushes, direct assault, and terminal guidance.

• **Special Reconnaissance (SR).** In the condensed urban environment, it is often difficult to gain accurate observation and surveillance through technological means. SOF can provide visual observation to obtain or verify information and can place sensors by hand in key locations. SOF can provide a form of HUMINT to supplement other sources of information. SR missions that may be appropriate to JUOs include environmental
reconnaissance, armed reconnaissance, coastal patrol and interdiction, target and threat assessment, and post-strike reconnaissance.

- **Foreign Internal Defense.** FID provides SOF local access in much of the world. These same programs provide SOF personnel with invaluable experience in the cultural complexities of numerous nations. SOF urban counterinsurgency operations, as part of FID, can provide the JFC a tool for consolidation and transition of operations, and also to combat an urban insurgency without the use of large scale, visible conventional force involvement.

- **Unconventional Warfare.** Whether supporting HN forces in the conduct of counterinsurgency or conducting their own UW operations, SOF provides the capability to carry out asymmetric urban attacks at the heart of the adversary’s resistance. The urban applications of UW capability can weaken and destroy an adversary from within (particularly unconventional threats such as insurgents or criminal organizations), protect key infrastructure, and provide up-to-date intelligence on current adversary activities in preparation for and coordination with the conventional fight.

- **Civil Affairs.** Designated Active and Reserve Component forces and units are organized, trained, and equipped specially to conduct CA activities and to support CMO. CMO are the activities of a commander to affect relations between military forces, governmental and nongovernmental organizations and authorities, and the civilian population within the urban environment. CA augment CMO staffs of JFCs and selected component commanders. CA activities are performed or supported by CA and embrace the relationship between military forces and civil authorities in urban areas and involve application of CA functional specialty skills in technical sectors normally the responsibility of civilian government. In JUOs, these activities include PRC, humanitarian assistance, and emergency services. All CA activities support CMO.

  For a more detailed discussion of CA, CMO, and CA activities, refer to paragraph 13 of this chapter, “Civil-Military Operations.”

- **Psychological Operations.** Whether the JUO is one of conventional combat or MOOTW, PSYOP will likely be an integral part of efforts to influence the emotions, motives, objective reasoning, and behavior of the government, organizations, groups, and individuals in the urban area. One of the most effective weapons available to the JFC, particularly in JUOs, PSYOP can positively dispose local officials and noncombatants toward the joint force objectives. It can also reduce the morale and effectiveness of enemies and political adversaries by creating dissidence and disaffection, encouraging defections, promoting resistance, and reducing support among the civilian population. In the urban environment, the task for PSYOP to get out the JFC’s approved message is enhanced by the large number of communication devices available to urban residents (cellular phones, facsimile machines, computers, newspapers, radios, televisions, and others).

  For more information, see paragraph 11 of this chapter, “Information Operations.”
Operational Tasks and Considerations

- **Counterproliferation (CP) of WMD.** CP refers to action taken to seize, destroy, or recover WMD. SOF provide capabilities to conduct or support DA, surveillance, CBT, and IO missions to deter or prevent the acquisition or use of WMD and operate against the threats by WMD and their delivery means. Urban terrorism is widely practiced against existing governments, civilian populations, and US forces abroad. There have already been attempts to use WMD as a weapon of urban terror and the likelihood is great that there will be other attempts. SOF may be the best means available — perhaps the only suitable means — to take appropriate action to prevent the use of WMD in an urban area.

- **Information Operations.** The unique capabilities of SOF enable the JFC to access, alter, degrade, delay, disrupt, deny, or destroy adversary information systems throughout the range of military operations and at all levels of war. IO apply across all phases and across the range of urban operations. Special operations missions that support IO may include DA, SR, PSYOP, CA, and FID.

  For further details, see paragraph 11 of this chapter, “Information Operations.”

- Recent US military operations involved coalitions providing forces in a combined military effort. SOF can provide a valuable link in this effort. The ability to coordinate and deconflict operations among various multinational components within a military operation is critical to successful operations, but even more so in the rapidly evolving, close-in, urban fight. SOF coalition support teams provide trained, culturally aware, language proficient, military liaison personnel with communications connectivity that can provide a multinational forces commander the conduit to multinational forces operating under the combined command or in concert with the operation.

- **C2 of SOF.** When SOF participates in JUOs, it is essential that the conventional commander be fully cognizant of the unique nature of joint special operations which require forces with attributes different from conventional forces and that the JFC ensures that missions identified, nominated, and selected for SOF are appropriate. Accordingly, C2 of SOF is normally exercised by the SOF chain of command.


9. **Space Operations**

  a. **General.** Space power is the total strength of a nation’s capabilities to conduct and influence activities to, in, through, and from space to achieve its objectives. Space-based systems are unconstrained by political boundaries and can provide support before, during, and after JUOs. The information provided by these systems can improve situational awareness and help enable information superiority for the joint force.
See JP 3-14, Joint Doctrine for Space Operations, for a full discussion of space operations.

b. **Space Support and the Urban Triad.** The same urban characteristics that interfere with the ability to communicate on the ground can diminish the information derived from space-based ISR systems. The physical terrain is complex and crowded, with equipment and movement masked by the huge amount of activity in the urban area and thus making surveillance and reconnaissance more difficult. Space systems have little capability to observe interior or subterranean activity. Because urban areas tend to be communications hubs, SIGINT must be gleaned from the multitude of signals that are not operationally significant. The complex physical terrain, large numbers of civilians working and moving in the urban area, and presence of significant communications, transportation, and other infrastructure can affect the rapid fusion of information to create a complete picture of the battlespace.

c. **Space Support Considerations in JUOs**

- Space systems may be employed during peacetime or times of crisis to monitor an urban area before friendly forces are established. To aid in planning an urban operation, the JFC may request the deployment of a joint space support team to assist in planning and integration of space operations into the overall joint force plan, as well as act as liaison with Commander, United States Space Command.

- **ISR** operations normally have a number of inherent tasks, most of which are made more difficult by the characteristics of urban areas.
  
  - Space systems can normally detect disturbances such as buried facilities and construction sites, but built-up areas contain many such areas that are part of the city landscape and not related to militarily important sites.
  
  - Of particular importance, space systems can provide route and target information for mission planning — critical to the precision strikes that can be necessary in urban fires.
  
  - Space systems can also detect camouflage and assess adversary movements and operations. However, in urban areas concealment is often provided by buildings and structures themselves and not by camouflage. The movement of civilian traffic and the sheer volume of vehicles can mask adversary movement and make identification difficult.
  
  - Space systems may be able to provide warning of hostile acts and reconnaissance against friendly forces, depending on the size and nature of the urban area, but the availability of covered avenues of approach make that capability problematic.
  
  - The ability of space systems to detect, track, assess, and report aircraft and vehicular threats is a valuable one, even in urban areas. Again, the presence of a significant number of civilian aircraft and vehicles may make timely identification a problem.
• The space-based **global positioning system (GPS)** provides a critical capability during JUOs.

  • GPS can provide position, location, and velocity for weapon accuracy, ingress and egress, location, and silent rendezvous coordination.

  • The ability of space systems to provide real time terrain information that, enhanced by imagery data, can be used on the ground is crucial to the success of ground forces.

  • The **environmental monitoring** capability of space systems can provide weather and atmospheric information critical to weapon selection, air routes, ground and water trafficability, and communications. In CM operations, space systems can provide data for radiation fallout patterns and intensity, and aerosol dispersion of chemical or biological agents.

• Space systems provide C4 and IO capabilities. Considering the difficulties in communications in and around urban areas, the C4 capability offers the JFC the ability to exchange information inside the urban area, between elements of the joint force, and also facilitates intertheater and intratheater communications. Space systems may form a critical link in the C4I architecture that rapidly passes raw data to assessment centers and assessed information to key decision makers. This ability to rapidly pass data and information can enable taskings and warnings to forces, as well as critical situational awareness and location information, within the limits of the systems’ ability to collect such information in the urban environment.

10. Public Affairs Operations

   For several reasons, the level of news media coverage in urban operations is often higher than in operations in other areas. Urban areas make it generally unnecessary for the media to depend totally on logistic or PA support from military forces. Urban areas tend to be easily accessible and contain the technological resources required by the media representatives. The close proximity of numerous civilians and cultural and political centers makes it relatively easy for media representatives to find colorful stories to report. The JFC may have little control over the flow of information that the news media present to the public. The JFC must therefore plan and execute PA operations in such a way as to produce maximum cooperation between the media and joint forces. This is best accomplished by issuing accurate, credible, and timely information concerning military operations and the urban situation. Providing insufficient information to the media can hamper the force’s ability to conduct operations, and poor relationships with the media can result in inaccurate reporting, which can in turn cause a public reaction that influences the ability to achieve operational objectives. On the other hand, successful engagement of the media can aid the dissemination of information in the operational area and help produce and maintain domestic and international support.

   Including PA in the operation planning process is critical to the success of any military campaign, but even more important in an urban environment due to the abundance of competing media. Commanders must understand that the information most available to the news media at the tactical and operational levels is also the most perishable in terms of timeliness. Decisions about information release must reflect
that understanding. PA operations may exploit operational information despite the natural tension between traditional operations security and the commander’s desire to send a clear signal to the adversary. The prudent use of operational information in the news may deter potential adversaries, driving a crisis back to peace before use of force becomes necessary.

11. Information Operations

   a. **General.** IO capitalize not only on the growing sophistication, connectivity, and reliance on information technology but also on the human factors associated with every JUO.

   *For further information, see JP 3-13, Joint Doctrine for Information Operations.*

   b. **IO and the Urban Triad.** Of the three elements of the urban triad, two may be influenced by IO — noncombatants and infrastructure. These, in fact, are targets of IO. Leadership may include not only military leadership, but civilian political, social, and cultural leadership as well. Urban infrastructure may include communications and information, transportation and distribution, energy, economics and commerce, and administration and human services. All of these are most likely to be located in an urban area, whether they are national or regional in authority and scope. Also located in the same urban areas are the means to influence them — news media, communications, cultural and societal organizations, political headquarters, and concentrated popular opinion. Even when JUOs are but part of a larger campaign, many of the targets of IO will be located in urban areas. Figure III-6 lists targets of and threats to IO.

   c. **IO Considerations in JUOs**

   - IO are a means to **shape** the battlespace and also a tool to **engage** the adversary by selectively targeting infrastructure and weapons systems. In order to fully integrate the many capabilities and activities that conduct IO, the JFC forms an IO cell with full representation from staff elements, components, and supporting agencies responsible for integrating IO capabilities. In JUOs, the **IO cell** should also include representatives of those elements or agencies specifically concerned with the urban aspects of the operation or campaign.

   - **Intelligence support is critical to the planning, execution, and assessment of IO.** In JUOs, intelligence support to IO includes the intelligence specific to the urban area concerned. This information can be obtained from many different sources such as the theater joint intelligence center, NGOs, embassies, or international organizations.

   - Communications support for urban IO is subject to the same limitations and vulnerabilities caused by the nature of the urban area as other communications.

   - There are a number of activities important to the planning and conduct of IO that may themselves be critical to JUOs. The planning for IO must be integrated with planning for these related urban activities to ensure efficient execution for optimal effect. These activities may include
Operational Tasks and Considerations

12. Psychological Operations

a. General

- For any type of urban operation, PSYOP is an important element at both the operational and tactical levels. In JUOs, whether in war or in MOOTW, emphasis on the psychological or informational objectives places PSYOP in a unique and vital position. PSYOP can be used independently or in conjunction with economic, social, and political activities to limit or preclude the use of military force. In some cases, the military objective may be relevant only in terms of the psychological effect. In other cases, PSYOP can augment and support military operations to achieve desired objectives. History indicates that armed conflict is a battle of wills where often the intangibles of morale and willpower can be defeated more easily in psychological than physical terms.

- The psychological dimensions of operations affect those fighting the battle, their military leaders
Chapter III

INFORMATION OPERATIONS

US forces defeated the North Vietnamese on the battlefield during the Tet offensive of 1968, but the information battle was the strategic battle that US forces most needed to win, both within South Vietnam and at home. By ignoring the information battle, the overwhelming US tactical victory was a strategic defeat. Had US leaders made winning the information battle a central part of the campaign plan (for example, by exposing the American people to the North Vietnamese Army’s brutality by publicizing the mass executions in Hue), things may have turned out differently.

In Mogadishu, UNOSOM II leaders also largely discounted information operations and they did not establish robust public affairs and psychological operations (PSYOP) initiatives. US forces participating in UNOSOM II lacked a public affairs organization altogether. In contrast, the unified task force (UNITAF) countered Aideed’s own PSYOP campaign, which he conducted primarily through Radio Aideed, by creating its own radio station. This technique proved so effective that Aideed called General Zinni over to his house on several occasions to complain about the UNITAF radio broadcasts. General Zinni responded that “if he didn’t like what we said on the radio station, he ought to think about his radio station and we could mutually agree to lower the rhetoric.” This technique worked. The UNOSOM II technique of shutting Aideed’s radio station down did not. The warlords had both the weapons and the popular support, and a more effective UN strategy would have been to make them the target of an information campaign as the UNITAF had done.

In the first Chechnya campaign of 1994-95, the Chechens used information operations to complement and multiply the effects of their lethal fires at the tactical level. The Chechens employed four specific types of psychological operations directed against both the Russians and their own populace in the campaign: disinformation, intimidation, provocation, and deception. They relied heavily on disinformation to shape the international news media’s coverage of the conflict. In several instances, they successfully combined their electronic warfare and information attacks. For example, the rebels often employed jamming measures to limit the influence of the Russian mass media on their republic, while Dudayev overrode Russian television broadcasts with his own messages delivered from mobile television platforms. In short, Chechen information operations seriously degraded support for the war among both the Russian populace and its army.

Having lost the propaganda war in 1995 by default, during the second Chechnya campaign of 1999-2000 the Russian government made every effort to control the media and ensure that the Russian view of the war dominated public opinion. Russia won this information war from day one of the fighting. One analyst noted that “after the first Chechen war, the Russian military came to the conclusion that they had to first play out the information war against
and staffs, the political leaders, and the civilian population—not only military targets but also political, economic, or social structures within the urban operations operational area. PSYOP objectives are listed in Figure III-7.

- PSYOP are also an integral element of IO. Along with OPSEC, EW, military deception, physical attack and destruction, computer network attack and defense, PA, special IO, and CMO. However, in supporting the JFC’s objectives, PSYOP may be the predominant application of IO used in JUOs.

b. **PSYOP and the Urban Triad**

- The physical terrain of the urban area does not have the adverse effect on PSYOP as it does for many other activities, since PSYOP generally depend on open sources to disseminate information. If anything, the physical nature of the urban area allows the concentration of people and institutions and makes them easier to reach with PSYOP.

- The civilian populace forms one of the primary audiences of PSYOP, and the urban area contains large numbers of civilians in a relatively small physical area. However, that density also makes it easier for local, tribal, gang, or other group leaders to counteract joint force PSYOP efforts. Still, across the range of urban operations, the support and cooperation of the civilian populace is desirable, and perhaps essential. The potential complexity of the civilian populace can make PSYOP efforts challenging, but this complexity also offers a multitude of options and resources for PSYOP activities. Consideration must be given to those aspects of the civilian populace that can affect the success of PSYOP, such as ethnicity, cultural identity and custom, religion, or economic factors.

- The physical and service infrastructure of an urban area may enhance PSYOP by providing the means to disseminate information throughout the operational area. Existing communications systems—television, radio, computers, newspapers and journals—can provide multiple avenues for PSYOP that are already used by the civilian populace.

c. **PSYOP Considerations in JUOs**

- PSYOP have a fundamental role in JUOs, where the civilian populace and infrastructure often are as important as adversary forces. PSYOP can do much to shape the urban battlespace before, during, and after actual engagement, whether in war or MOOTW. The general

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**SOURCE:** Norman L. Cooling, *Shaping the Battlespace to Win the Street Fight*, and Timothy L. Thomas, *The Battle of Grozny: Deadly Classroom for Urban Combat*
The objectives of joint PSYOP indicate their utility in JUOs.

- Reduce the efficiency of opposing forces,
- Support and enhance FHA, FID, and/or foreign nation assistance military operations.
- Facilitate reorganization and control of occupied or liberated areas in conjunction with CMO.
- Further US and/or multinational war effort by modifying attitudes and behavior of selected audiences.
- Obtain the cooperation of allies and neutrals in any psychological operations effort.

The results of PSYOP should be continually evaluated for relevance to the mission and to national and military goals. The complexity of the urban area enables changes in opinion or attitude to occur quickly. In addition, a PSYOP activity that is effective for a portion of the target audience may leave another target or segment indifferent or even hostile. Continuous evaluation, in coordination with up-to-date intelligence, can reduce the possibility of adverse effects resulting from PSYOP activities and enable PSYOP planners to make necessary adjustments.

Fundamental to the planning of urban PSYOP is an understanding of the urban area — language, urban demographics, culture, economics, politics, religion, local and neighborhood allegiances, and other characteristics of the target population that can affect the way that PSYOP are perceived.

In JUOs, PSYOP can be instrumental in supporting the campaign or operation plan. PSYOP
can be crucial in undermining adversary will. It takes a formidable willpower to fight the urban battle, especially when the resulting destruction is of one’s own city, and PSYOP should be considered an essential weapon in the commander’s arsenal. Support from the local populace can enhance the success of JUOs. Accordingly, PSYOP can gain support for the joint force while reducing support for adversary forces.

- In MOOTW, PSYOP can support all types of JUOs, whether or not they involve the use or threat of force. Urban areas are rich with PSYOP opportunities and resources.

For additional information, refer to JP 3-53, Doctrine for Joint Psychological Operations.

13. Civil-Military Operations

a. General

- CMO may occur before or during military operations as well as during post-hostility operations. They may also occur, if directed, in the absences of other military operations. In any operational area, most of the civil authority and the greater part of the population are likely to reside in one or more urban areas. Because of the numbers and density of civilians, any urban operation will require a significant CMO effort on the part of the joint force.

- Strategic CMO focus on long-term global and regional issues such as economic development and stability, national or host government infrastructure, and reestablishment of national power grids, transportation networks, and telecommunications. At the operational level, CMO support strategic CMO objectives and focus on near-term and immediate issues such as medical readiness, noncombatant evacuation, movement and sheltering of displaced civilians, police and security.

PSYCHOLOGICAL OPERATIONS IN RECENT US OPERATIONS

Haiti — Support of Pre-hostility Psychological Operations (PSYOP)

Operation UPHOLD DEMOCRACY (1994-1995) is an excellent example of effective PSYOP being employed before committing US forces. Elements from the 4th PSYOP Group deployed to Washington, DC and worked closely with members of the Joint Staff, Assistant Secretary of Defense (Special Operations and Low Intensity Conflict) and the State Department to construct and execute an integrated and effective strategic and operational PSYOP plan. General Henry H. Shelton, Commander of the XVIII Airborne Corps for UPHOLD DEMOCRACY, noted: “...it is my belief that the integration of PSYOP early in the planning process was critical to the successful execution of the operation. Long before any American military forces stepped ashore, PSYOP helped us quickly accomplish our political and military objectives by laying the foundation for transition from forced entry to semi-permissive operations. There is no question PSYOP saved lives, on both sides, during Operation
integration of interagency operations with military operations, and synchronization and integration of CMO support to tactical commanders. Figure III-8 provides further details about CMO.

- Urban CMO have three primary objectives.
  - Enhance military effectiveness by eliminating interference with military operations by the civilian population.
  - Support national objectives by assisting the HN in achieving its political, economic, and psychological objectives.
  - Reduce the negative impact of military operations or other destructive forces on civilians. These negative impacts can range from civilian casualties and loss of property to destruction of supporting infrastructure. The effects of suffering on the part of noncombatants often have a profound influence on the attainment of strategic and...
operational objectives. Commanders have an operational, legal, and humanitarian obligation to minimize civilian hardship as far as it is within their power, even while simultaneously conducting military operations.

b. **CMO and the Urban Triad**

- As with other activities, the complex, physical urban terrain can hamper CMO. The urban terrain can fragment and channel CMO efforts, particularly FHA. It may be difficult to find and reach all those in need of support. Constricted terrain makes it more difficult to control large numbers of people in PRC operations. Although urban areas normally offer many buildings usable for shelter, medical care, and other forms of support, the damage to those structures from military operations or natural or manmade disaster can make them unusable, thus adding to the support difficulties.

- Noncombatants are the primary focus of CMO, and urban areas may contain huge numbers of civilians, ranging from the thousands to the millions. Depending on the circumstances, many will be displaced and in need of basic support. Services may be degraded or nonexistent. The requirement to control and support the noncombatant population can easily overwhelm local
capabilities. Effective urban CMO requires knowledge of the ethnic, cultural, religious, and attitudinal characteristics of the populace. Noncombatant populations in urban areas are rarely homogenous, and effective CMO will require understanding of neighborhoods, tribal relations, and the basic allegiances and daily life of the inhabitants.

- Urban infrastructure may be functioning with some degree of effectiveness, in which case CMO must work through and with local authorities and services. It may be necessary to repair physical infrastructure facilities and means, such as power plants or water stations, as part of CMO. Existing service infrastructure may be totally lacking or overwhelmed by circumstances, requiring the joint force to provide not only basic subsistence and shelter, but the full gamut of support personnel — police, legal, administration, engineer, sanitation, medical, transportation, and other.

c. CMO Considerations in JUOs

- JUOs will certainly include CMO. Urban CMO can support overall operational objectives or be the main focus of operations, but are in any case the responsibility of the combatant commander to plan and conduct. CMO may be conducted to shape the battlespace or to engage a civil problem, but their more likely role is in the transition to civil authority.

- Urban CMO may consist of any or all of a number of types of operations, as reflected in Figure III-8.

For further discussion on CMO assistance to FHA and PRC operations, see Chapter IV, “Noncombatants.”

- Planning Considerations

  • CMO planning must carefully consider the nature of the urban area and urban operations. For example, if the JFC considers administrative, logistic, and communications support requirements, additional requirements necessitated by the urban area must be considered by the JFC, both for CMO support and for support of other aspects of the operation. Where CMO is not the main focus of the urban operation, the JFC may wish to establish a joint civil-military operations task force.

  • CMO planners should carefully consider those aspects of the urban area — terrain, human, and infrastructure — that may impact CMO, in addition to potential human or environmental threats. Some of these planning factors include legal implications, communications, culture, education, economic, religious, labor, health, and administrative considerations. Since these factors are also key items of intelligence planning, CMO planning should be closely coordinated with intelligence efforts.

  • Whether CMO is planned to support urban combat actions or operations not involving combat, certain planning considerations apply: (1) The purpose and objectives of the operation;
HAITI — CIVIL-MILITARY OPERATIONS

The large civilian population in Port-au-Prince and the complexities of the humanitarian mission required the United States to interact constantly with other US governmental entities. These agencies included US Agency for International Development and the State and Justice Departments, along with a variety of nongovernmental organizations (NGOs) that also supported nation-building in Haiti. To help resolve the cultural and operational differences between the military and civilian organizations, the joint task force created a formal political-military operations plan that included a civil-military operations center (CMOC). US forces also established a humanitarian assistance coordination center as a part of the CMOC to serve as a clearinghouse for all humanitarian requests for assistance and to prevent NGOs from inundating the headquarters. Civil affairs and Army Special Forces personnel were instrumental in manning and facilitating these activities. In retrospect, the relative smoothness of the operation owes much to the intensity of civil-military cooperation that the CMOC helped to foster.

In addition to the CMOC, Military Information Support Teams (MISTs) were established in June of 1994 to support US policy to restore Haiti’s democratic government, counteract misinformation broadcasts by Haiti’s de facto military regime, and disseminate messages from Aristide to the Haitians. The MISTs were typically five-person teams composed of a psychological operations (PSYOP) officer; a noncommissioned officer; two PSYOP specialists with photography, videography, journalism, or editing skills; and a civilian analyst with linguistic and area specialist skills. The MISTs interacted with both US and host nation militaries and law enforcement agencies to develop appropriate PSYOP missions, information campaigns, and military intelligence support.

SOURCE: Joint Military Operations Historical Collection

(2) the nature and capabilities of all potential urban threats; (3) the nature and characteristics of the urban area; (4) coordination and liaison requirements with other organizations, to include the Department of Defense, other USG agencies, allies, HN officials and agencies, other foreign government officials, NGOs, international organizations, and other public and private groups; and (5) transition criteria and procedures.

See Chapter IV, “Noncombatants,” for further discussion concerning interagency coordination.

• CMO must be synchronized and integrated both internally and with other operations. The relation of CMO to the overall operation can vary a great deal. JUOs could easily require the full conduct of CMO in one part of an urban area while another is still being contested in conventional combat, thus calling for close synchronization and integration of combat and CMO requirements and actions. It could be that initial CMO takes place in the urban area itself or, in the case of massive civilian displacement, in areas nearby. CMO may be the focus of MOOTW
in urban areas, but with combat occurring between the joint force and hostile elements within the urban area. In either case, the JFC should synchronize and integrate planning, employment, and support for both CMO and combat missions.

• CMO will require support in a number of key areas from forces and organizations who themselves understand the nature of urban operations.

  • **SOF** can provide support in the areas of PSYOP and CA.
  
  • **CA** activities require a strong relationship between military forces, NGOs, international organizations, and civil authorities and population in the urban areas where military forces are present. In urban combat, CA requirements will be considerable.
  
  • **PSYOP** will be a key element in any urban operation, not just in CMO.
  
  • **Engineering** support could be critical to urban CMO, particularly in combat and disaster relief operations. This support may consist of firefighting services, facilities repair and management, power generation, construction of fuels and water supply, erection of temporary shelter, construction and repair of ports and airfields, repair and maintenance of transportation and communications systems, explosive ordnance disposal, or many other actions.
  
  • **Health Service Support** (HSS) may be the most immediately critical asset of CMO. HSS activities in urban areas may consist of medical and dental treatment, preventive medicine services, medical logistics, training, and medical evacuation. In JUOs, HSS activities should pay particular attention to the development of HSS intelligence and threat analysis due to the strong potential for epidemic outbreaks.

  Medical support to noncombatants is discussed in detail in Chapter IV, “Noncombatants.”

  • **Transportation** support is necessary for the distribution of food, water, and medicines, for medical evacuation, and for the movement of dislocated civilians to a safe environment. In urban areas, transportation is easily hindered by the nature of the area or by the results of destruction, and support should be planned accordingly.

  • **Military Police and Security Forces** may be vital to establish sufficient control for CMO activities to successfully take place, as well as providing a normal law enforcement capability when none is present.

• The most important urban operational consideration is that CMO will most likely occur simultaneously with, not subsequent to, other operations including combat. The JFC must therefore identify sufficient forces and synchronize and integrate the planning and execution of these operations as well as the support required. The relation of CMO to other operations in JUOs will vary, but CMO will be a significant part of any operation. In full-scale
combat operations, the commander must also accomplish CMO; in MOOTW where the use or threat of force is unlikely, the commander still must maintain the capability to conduct both combat operations and CMO.

- During defensive JUOs, CMO contributes to the military effort by maintaining liaison with civil and interagency organizations and officials, which provides better situational awareness and contributes to force protection. Additionally, coordination with the international relief community can result in a diminution of requirements for US military support to nonmilitary missions, helping to conserve military resources. Finally, PRC measures minimize adversary access to the area (which supports force protection) as well as adversary access to HN logistic support. The commander must also consider the effects of defensive operations on the civilian populace and take the appropriate CMO measures.

- CMO contributes to the military effort during offensive operations, as well. Liaison with local officials and the local populace again provides an additional source of situational awareness, some of which can be used for the targeting of adversary forces and positions. Coordination with the relief community continues to help conserve military resources. Most importantly, PRC measures can be used to minimize civilian interference with military operations, supporting the JFC’s mobility requirements. Again, the JFC must consider the effects of operations on the civilian populace and conduct CMO both to support that populace and to enhance operational capabilities.

For additional information on CMO and CA activities, refer to JP 3-57, Joint Doctrine for Civil-Military Operations, and JP 3-57.1, Joint Doctrine for Civil Affairs.


Personnel recovery (PR) is the aggregation of military, civil, and political efforts to obtain the release or recovery of personnel from uncertain or hostile environments and denied areas whether they are captured, missing, or isolated. This includes US, allied, coalition, friendly military or paramilitary, and others as designated by the President or Secretary of Defense. PR is the umbrella term for operations that are focused on the task of recovering captured, missing, or isolated personnel from harm’s way. PR includes but is not limited to theater search and rescue; combat search and rescue; search and rescue; survival, evasion, resistance, and escape; evasion and escape; tactical recovery of aircraft and personnel, and the coordination of negotiated as well as forcible recovery options. PR can occur through military action, action by NGOs, other USG-approved action, and/or diplomatic initiatives, or through any of these.


15. Legal

a. General. Legal support can be critical to JUOs, whether in war or MOOTW. JUOs are likely to involve a myriad of statutory, regulatory, and policy considerations in addition to the normal constraints
associated with deployments and operations. The senior Staff Judge Advocate (SJA), as the JFC’s legal advisor, is usually in the best position to provide the legal knowledge and advice required by the joint force. Because of the nature and complexity of the operational legal issues involved, (LOAC, ROE, dislocated civilians, negotiations and involvement with local and HN governments, etc.), the SJA must be consulted early and frequently in the deployment.


b. **Legal Considerations and the Urban Triad.** The large numbers of noncombatants potentially affected by urban operations are a major legal concern and increase the requirement for knowledgeable and active legal support to the joint force. Whether these noncombatants suffer the negative effects of urban combat or benefit from FHA, there are legal requirements and ramifications to every aspect of the operation. Further, the impact military operations have on the local infrastructure must be carefully monitored. Some infrastructure provides service to noncombatants which, if destroyed or significantly curtailed, could result in their displacement.

c. **Legal Considerations in JUOs**

- Operational law is that body of domestic, foreign, and international law that directly affects the conduct of military operations. There are a multitude of treaties, conventions, protocols, and international agreements that influence the legal aspects of deploying and employing military forces. The set of international agreements governing warfare is collectively known as Law of Armed Conflict, or Law of War.

- **The Law of Armed Conflict**

  - The LOAC encompasses numerous international treaties, conventions, or protocols. The United States recognizes most of these agreements either through signature and ratification or as customary international law. However, certain agreements and their applicability to any military operation may be subject to disagreement. The JFC’s legal advisor should be aware of both US law and policy considerations and their affect on various arguments concerning the LOAC as it pertains to each potential JUO. The position of the United States, as well as the North Atlantic Treaty Organization and the United Nations, is that their forces will apply the principles and spirit of the LOAC to any military operation. Figure III-9 lists LOAC principles.

  - In JUOs, the principles contained in LOAC are the same as those applicable to other military operations. However, the difficulty faced by the JFC centers on the concentration of people and property and makes these military actions more complex. Virtually any activity in JUOs can have a legal aspect or consequence, from targeting to control of dislocated persons.

  - LOAC consists of a number of general principles which must be considered by the commander in evaluating all uses of force. Four of the most important ones are: (1) **Discrimination.** Distinguishing between combatants, who may be attacked, and
noncombatants, who may not be attacked. (2) **Military Necessity.** Justification of only those measures not forbidden which are necessary for securing the military objective as soon as possible, unless forbidden by international or domestic law. (3) **Unnecessary Suffering.** The prohibition of using weapons, projectiles, or other materials which, by their nature or manner of use, are calculated to cause superfluous injury or unnecessary suffering. (4) **Proportionality.** The injury to persons and damage to property incidental to military action must not be excessive in relation to the direct military advantage anticipated.

- One of the major areas of consideration in the LOAC is that of targeting. There are few absolutes in targeting, but the application of the general principles applies. **Commanders must confirm that targets support military objectives.** The following may be considered to be in that category: (1) members of the armed forces having the status of combatants; (2) noncombatants who lose their protected status by taking a direct part in hostilities; (3) objects that by their nature, location, purpose, or use are either military property, or they contribute to the adversary’s war effort, and their destruction provides a military advantage. Although civilians, noncombatants, and civilian property may not be specifically targeted, incidental injury and collateral damage are not unlawful if: caused incident to an attack on a lawful target, and the incidental injury and collateral damage are not excessive in light of the anticipated military advantage from the attack. Targeting issues are important not only in urban combat operations, but also in unconventional situations where an adversary, in violation of the LOAC, may use civilians to mask attacks or as unlawful combatants.

- LOAC prohibits or regulates the use of certain weapons such as landmines and booby traps, incendiary devices, and lasers. Some aspects of the LOAC provisions are particularly relevant to JUOs and uses of these weapons must be part of the legal review conducted of all operation plans. See Figure III-10 for LOAC weapons prohibitions.

**Figure III-9. Law of Armed Conflict Principles**
• **War crimes** are violations of the LOAC committed by any member of the force, military or civilian. Commanders are responsible for war crimes committed by their subordinates when the commander ordered the act; knew of the act or, owing to the circumstances at the time, should have known that the forces were committing or about to commit such crimes; and failed to take all necessary and reasonable measures within his or her power to prevent or repress their commission. The key to preventing war crimes by US or allied forces lies in awareness of the factors that have historically led to their commission. A look at these factors shows that several of them are frequent products of urban combat, whether in war or MOOTW: (1) high friendly losses; (2) high turnover rate in the chain of command; (3) dehumanization of the adversary; (4) poorly trained or inexperienced troops; (5) the lack of a clearly defined adversary; (6) unclear orders; and (7) high frustration level among the troops.

• There exists a large body of agreements containing provisions for the protection of civilians. These agreements include not only the LOAC, but also recent international human rights treaties. The decisions by commanders and civilian leaders are often influenced by recognized international law, domestic law, and policy. As the United States finds itself employing forces more often in MOOTW, the operational difficulty represented by civilians in the operational area increases. US forces abide by LOAC and apply these principles in MOOTW. This practice forms the basis of the Chairman of the Joint Chiefs of Staff’s standing rules of engagement.

• JUOs typically involve large numbers of noncombatants, and the legal requirements and

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**LAW OF ARMED CONFLICT WEAPONS PROHIBITIONS**

- *The Chemical Weapons Convention prohibits the use of all chemical weapons, including riot control agents.* However, the United States holds the position that use of riot control agents to control prisoners of war or civil disturbances is not a method of warfare and therefore not covered by the convention. In war, President and Secretary of Defense approval is required for the use of riot control agents; in peacetime, the supported combatant commander has approval authority.

- *The Conventional Weapons Convention prohibits the intentional targeting of civilians with landmines and also forbids their indiscriminate use.* It also applies restrictions to the use of remotely delivered and non-remotely delivered mines. Other restrictions apply to the design and use of booby traps.

- *Incendiary weapons are lawful so long as they are not employed so as to cause unnecessary suffering.* Weapons with incidental incendiary effects are exempted, as are munitions with a combined effect.

- *Laser weapons are prohibited if their use is specifically designed to cause permanent blindness.* No prohibition exists concerning laser systems designed to defeat or otherwise counter optical or electro-optical equipment, or laser systems for rangefinding, target designation, or similar purposes.

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*Figure III-10. Law of Armed Conflict Weapons Prohibitions*
prohibitions regarding those civilians are not found in a single legal source. During armed conflict, the SJA or legal advisor can turn to the analytical structure built into the Hague Conventions and the four Geneva Conventions. For MOOTW, law protecting civilians offers an approach to the wide array of treaties, laws, agreements, and policy that cover civilian protection. These laws consist of four tiers of protection—fundamental international human rights, HN law, domestic law, and law by analogy. This allows the SJA or legal advisor to examine the purpose and method of the operation to determine how and to what extent civilians might be affected. The SJA or legal advisor can then advise the commander on the legal ramifications of the operation and, more importantly, provide significant support as the specific ROE for the operation are developed.

• **ROE** delineate the circumstances and limitations under which US forces will initiate and/or continue combat engagement with other forces encountered. ROE are the means by which the President and Secretary of Defense and operational commanders regulate the use of armed force in the context of applicable political and military policy and domestic and international law. Legal factors are but one element of the ROE; nonlegal issues such as national policy and political objectives also play an essential role in the drafting of ROE. Often the ROE will include some restrictions on weapons and targets, and provide the operational commander with guidelines to ensure the greatest possible protection of noncombatants consistent with military necessity.

• **Special operations** do not fit neatly into the legal framework that supports conventional military operations. Nevertheless, these operations are not exempt from the requirement to comply with domestic and international law, including the LOAC. SOF missions are politically sensitive, particularly in peacetime or in MOOTW, and so the area of special operations is full of potential legal pitfalls. Special operations have unique legal issues that can only be addressed by SJAs familiar not only with the law, but also with the nature and requirements of those operations.

• **Other legal considerations** applicable to JUOs fall into the area of administrative law, including environmental law, acquisition, claims, contracts, and fiscal law. These areas require knowledge of US and HN laws, international law, and USG regulations, and they are generally applicable to peacetime exercises and deployments as well as military operations.
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CHAPTER IV
NONCOMBATANTS

“\textit{If you don't understand the cultures you are involved in; who makes decisions in these societies; how their infrastructure is designed; the uniqueness in their values and in their taboos — you aren't going to be successful.}”

George Wilson, Air Force Times

1. General

a. The dense populations inherent to urban areas require that JFCs pay greater attention to the relationship between noncombatants and military operations than in other types of operation. The presence of large numbers of noncombatants will affect military operations, and military operations will affect the lives of the noncombatants. In examining those effects, the commander should keep in mind two overall objectives regarding the civilian populace: to minimize their interference with military operations, and to observe the necessary legal, moral, and humanitarian obligations toward them. Failure in either case may adversely influence the achievement of strategic and operational objectives.

b. Noncombatants can influence the conduct of JUOs in two ways. Their presence levies certain requirements on the joint force, certain actions the force must perform. Noncombatants also cause the force to operate under additional restrictions and constraints.

- The joint force is required to take certain actions toward noncombatants, whether in war or MOOTW; these may include protection, control, support, and influence.
  - \textbf{Protection} can take the forms of security against terrorism, law enforcement, removal from combat areas, separation of hostile factions, or other actions.
  - \textbf{Control} includes control of civil unrest and restoration of order, managing civilian movement, and controlling the resources and services on which the populace depends.
  - \textbf{Support} are all those aspects of support operations designed to relieve conditions caused by manmade or natural disaster or other endemic conditions, including provision of basic sustenance, health services, and restoration of services.
  - \textbf{Influence} includes those actions taken by the force to foster support for US objectives by the civilian populace.

- \textbf{Restrictions} on the joint force can take the form of restrictions on actions in regard to noncombatants or restrictions on operations themselves. The LOAC identifies those restrictions regarding noncombatants, and they may be supplemented by specific constraints provided by the Secretary of Defense. ROE may be a method of restriction that covers both forms. The presence of large numbers of noncombatants can also affect mobility, fires, and the employment of obstacles.
c. **Urban operations can have either a negative or positive impact** on the noncombatant population. Negative effects will most likely result from urban combat. Even within the constraints of the LOAC and restrictive ROE, urban warfare can cause significant civilian casualties, destroy property, disrupt basic services, cause mass dislocation, encourage criminal activity, and bring about conditions conducive to disease. On the positive side are actions and operations designed to provide support to an already suffering populace or prevent adverse effects from disruptive elements.

d. When planning JUOs, the JFC should consider the effects of noncombatants on operations and vice versa. These assessments should be part of the planning for the various operational tasks, as discussed in Chapter III, “Operational Tasks and Considerations.” In addition, the effects of operations on the civilian populace will likely influence both the commander’s ability to conduct operations and the determination of the operational end state. Therefore, noncombatant considerations should form a discrete overall planning area.

• In war, the JFC should consider, as part of the overall determination of operational objectives, the objectives in regard to noncombatants. In doing so, the JFC will determine the desired physical and psychological condition of the civilian populace upon termination of hostilities. The commander may then examine noncombatant considerations in three stages: actions prior to, during, and after combat operations.

**NONCOMBATANTS — OPERATION PEACE FOR GALILEE, 1982**

Failure to understand the importance and potential behavior of noncombatants cost Israeli commanders dearly during Operation PEACE FOR GALILEE. Local Israeli Defense Force (IDF) commanders did not understand the vital importance of populace control for ongoing urban combat operations, either the immediate combat implications or the larger political implications of poor population management. An example occurred during the attack on the city of Tyre. To facilitate the IDF attack on Palestinian Liberation Organization (PLO) forces, Israeli psychological operations convinced 30,000 Lebanese noncombatants to flee Tyre and head for beaches outside the city. The IDF was subsequently unable to provide food, water, clothing, shelter, and sanitation for these people, with predictable consequences. Many tried to return to the city, a process that complicated the northward movement of Israeli troops and the delivery of ordnance on selected targets in Tyre. IDF commanders compounded these oversights by interfering with the efforts of outside relief agencies to aid the displaced population of Tyre lest the PLO in someway benefits. PLO psychological warfare specialists quickly exploited this second failure. The IDF also failed to educate its troops in dealing with Lebanese civilians. Although the Shi’a Muslim population of southern Lebanon either initially welcomed or was neutral to Israeli presence, it soon became hostile because of IDF policies and behavior toward noncombatants.

**SOURCE:** MOUT Lessons Learned: Operation Peace for Galilee
Noncombatants

- Actions concerning noncombatants taken prior to combat are numerous and may include such areas as PSYOP, development of ROE, operational planning, development of HUMINT sources, building local relationships, assessing humanitarian needs, and the need to remove civilians from the areas to be contested.

- Actions taken during combat may include operational restraints, PSYOP, and PRC.

- Actions taken after combat may include PRC, civil action, and humanitarian assistance.

- In MOOTW, the JFC should also determine the operational objectives in regard to noncombatants. In MOOTW, since political considerations permeate all levels of activity, noncombatants generally are a key part of operational focus. In these operations, the principles of MOOTW should be applied to all actions involving or affecting noncombatants.

e. In any urban operation, several activities regarding the civilian populace assume greater importance than perhaps in other operations.

- **Populace and resources control** may be of most critical importance in operations involving combat, but it can also play a key role in noncombat MOOTW. Depending on the location and situation, PRC may be well within the capabilities of the joint force, or it may be an overwhelming task that requires many more resources than the JFC can bring to bear.

- **Health support** to civilians is likely to be of vital concern in JUOs and may require significant action by the joint force.

- The joint force may need to provide **logistic support** to noncombatants and civilian agencies, particularly in the early stages of JUOs.

- **Security issues** relating to noncombatants include protection of the joint force, security of the noncombatant population, and security of civilian agencies.

- **Foreign humanitarian assistance** operations are a type of MOOTW, but some form of humanitarian support may be required by the joint force in all JUOs. Whether in war or MOOTW, the joint force will have to plan and conduct activities in support of noncombatants. Although these support activities are primarily the responsibility of the HN, that nation may be incapable of providing that support, and the joint force may be the only capable support organization for a period of time. It is also highly likely that in any situation where support of large numbers of civilians is required, there will be a strong presence of civilian agencies of various types also trying to relieve suffering and provide for the needs of the civilian populace. The JFC will have to coordinate with those agencies.
2. Populace and Resources Control

a. PRC normally assists HN governments or de facto authorities in retaining control over their population centers, thus precluding complicating problems that may hinder accomplishment of the JFC’s mission. However, civil authorities may be either unable or unwilling to undertake responsibility for controlling the civilian population, in which case the joint force may have to conduct PRC alone or in coordination with civilian agencies. In friendly areas, these operations are conducted with the assent of the local government; in hostile territory, PRC is conducted in accordance with international law and the LOAC.

b. PRC can be applied across the range of military operations and at all levels of war. Successful PRC mobilizes and provides security for the population and material resources of an urban area. It can deny an adversary ready access to the population and to both internal and

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POPULACE AND RESOURCES CONTROL OPERATIONS
— BELFAST, 1921 - Present

While noncombatants are always a factor in urban operations, controlling the civilian population of Belfast is actually the primary focus of the entire operation and is integral to achieving stability. Because the conflict does not have distinguishable uniformed combatants, but rather draws its combatants from the civilian population, controlling and influencing the populace is key to identifying combatants, pre-empting and deterring violence, and stemming support for terrorist activities. More broadly, although stability can be temporarily created by force, long-term stability is ultimately dependent on changed popular perceptions, attitudes, and behavior. The task of controlling the civilian population while fighting terrorism has proved challenging for British forces not only because “combatants” are difficult to identify, but also because overly aggressive enforcement to root out combatants risks the danger of provoking the noncombatant populace toward militancy. Moreover, the nature of the mission has required British forces to perform a range of “police” functions that are atypical of normal military duties.

The key to controlling the urban population has been the synchronization of military and police responsibilities within the city. The nature of stability operations has blurred the line normally present between military and police objectives. While the Royal Ulster Constabulary (RUC) is the law enforcement agency within Northern Ireland, it has evolved into more of a paramilitary force in order to deal with the extreme cases of violence in the city. To support the RUC properly, British commanders have adapted their military force to accomplish both military and police tasks. For example, British forces have modified their intelligence units to enable tracking of informants, often exploiting typical police tools such as working dogs. Special Air Service units have adopted many of the functions of a special weapons and tactics team to extract terrorists. More generally, British forces have taken on basic policing duties such as street patrolling.
To accomplish their tasks, the military forces in Northern Ireland have been granted special legal and police powers, to include the authority to:

- Stop and question any person about his identity and movements
- Stop and search any person for weapons
- Arrest without warrant and detain for four hours
- Enter premises and search with only the permission of a commissioned officer
- Stop vehicles/vessels for search
- Control and restrict highways, rights of way, and access to buildings

Exercise of these powers has been instrumental in enabling the British forces to assist the RUC in maintaining a stable environment. However, in some instances, real or perceived abuses of these powers have incited the local populace. The nationalists (and some loyalists) have always felt these “special powers” were too broad and allowed the soldiers to violate their civil rights. In recognition of these sentiments, British commanders have generally been extremely careful in monitoring the use of these powers and ensuring that their soldiers do not abuse them. The British rules of engagement (ROE) have allowed their soldiers to use reasonable force to prevent a crime or assist in the lawful arrest of offenders or suspected offenders. Violations of ROE by British soldiers have been prosecuted under United Kingdom law, and the offenders have been punished, although too lightly in the eyes of some factions. Despite some criticism, the British have been generally successful in exercising control of the urban population without provoking popular backlash by their presence. In large part, they have done this by adapting to the exigencies of the mission and by coordinating extensively with their police counterparts.

The British performance in Belfast provides a model of both inter-Service and inter-agency cooperation. Militarily, the British have established a solid chain of command based on regional areas in which all members of the armed forces are subordinate. The integration of Regular Army forces with special forces, intelligence, and explosive ordnance disposal units has been seamless. The British have also done a remarkable job interfacing with the local RUC units, and have effectively modified their forces to perform police functions.

SOURCE: *Handbook for Joint Urban Operations*
external sources of supply. PRC measures seek to reduce, relocate, or access populace and resources that may impede or otherwise threaten the success of military and supporting logistic operations.

c. Populace controls normally used in PRC include curfews, movement restrictions, travel permits, registration cards, and resettlement. Resource controls can include licensing, regulations, checkpoints, ration controls, and inspection of facilities. In JUOs, however, the size and density of the civilian populace and the nature of JUOs add a number of complications to PRC operations, particularly in war.

d. **Urban PRC Considerations**

- The potential magnitude of the PRC task in JUOs cannot be overstated. The JFC could be at least partially responsible for the care and control of hundreds of thousands, if not millions, of civilian noncombatants, no matter what the original mission.

- With the potential of huge numbers of noncombatants, urban PRC will be difficult to enforce. The standard control measures of passes, permits, and resettlement may be beyond the capabilities of the joint force for some time.

- The JFC must give great care in the establishment of population control measures, depending on the situation and characteristics of that population. Inappropriate controls could exacerbate the PRC problem.
Noncombatants

- PRC measures must take into consideration the presence of factions, ethnic groups, and criminal organizations that may be hostile to one another or to the joint force. Further, these groups may have ways of controlling their members that are not readily apparent to the joint force.

- The complexities of the physical urban terrain could result in fragmentation of effort and difficulty in imposing controls in a consistent manner throughout the urban area.

- Security of noncombatants could be difficult and require significant resources.

- There is a strong potential, in war or MOOTW, for the use of noncombatants by the adversary. This use can range from using them as human shields to fomenting riots to conducting terrorist attacks on civilians to influence US policy and actions.

- As with any dealings with the civilian noncombatant population, PRC operations require an understanding of the culture.

- In JUOs, the objectives of PRC are to move noncombatants away from combat areas or other areas of concern within the city, to centralize them into one or more locations, to provide for their basic needs, and to foster cooperation and good will.

  - Operations involving dislocated civilians can be a special category of PRC. Dislocated civilians can include displaced persons, migrants, evacuees, or refugees. In situations of crisis and adversity, whether from war or other cause, people converge on urban areas from the surrounding regions, so it is possible that the commencement of JUOs will find dislocated civilians already present. Urban combat will create many more displaced persons, either through design or as an inadvertent result of urban fighting.

    - Dislocated civilians are often a long-term problem and require enormous resourcing. Responsibility for these dislocated civilians could fall under the joint force until long-term aid is fully established. These responsibilities will likely fall into one of five areas: protect these noncombatants from combat operations; centralize or otherwise control the large numbers of dislocated civilians; coordinate with civil authorities or relief organizations; mitigate and control the outbreak of disease; or provide for their basic life-sustaining needs.

    - Four basic principles govern dislocated civilian operations: accountability, control, security, and communications.

  - The commander of the joint force must analyze the requirements for PRC and then make some fundamental decisions:

    - Whether PRC operations are necessary or feasible;

    - The extent to which PRC can reasonably be conducted;
REFUGEES

Refugees are a perennial problem of war. Their presence affects the ability of commanders to conduct combat operations, and their behavior is difficult to predict.

In 1968, American forces had immense difficulty in caring for the several thousand South Vietnamese refugees in Hue.

In 1982, the return of thousands of refugees to their homes in Tyre during the battle significantly hampered Israeli operations. Similarly, the need to impose cease-fires and open lanes for civilians to escape the fighting in Beirut slowed Israeli Defense Force operations in that city. Many Israeli military planners presumed that civilians in urban combat zones would follow “common sense” and abandon areas where fighting was taking place. In many cases, this did not occur. Civilians would instead try to stay in their homes, leaving only after the battle had begun.

In 1995 during the Chechnya campaign, intelligence did not adequately forecast the quarter of a million displaced noncombatant refugees. Thus, Russian logistical planners ignored requirements for such a crisis. In fact, Russian operational commanders made a conscious assumption that, should the operation in Grozny escalate in violence, the noncombatants would seek every opportunity to leave the city. Ironically, not only did this prove to be a false assumption, but those who did leave were primarily ethnic Chechens. The ethnic Russians found themselves with nowhere to go.

SOURCE: Norman L. Cooling, *Shaping the Battlespace to Win the Street Fight*

- Whether or not to attempt to relocate all or part of the civilian population, and if so where and how to relocate them; and

- How to provide the necessary support.

3. Health and Logistic Support

a. Health Service Support

- The HSS mission is to conserve the fighting strength of the joint force and to provide the combatant commander with a source of trained manpower. For combat operations, HSS focuses primarily on the treatment and evacuation of wounded and injured and the prevention and treatment of disease. Chapter III, “Operational Tasks and Considerations,” discusses the particular aspects of HSS in support of the joint force during JUOs. The presence of large numbers of noncombatants, however, will probably require HSS units also to support the civilian populace to some degree in all JUOs within the
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limits of applicable laws and regulations. Assistance normally associated with MOOTW may be required at the same time as HSS for the engaged force.

- During urban combat operations, civilian casualties will occur from wounds, disease, exposure, or lack of safe food and water. Local medical services may be nonexistent, or at least unable to provide sufficient care for the sick and injured. Relief agencies may or may not be able to alleviate the situation. Military HSS may be the only source of medical relief for noncombatants until other agencies and organizations are functioning.

- In MOOTW, the provision of HSS often becomes a primary means of assistance. In urban areas, joint force medical units will likely not have primary HSS responsibility, but will focus on furnishing assistance to the populace that the local government is not capable of providing. This assistance normally requires a great deal of interaction with HN services and authorities, government agencies, NGOs, and international organizations.

- The medical threat to noncombatants in urban areas is a combination of injuries resulting from combat (including terrorism) and injuries and disease occurring naturally. Because of the density of the population, civilian casualties will occur more frequently and in greater numbers than in other operational environments: weapons effects will injure more civilians; poor sanitation is more likely to cause endemic disease; infectious diseases will spread more quickly. As Figure IV-1 indicates, certain noncombatant health threats are likely in JUOs.

![HEALTH THREATS TO URBAN NONCOMBATANTS](image)

**Figure IV-1. Health Threats to Urban Noncombatants**
• Many JUOs will be conducted in areas where there is little or no medical infrastructure. US forces will be at risk from a wide variety of endemic diseases requiring extensive planning for surgical support, patient movement, appropriate immunizations, preventive measures, and veterinary and combat stress requirements based upon the disease threat. Environmental and industrial hazards may pose a threat to deployed forces. An HSS plan must be developed and include a medical surveillance program, the establishment of a joint patient movement requirements center, and the activation of the joint task force Joint Blood Program Office.

• The JFC should organize HSS elements based on the anticipated needs of both the joint force and the civilian populace, within the limits of applicable laws and regulations. HSS representatives should be members of all groups, centers, or teams concerned in any way with the civilian populace, such as the humanitarian assistance survey team, the humanitarian assistance coordination center, or the civil-military operations center (CMOC). In order to adequately anticipate noncombatant needs, health service planners must conduct a health service assessment that examines the factors listed in Figure IV-2.

• Using the information developed in the HSS assessment, the HSS plan should consider factors significant to the urban area.

• Intent of the HSS to be provided to noncombatants. Is the intent to provide only minimal HSS support to the civilian populace, or is nation-building or disaster relief a primary mission?

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<th>HEALTH SERVICE ASSESSMENT FACTORS</th>
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<td>• Population Demographics</td>
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<td>• Sanitation and Personal Hygiene</td>
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<td>• Available Medical Intelligence</td>
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<td>• Cultural Factors Related to Health Service Support (HSS)</td>
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<td>• Political Impact of Providing Care to the Local Population</td>
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<tr>
<td>• Anticipated Type, Number, and Capabilities of Relief Organizations</td>
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<td>• Secondary and Tertiary Hospital Facilities and Supporting Transportation</td>
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<td>• Local Facilities for Production of Medical Equipment and Supplies</td>
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<tr>
<td>• Education and Training Levels of HSS Professionals and Technicians</td>
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Figure IV-2. Health Service Assessment Factors
• **Special restrictions on the medical care to be provided.** Restrictions may be necessary because of a shortage of medical supplies, cultural considerations, financial or legal constraints, or an attempt to keep the level of care consistent with that normally provided by local health services.

• **Most immediate threats in urban area.** Often, regardless of the major event precipitating HSS, the most immediate threats will result from extreme environmental conditions in the form of heat, cold, and high humidity.

• **Nature and behavior of the particular prevalent diseases.** Diseases behave differently in urban areas due to the high concentration of people, and any disruption in basic services increases the threat from high-risk diseases such as human immunodeficiency virus, cholera, tuberculosis, dengue, and malaria.

• **Patient movement.** The need for clear guidance concerning the medical evacuation and treatment of civilians is critical. Unless otherwise specifically authorized by the stated mission, force members will provide only emergency medical services to civilian casualties. Unless otherwise authorized, civilian casualties will be transferred to the nearest available civilian treatment facility when the medical condition is stabilized.

• **Required preventive medicine measures.** Provision of safe water and food, immunizations, and prophylactic medications can reduce the chances of endemic diseases reaching epidemic proportions.

• **Medical logistic requirements.** Whatever the anticipated level of HSS for noncombatants, the medical logistic requirements will be greater than those for the force only. Accurate logistic planning will reduce the likelihood of conflict between HSS requirements in support of the joint force and those in support of noncombatants.

• All HSS units must have the capability to react quickly and decisively to a terrorist incident. Medical treatment facilities should have well-conceived mass casualty control plans and contingency support plans. These plans should consider the urban terrain, population densities, major roads, possible landing zones, location of all medical facilities, and reaction procedures.

b. **Logistic Support**

• **In JUOs, logistic elements may be employed in nonstandard tasks and in quantities disproportionate to their normal military roles.** Part of the reason for this is the demands JUOs put on certain types of logistic support. Another factor is the concentration of noncombatants also requiring support. Logistic elements may have to support both combat operations and noncombatants. They may precede other military units or be the only forces deployed, or they may have continuing responsibility after the departure of combat forces, in support of multinational forces or NGOs and international organizations.
• Logistic support to noncombatants will fall into one of four categories. It may comprise more than one, or even all, depending on the mission and the situation. This support is limited by applicable laws and regulations, and consultation with Service legal personnel is critical to assure compliance. These categories are as follows.

• **Support directly to noncombatants**, such as the provision of food, water, shelter, and medical treatment.

• **Support that indirectly benefits noncombatants**, such as the restoration of basic infrastructure and services.

• **Support to military and government organizations dealing with noncombatants**, such as support of multinational forces, diplomatic missions, or government agencies.

• **Support to HN, NGOs, and international organizations**, such as construction, warehousing, and distribution of supplies.

• The density of noncombatants is the single greatest influence on logistic support. In combat, this concentration of civilians can add a considerable support requirement. In MOOTW, provision of support to noncombatants may be the primary focus of the operation. **All six joint logistic functional areas — supply, maintenance, transportation, civil engineering, health services, and other services — are likely to be taxed to support noncombatants in JUOs.** Other services will probably include above-average requirements for such capabilities as waste disposal, contracting, mortuary services, and civil administration, to name but a few.

4. **Security**

   a. Three main areas constitute security in JUOs, and all involve the security of noncombatants to some degree.

   • **Security of the joint force.** Force protection is a required task in any operation. In JUOs, where support and protection of noncombatants is a legal requirement and may be a mission objective, the ability of the force to provide support depends on the security with which it can do so.

   • **Security of noncombatants.** Commanders have an obligation to protect noncombatants, as combat operations and force protection will allow. In many operations other than war, security of noncombatants is a stated operational objective. These operations include peacekeeping, combatting terrorism, military support to civil authorities, or FID. Whether in war or MOOTW, security of noncombatants may consist of protection from military operations, from terrorism, from opposing groups or factions, and from criminal activity.

   • **Security of civilian agencies.** Particularly in MOOTW, governmental and nongovernmental agencies and missions will operate within the urban area. These
noncombatants, while not part of the local populace, may require various forms of security from the joint force, ranging from perimeter and point security to armed escort.

b. **Aggressive actions on the part of the joint force enhance security**, both for noncombatants and the force itself. These actions include close contact and communications with local civilians and organizations and with other civilian agencies, extensive patrolling, PSYOP, barrier construction, mine and obstacle clearance, movement control, and provision of needed support.

5. **Foreign Humanitarian Assistance**

a. **General**

- The purpose of FHA is to relieve or reduce the results of natural or manmade disasters or other endemic conditions such as human pain, disease, hunger, or privation that might present a serious threat to life or loss of property. **US forces generally supplement the efforts of the HN civil authorities or agencies** that may have the primary responsibility for providing humanitarian assistance **by conducting operations limited in scope and duration**. The primary responsibility for US response to FHA requirements lies within the US Agency for International Development.

- In JUOs, however, many types of operations will have a requirement for some type of humanitarian assistance. **Some degree of assistance may be undertaken in concert with combat operations, peacekeeping, or other operations whose intent is not the provision of FHA.** Because a UN or US civilian framework may not exist within which the JFC can support FHA, the joint force may need to perform humanitarian assistance in addition to its other missions until clarifying authority and direction are received. The conditions under which FHA is warranted can certainly result from manmade actions as well as the forces of nature. Warfare, ethnic or religious violence, political instability — all can lead to suffering and privation on a significant scale.

b. FHA falls into three main categories. It is easy to see that the conditions for any of the three types of FHA may exist in the urban area at the same time as the causes of other types of operation. These conditions may stem from the same causes, or they may result from the JUOs themselves — especially urban combat.

- **Relief** operations are intended to respond to the conditions caused by natural or manmade disaster to provide the basic materials and services required to sustain life.

- **Dislocated civilian support** provides care for refugees, displaced or stateless persons, evacuees, and other victims of conflict or natural disaster.

- **Security or technical assistance** can include short-term tasks such as communications restoration, relief supply management, provision of emergency medical care, humanitarian demining, restoration of basic infrastructure, or delivery of emergency relief supplies.
c. When assigned an FHA mission in an urban area, the JFC should take into consideration the characteristics of the urban area and take all the specific planning and organizational steps required for JUOs. When FHA is not assigned as part of JUOs, the JFC should nevertheless be prepared to conduct FHA if directed. These preparations should include the readiness to:

- Assess the nature and extent of humanitarian requirements in the urban area, to include available food and water, civilian casualties and loss of life, dislocated civilian population and location, status of local government or authority, and degree of destruction to property and infrastructure;

- Establish a CMOC to coordinate and facilitate US and multinational forces humanitarian operations and to coordinate with those of local, HN, NGOs, and international agencies and authorities involved in relief operations, either from the outset or as civilian agencies become involved; and

- Take steps to alleviate the suffering and hardship of the civilian population until government agencies, NGOs, or international organizations are on-scene and functioning.

d. Urban FHA Considerations

- Particularly in urban combat operations, it may be difficult to provide relief for the civilian populace. There may be no agency immediately available to accept primary responsibility for FHA. By necessity, the JFC may find that the joint force must perform some FHA, and possibly provide extensive support, as well as conduct combat operations.

- The urban environment will affect the ability to conduct FHA, in combat or not. The same tendency toward fragmentation, hindrances to movement and communications, proximity of the press, and security requirements that accompany other types of JUOs will also affect urban FHA.

- Interagency operations are key to successful FHA. Normally, the accessibility of urban areas makes it easier for NGOs and international organizations to participate, therefore increasing the number of agencies with which the joint force must deal.

- FHA requirements are more concentrated in urban areas, but so are the dangers: disease spreads more rapidly, unrest is more concentrated, rivalries are exacerbated by close contact, media attention is more pervasive, security is more problematic, and the population is significantly more dense.
CHAPTER V
INFRASTRUCTURE

“Cities are the most likely battlefield in the 21st century.”
Defense Science Board, 1996

1. General

a. A city is a system of systems that supports the total functioning of an urban area. Infrastructure is one of those supporting systems and is itself composed of other systems. Urban infrastructure forms the city’s foundation, and each component of infrastructure affects the population, the normal operation of the city, and the nature and long-term success of JUOs. Military planners must understand the functions and interrelationships of these systems in order to achieve success.

b. Like noncombatants, infrastructure plays a key role in the planning and execution of JUOs of all types. The nature of that role can vary depending on the type of operation, the operational objectives, even the phase of an operation. For example, it may be necessary to protect electrical power facilities during FID operations, disrupt them during urban combat operations, and restore electrical power during the transition phase. The commander must determine the role and importance of key infrastructure for each phase of the urban operation and for the end state. The role and importance falls into two categories: the impact of individual services, facilities, or systems on planned JUOs; and the impact operations may have on key infrastructure. In either case, the impact may be either direct or indirect — direct, for example, in the disruption of electrical power or the restoration of water services; indirect in the damage to buildings of cultural significance or the improvement of roadways.

• The effects of infrastructure on operations depend on a number of factors: the unique nature of the urban area; the type of operation; operational objectives; the infrastructure’s effectiveness; and friendly ability to disrupt, control, or make use of it. In some cases, infrastructure may primarily support adversary forces. In other cases, it may provide support to both the adversary and the civilian populace. And in still other cases, it may support only noncombatants.

• The impact of operations on infrastructure also depends on the same factors, but with the additional consideration of operational effects and their relation to mission accomplishment.

c. The JFC needs to perform an analysis of the infrastructure to determine the relationship between infrastructure and operations. Such an analysis of key facilities will help the commander make certain informed decisions, such as: action to be taken in regard to key infrastructure; requirements for protection, restoration, and joint usage; and estimate of the likelihood and potential effects of collateral damage, both physical and environmental.
2. Key Facility Analysis

  a. Before a key facility analysis is conducted, the commander determines what factors make facilities important enough to be considered “key.” These factors may include such elements as whether and by whom a facility or service is required, the probable effects of its neutralization or use by friendly or adversary forces, and its importance to the noncombatant population. Planners take these factors and examine all systems and subsystems of the urban infrastructure, both physical and service, in order to identify the key facilities. These systems can generally be grouped as one of the following.

  • Communications and information.

  • Transportation and distribution.

  • Energy.

  • Economics and commerce.

  • Administration and human services which includes law enforcement, health and sanitation services, water distribution, and structures of social political, or cultural significance.

  b. Key facility analysis is a combination of intelligence preparation, the targeting process, and staff planning. Its purpose is to examine closely the nature of the infrastructure systems and their components.
• Examine each system in terms of its characteristics, organization, and capabilities.

• Determine how the system acts as infrastructure: how it affects the civilian population, how it might function both in support of and in opposition to JUOs, and what potential effects different operational actions might have.

• Break the system down into its components.

• Analyze each facility making up each infrastructure system, using the same terms of reference used for the system as a whole.

• Recommend COAs for each key facility, with short and long-term potential effects.

c. The simplified example of a key facility analysis for the transportation system in Figure V-1 illustrates the procedures involved.

**KEY FACILITY ANALYSIS (TRANSPORTATION)**

1. The Urban Transportation System May Consist of a Port, Airfields, a Road Network, Railways, Bridges, and Subways.

2. An Analysis of Bridges Will Look at Them Collectively and at Each Bridge by Itself.

3. For Each Individual Bridge, the Analyst Would Complete a Two-Step Procedure:
   - Conduct a Close Examination of the Bridge
     - Characteristics
       May include length, width, type, structure make-up, number of spans, condition, clearances, and other information
     - Organization
       May include obstacle crossed, route designation, condition of bypasses and approaches, condition of banks and support structures, safety and security features, traffic control, and others
     - Capabilities
       May consist of maximum load capacity, daily traffic use, effect of weather and climate, and others
     - Role as Infrastructure
       How the bridge functions in the overall transportation system and its role in support of the civilian populace
     - Use by Friendly Forces
       Whether and how friendly forces might use the bridge in the future
     - Use by Adversary Forces
       How the bridge is or may be used to support adversary forces and actions
   - Recommend Courses of Action
     Recommend joint force action toward the bridge and project the effects each course of action may have on the adversary, on friendly forces, on the civilian populace, and on the rest of the urban area’s infrastructure.

*Figure V-1. Key Facility Analysis (Transportation)*
3. Protection, Restoration, and Joint Usage

a. Protection. The initial steps in the key facility analysis will identify certain infrastructure to be preserved, protected, or to which damage should be minimized. These systems and facilities may be protected for several reasons:

- Features of cultural, religious, medical, or other significance whose protection is required under the LOAC;
- Infrastructure whose destruction would cause unnecessary suffering for noncombatants;
- Infrastructure which, for strategic or other reasons, is protected by the ROE; and
- Infrastructure that the joint force will require for its own use.

The JFC has several methods of protecting selected infrastructure. The targeting process should recognize these facilities or structures to be protected and give careful consideration to potential collateral damage resulting from attacks on nearby targets. ROE can include restrictions on actions related to protected sites. If it becomes necessary to attack them, restrictive measures such as weapons restrictions or the use of nonlethals can preclude serious damage.

b. Restoration

- In the case of certain infrastructure, the JFC will desire to minimize damage on an otherwise legitimate target. In this case, the objective will be to temporarily disrupt the service that infrastructure provides in order to accomplish strategic or operational objectives, but be able to restore that service when desired. Planning should therefore include an understanding of the functioning of that infrastructure system and what may be required in order to repair or restore it. For example, if the JFC decides to disrupt electrical power to an urban area, planners would require advice from an engineer familiar with the provision of electrical power to an urban area. That engineer would advise planners concerning key parts of the system, feasible ways to disable those parts, and the requirements in time and assets required to restore the system to operation. The JFC can then take the necessary steps to restore usage when appropriate.

- Restoration of infrastructure is not restricted to the repair of facilities or systems. It can also consist of the restoration of services such as law enforcement, emergency services, or medical services. Restoration of these services may be a lengthy process and generally is a function of CMO.

c. Joint Usage

- In any ground operations in an urban area, use by the joint force of existing infrastructure will occur. This usage may be as simple as driving vehicles on city streets, the appropriation of an entire system such as an airport, or a complex sharing of many
infrastructure systems that serve the urban area. Before a decision is made to use existing infrastructure, planners must examine its characteristics, functions, availability and suitability, and the effects of joint use on operational objectives.

• Most of the information required to plan joint usage will be forthcoming from the key facility analysis, particularly data concerning characteristics, capabilities, and functions. From that data and the needs of the joint force, planners must determine the availability and suitability for joint use. When infrastructure is selected for possible joint usage, planners should determine the potential effects joint use would likely have on the civilian populace, local government, and other infrastructure. In turn, these effects could impact on the accomplishment of operational objectives. Finally, the legal advisor should review any plans for joint force use of infrastructure for adherence to applicable laws and regulations.

4. Collateral Damage and Environmental Considerations

a. Coordination of JUOs through the joint targeting coordination board can significantly reduce collateral and environmental damage. The objective is to control as carefully as possible the effects of operations on infrastructure and the civilian populace.

• Key facility analysis can aid in the selection of targets in urban infrastructure to ensure that they meet specific objectives. Target analysis and weaponeering can determine the potential for collateral and environmental damage resulting from attack of a particular target.

• In the urban concentration of people and infrastructure, the potential for serious environmental consequences is greater than in some other areas. To accurately predict the environmental damage and its consequences that may occur as a result of attacks, planners require expert advice in the particular areas concerned. For example, an attack on a chemical plant in a predominantly rural area is likely to affect directly fewer people than if the plant were in an urban area. When assessing key facilities as targets, only expert opinion can predict the extent of the resulting effects — such as spillage, pollution, or toxicity. Subject matter experts can then determine the impact of those effects. For example, one expert may determine that an attack will result in a certain level of toxic spillage; another might predict where that spillage would go. The experts should be able to determine whether the nature and location of the spillage could contaminate the city’s water supply.

b. In the end, analysis of potential collateral and environmental damage must be weighed against the importance of the target in achieving operational and strategic objectives. In making that determination, the JFC should examine the short- and long-term operational and strategic consequences that any damage might have on the conduct of operations, friendly forces, the civilian populace, infrastructure, and public perception.
1. General

   a. Joint intelligence preparation of the battlespace (JIPB) is the analytical process used by joint intelligence organizations to produce intelligence assessments, estimates, and other intelligence products in support of the JFC’s decisionmaking process. It is a continuous process that involves four major steps: defining the battlespace environment; describing the effects of the battlespace; evaluating the adversary; and determining and describing adversary potential COAs.

   • Although the JIPB process assists joint forces in achieving information superiority, JIPB’s main focus is on providing predictive intelligence. JIPB assesses adversary COGs, focuses intelligence collection at the right time and place, and identifies adversary COAs (particularly the adversary’s most likely COA and the COA most dangerous to mission accomplishment).

   • The JIPB effort must be fully coordinated, synchronized, and integrated with the separate IPB efforts of the component commands and Service intelligence centers. All staff elements of the joint force and component commands fully participate in the JIPB effort by providing battlespace information and data relative to their staff areas of expertise.

   b. JIPB is a remarkably versatile process that can be adapted to support a wide variety of joint missions across the range of military operations. For this reason JIPB is particularly useful in supporting JUOs during force-on-force confrontations or during MOOTW.

2. JIPB Process for Urban Area Operations

   a. All urban operations are likely to be joint, whether part of a larger campaign or focused operations within an urban area. In JUOs, tactical level detail often has operational or strategic significance. Therefore, JIPB support to JUOs must provide a finer degree of detail than would be required of operations over a broader operational area. JIPB products (e.g., modified combined obstacle overlays [MCOOs], doctrinal templates, situation templates, and event templates) should be tailored to the situation, but should follow the general formats prescribed in JP 2-01.3, Joint Tactics, Techniques and Procedures for Joint Intelligence Preparation of the Battlespace. JIPB support to urban area operations follows the basic four-step process outlined below.

   b. Define the Battlespace Environment. The joint battlespace includes the operational area and areas of interest for each battlespace dimension of potential concern to the command (e.g., information environment, subsurface dimension, and political constraints). The full multi-dimensional, geographic and non-geographic spectrum of the battlespace should be defined based on the following factors:
• Mission and commander’s intent.

• Potential sources of influence outside the actual urban area (e.g., dependence on surrounding rural areas for water, hydro-electric power, and food).

• Treaties, domestic and international law, ROE, and targeting constraints.

• General characteristics and capabilities of potential manmade and natural threats (e.g., disease, environmental hazards, criminal gangs, and insurgents).

c. **Describe the Battlespace Effects.** The urban battlespace contains significant differences from that of other environments, consisting as it does of more complex physical terrain, concentrated infrastructure, and relatively dense population in addition to typical battlespace elements. This requires JIPB to focus on providing an extremely high level of detail in the description of the battlespace’s effects. The analysis must consider the following factors that should be depicted on the MCOO:

• Urban terrain.
  • Building construction.
  • Subterranean features.
  • Physical layout and subdivisions of the urban area.

• Society, culture, politics.
  • Basic demographics.
  • Social structure: social interaction, culture, political organizations.

• Infrastructure.

• Key facilities.

• Critical urban services.

• Power plants.

• Water system.

• Sewage and waste disposal.

• Medical facilities.
• Communications lines and nodes.
• Ports and harbors.
• Airfields.
• Helicopter landing zones.
• Roadways.
• Railways.
• Bridges.
• Subways.
• Civil defense.
• Petroleum and natural gas lines and storage facilities.
• Resources and material production.
• Surrounding environs.
  • Sources of electric power generation (e.g., dams, nuclear power plants).
  • Sources of food and water.
  • Base camps or support areas for insurgents.
  • Actual or potential sources of hostility between urban and rural populations.
• Multinational capabilities.
  • Multinational forces.
  • HN and local forces.
• Government organizations, NGOs, and international organizations.

d. Evaluate the Adversary. In JUOs, the adversary could be greatly different from an adversary normally associated with operations in non-urban environments. Adversaries may choose to make widespread use of snipers, ambushes, and HUMINT networks, and may choose to deliberately avoid decisive engagements. In some situations, as in MOOTW, the term
“adversary” must be broadly applied to include organizations, groups, decision makers, or even physical factors that can delay, degrade, or prevent the joint force from accomplishing its mission. The following factors should be analyzed and depicted on adversary doctrinal templates.

- Adversary doctrine for urban operations.
- Conventional force order of battle (air, ground, missile, anti-air, and electronic).
- Paramilitary order of battle.
- Terrorist, insurgent, and criminal groups and their methods of operation.
- Unconventional warfare order of battle and urban operations doctrine.

c. **Determine Adversary Courses of Action.** The final step in the JIPB process integrates the results of the previous steps into a product to assist in identifying the adversary’s most likely COA and most dangerous COA. It begins by defining likely adversary objectives (geographic and/or political) and developing potential COAs for accomplishing those objectives. Each COA should be reflected on separate situation templates. The situation templates are integrated to form an event template that facilitates the identification of named areas of interest. The following factors should be considered when determining adversary COAs relative to urban operations.

- The adversary’s likely objectives and desired end state.
- Adversary capabilities to accomplish specific objectives or to interfere with the joint mission.
- Assets the adversary is most likely to use.
- Adversary COAs or methods most likely to achieve postulated objectives.
1. Procedures for Precision Targeting

a. Urban military operations are intimately involved with the urban triad of physical terrain, noncombatants, and infrastructure. Very few actions can occur that do not affect at least one of these elements of the urban environment, if not all three. Urban combat almost always will affect all three in greater or lesser degree, and fires have the potential for the greatest destruction and loss of life. In order to maximize the effect of urban fires on the adversary while at the same time minimizing the adverse effects on the city and its inhabitants, these fires must often be as precise as technology and planning will allow. Technology only allows a weapon to go where the planners intend it to go. The targeting process must take into consideration all the factors associated with urban fires and the urban operation when developing target lists. Neither art nor science, target development is a combination of the two that systematically examines the components and relationships of potential military, political, or economic systems to establish their criticality and vulnerability to attack. Understanding the system enables the attacker to undertake precision attacks on those parts that will achieve the desired effect on the whole. It is important to remember that destructive weapons are not the only means for precision attack on target systems; other means such as IO or nonlethal weapons may also be used.

b. Characteristics of Urban Targets

- Although single targets exist, most often a target’s importance lies in its relationship to other targets. A group of targets related functionally and geographically forms a target system. The basis for target development is to identify and analyze target systems. Since the urban area is itself a system of systems, this approach to target development is also applicable to urban targeting. The target system method of targeting is appropriate for all planned targets in urban areas.

- Identification of time-sensitive targets (TSTs) is an important consideration for the JFC conducting JUOs. TSTs are defined as “those air-, land-, or sea-based targets of such high priority to friendly forces that the JFC designates them as requiring immediate response because they pose (or will soon pose) a danger to friendly forces or they are highly lucrative, fleeting targets of opportunity.” The JFC normally provides specific guidance and prioritization for TSTs within the operational area.

See Appendix B of JP 3-60, Joint Doctrine for Targeting, for additional information on Time-Sensitive Target Considerations.

- Target systems also display some general systems characteristics that are useful concepts in urban target development. Although models exist that attempt to demonstrate visually the interrelationship of systems within an overall adversary system, their applicability can vary greatly depending on culture, state of development, geography, or situation in the area under consideration. Although all urban areas rely on various systems to some
degree, the functions and value of these systems may not be readily apparent to us or consistent with western ways of thinking.

c. **Urban Target Development.** Target development is the systematic examination and evaluation of potential target systems and system components to determine those against which military action can be directed to achieve given objectives. Target development translates the JFC’s objectives and guidance into the production of a joint target list.

2. **Fratricide Prevention Measures**

   a. Fratricide prevention is a matter of concern in all operations. The risk of fratricide is much greater when visual identification and precise navigation are inhibited, by either distance or reduced visibility. In JUOs, the very nature of the physical terrain — structures, fires and lights, interior and subterranean space, smoke, dust — creates a situation of reduced visibility, with the resultant unique and significant challenges to combat identification and fratricide prevention. These challenges ultimately boil down to the need to minimize fratricide without unreasonably restricting the joint force’s ability to accomplish its mission.

   b. **There are two basic causes of urban fratricide — procedural and technical.** Procedural causes can be either loss of technical control of weapons or weapons systems or failures of fire support coordination. Technical failures may include failures of controlling equipment or mechanical malfunctions.

3. **Weapons Effect Planning Considerations**

   a. The effects of weapons and munitions in urban areas can be significantly different from the effects in other environments. The characteristics of the terrain and the nature of urban combat affect both the results and employment of weapons of all types.

   b. Specific urban weapons effects considerations include the type and size of the weapon and round, the construction of the building, and the ability to engage the target.

4. **Nonlethal Weapons Employment**

   Nonlethal weapons are weapon systems that are explicitly designed and primarily employed so as to incapacitate personnel or materiel, while minimizing fatalities, permanent injury to personnel, and undesired damage to property and the environment. IOs such as EW and psychological warfare, are not designed specifically to minimize fatalities, but they may be used with the same intent. Nonlethal weapons can help commanders maintain the desired balance between force protection, mission accomplishment, and safety of noncombatants by expanding the number of options available when the use of deadly force poses problems. This type of situation most often occurs during MOOTW, although urban combat operations may also contain situations where nonlethal weapons are useful.
5. No-Strike and Restricted Target Considerations

The JFC may prohibit or restrict joint force attacks on specific targets or objects without specific approval based on political considerations, military risk, collateral damage risk, the LOAC, and ROE. Targeting limitations generally fall into two categories: no strike targets and restricted targets.

Refer to JP 3-60, Joint Doctrine for Targeting, for additional information.
APPENDIX C
PORT AND AIRFIELD CONSIDERATIONS

1. General

   a. Ports and airfields play a vital role to an expeditionary force. They are generally located in, or very near, urban areas. In many countries, ports and airfields provide the only means through which large numbers of personnel, equipment, and supplies can enter the operational area.

   b. Most coastal cities were built around a port, it being the reason for the city’s existence in the first place. Although some port cities have built new port facilities some distance from the urban area, in most cases the port is located right in the center of the most heavily populated and congested part of the city. Airfields are generally located farther from the built-up sections of the urban area, depending on their size and when they were built. Older airfields are often closer to the heart of the city, while newer ones can be miles away from even the outskirts of the urban area.

2. Planning Considerations

   a. The JFC must plan for both the entry of the joint force into the operational area and the sustainment of that force. Most of the time, this means planning for the use of available ports and airfields.

   b. Although planning for the use of ports has somewhat different considerations than planning for airfields, certain general planning considerations pertain to both.

   c. In urban combat operations, it may be necessary to target a port or airfield to prevent its use by the adversary. In this case, the same considerations apply as for other key infrastructure, and if future use by the joint force is contemplated, steps should be taken to limit damage as much as possible. The same is true if ground forces need to physically seize the facilities.

3. Port Considerations

   a. The planning and execution of port operations at the operational level requires a detailed analysis of a wide range of factors.

   b. The probable location of port facilities within the urban area makes smooth operations problematic. The most significant factors influencing operations of the port are physical layout, the handling capabilities, the transportation infrastructure, and security.
4. **Airfield Considerations**

   a. Air terminal operations involve numerous interdependent functions ranging from ensuring that sufficient airlift facilities are available to meeting any threat to operations.

   b. Many large urban areas have relatively modern airports serving them, even if they are some distance from the central parts of the city. Other urban areas may be serviced by smaller, less modern facilities. Factors influencing airfield operations in JUOs include the need to use the airfield for different types of flight operations (including civilian operations in MOOTW), the distance from joint force units and supply facilities, road capabilities, security, and airfield capabilities.

5. **Security Considerations**

   a. Both port and airfield facilities will be susceptible to attack by conventional and unconventional means. As stationary targets, they are vulnerable to air or missile attack. Their size and probable locations, along with the presence of civilians, may encourage sabotage, terrorism, mining, and espionage.

   b. The first step to providing security is threat assessment. Based on the assessed threat, the JFC can determine where to accept risks, where to focus protection efforts, and how much of the force should be devoted to protection of port and airfield facilities. Most terminals, ports, and airfields are physically laid out so that limited dispersion can be achieved within the boundaries of the port itself. In any case, dispersion does not permit maximum port use. The extent to which a commander uses the established port of airfield represents a calculated risk.
APPENDIX D
URBAN AIRSPACE CONTROL CONSIDERATIONS

1. General

a. Airspace control includes coordinating, integrating, and regulating airspace to increase operational effectiveness by providing the commander the operational flexibility to employ forces effectively in a joint campaign or operation. Focusing primarily on airspace control in a combat zone, airspace control measures and procedures can be adapted to operations not involving combat. In any urban operation, **airspace control increases the effectiveness of JUOs by promoting the safe, efficient, and flexible use of urban airspace with a minimum of restraint placed upon the friendly airspace users.** In addition to the primary objective to maximize the effectiveness of combat operations, other fundamental considerations are inherent in airspace control.

- The need for each Service or functional component within the joint force to operate a variety of air vehicles and weapon systems, both high and low speed, rotary- and fixed-wing (manned and unmanned), within the combat zone airspace control area.

- The need for each Service or functional component to use the airspace with maximum freedom consistent with the degree of risk operationally acceptable to the JFC.

- The need for airspace control activities to be performed in congruence with air defense operations to integrate and synchronize surface-to-air defense weapons and air defense aircraft for maximum effectiveness.

- The need to discriminate quickly and effectively between friendly, neutral, and adversary aircraft and vehicles.

- The need for the combat zone airspace control system to be responsive to the requirements of the joint force. The airspace control system needs to be capable of supporting high-density traffic and surge operations as may be required by the JFC.

- The need for close coordination and integration of surface force operations, supporting fires, air operations, air defense operations, special operations, and airspace control activities.

- The need to accommodate US, HN, and multinational airspace control activities within the joint combat zone.

- Recognition of the saturation levels and limitations of airspace control networks.

- The need for temporary restrictive airspace control measures on certain areas of airspace to allow subordinate commanders total freedom of operations.
b. The airspace of the combat zone is a crucial dimension of the urban battlespace and is used by all components of the joint and multinational forces to conduct assigned missions. A high concentration of friendly surface, subsurface, and air-launched weapon systems must be able to share this airspace without unnecessarily hindering the application of combat power.

c. The distinguishing features of urban airspace are compressed airspace and a three-dimensional ground environment.

- Compressed airspace brings separate and diverse missions into close proximity.

- The three-dimensional ground environment reaches into low-level airspace potentially used by fixed-winged and rotary-winged aircraft and unmanned aerial vehicles (UAVs).

- The location of major airports in or near urban areas often puts the aerial port of debarkation inside the urban airspace.

- During MOOTW, a number of different types of aircraft may share the urban airspace — tactical aircraft, airlift assets, rotary-wing aircraft, UAV, and civilian aircraft.

2. Urban Airspace Control

a. Planning Urban Airspace Control

- The JFC will normally designate a joint force air component commander (JFACC) to integrate the capabilities and C2 of joint air assets. The JFC also designates both the airspace control authority (ACA) and the area air defense commander (AADC). The responsibilities of the JFACC, AADC, and ACA are interrelated and are normally assigned to one individual, but they may be assigned to two or more individuals when the situation dictates. Based on the situation, if the JFC decides not to assign the JFACC, AADC, or ACA as one individual, then close coordination between all three positions is essential. The ACA is responsible for coordinating and integrating the use of the airspace control area, and developing the airspace control plan (ACP).

For more information regarding the responsibilities and relationships of the JFACC, ACA, and AADC, see JP 3-56.1, Doctrine for Command and Control of Joint Air Operations; JP 3-52, Joint Doctrine for Airspace Control in the Combat Zone, and JP 3-01, Joint Doctrine for Countering Air and Missile Threats.

- The methods of airspace control may vary depending on the range of military operations and the nature of the urban area. Methods range from full positive control to full procedural control of all air assets, or any effective combination of the two. Urban air control, in most instances, will require both positive and procedural control methods.
• The completed ACP will fully describe the airspace considerations, methods, and procedures that govern air and air defense operations in the urban area, including procedural airspace control measures.

• The control of urban airspace demands careful coordination to limit the potential conflict among aircraft needed for operations within that airspace. The ACA establishes airspace control measures to facilitate this control.

b. In JUOs, the methods and procedures for airspace control depend on the type of operation, the mission of the joint force, and physical conditions such as the operational situation, weather, and urban terrain.
APPENDIX E
REFERENCES

The development of JP 3-06 is based upon the following primary references.

1. Joint Publications

   a. JP 1, Joint Warfare of the Armed Forces of the United States.
   b. JP 1-02, Department of Defense Dictionary of Military and Associated Terms.
   c. JP 2-0, Doctrine for Intelligence Support to Joint Operations.
   d. JP 2-01, Joint Intelligence Support to Military Operations.
   e. JP 2-01.3, Joint Tactics, Techniques, and Procedures for Joint Intelligence Preparation of the Battlespace.
   f. JP 2-02, National Intelligence Support to Joint Operations.
   g. JP 2-03, Joint Tactics, Techniques, and Procedures for Geospatial Information and Services Support to Joint Operations.
   h. JP 3-0, Doctrine for Joint Operations.
   i. JP 3-05, Doctrine for Joint Special Operations.
   l. JP 3-07, Joint Doctrine for Military Operations Other Than War.
   n. JP 3-07.4, Joint Counterdrug Operations.
   q. JP 3-08, Interagency Coordination During Joint Operations: Vol. I.
Appendix E

r. JP 3-09, *Doctrine for Joint Fire Support*.
s. JP 3-11, *Joint Doctrine for Operations in Nuclear, Biological, and Chemical (NBC) Environments*.
x. JP 3-31, *Command and Control of Joint Land Operations*.
y. JP 3-33, *Joint Force Capabilities*.
z. JP 3-34, *Engineer Doctrine for Joint Operations*.
bb. JP 3-50.2, *Doctrine for Joint Combat Search and Rescue (CSAR)*.

ff. JP 3-52, *Doctrine for Joint Airspace Control in the Combat Zone*.


jj. JP 3-58, *Joint Doctrine for Military Deception*.

ll. JP 4-0, *Doctrine for Logistic Support of Joint Operations*.

mm. JP 4-01.1, *Joint Tactics, Techniques, and Procedures for Airlift Support to Joint Operations*. 


qq. JP 4-02, *Doctrine for Health Service Support in Joint Operations.*

rr. JP 5-0, *Doctrine for Planning Joint Operations.*

ss. JP 5-00.1, *Joint Doctrine for Campaign Planning.*


uu. JP 6-0, *Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations.*


zz. *Multiservice Tactics, Techniques and Procedures: NBC Aspects of Consequence Management*

2. **Air Force Publications**


   b. AFDD 2-1.7, *Airspace Control in the Combat Zone.*

   c. AFDD 2-2, *Space Operations.*

   d. AFDD 2-4, *Combat Support.*

   e. AFDD 2-4.1, *Force Protection.*

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g. AFDD 2-7, *Special Operations*.

3. Army Publications


c. FM 2-01.3 (34-130), *Intelligence Preparation of the Battlefield*.

d. FM 2-50.4 (34-8), *Combat Commander’s Handbook on Intelligence*.

e. FM 3-05.20 (31-20), *Special Forces Operations*.

f. FM 3-05.30 (33-1), *Psychological Operations*.

g. FM 3-06 (90-10), *Urban Operations*.

h. FM 3-06.11 (90-10-1), *Combined Arms Operations in Urban Terrain*.

i. FM 3-07 (100-20), *Stability Operations and Support Operations*.

j. FM 3-07.6 (100-23-1), *Multiservice Procedures for Humanitarian Assistance Operations*.

k. FM 3-57 (41-10), *Civil Affairs Operations*.

l. FM 3-61 (46-1), *Public Affairs Operations*.

m. FM 4-0 (100-10), *Combat Service Support*.

4. Marine Corps Publications


d. Marine Corps Doctrinal Publication (MCDP) 1, *Warfighting*.

e. MCDP 1-2, *Campaigning*.
References

f. MCDP 2, *Intelligence*.
g. MCDP 3, *Expeditionary Operations*.
h. MCDP 4, *Logistics*.
i. MCDP 5, *Planning*.
j. MCDP 6, *Command and Control*.

l. MCWP 3-33, *Military Operations Other Than War (MOOTW)*.
m. MCWP 3-33.6, *Procedures for Humanitarian Assistance Operations in Joint and Multi-Service Environments*.


5. Navy Publications

a. Naval Doctrinal Publication (NDP) 1, *Naval Warfare*.

b. NDP 2, *Naval Intelligence*.

c. NDP 4, *Naval Logistics*.

d. NDP 5, *Naval Planning*.

6. Miscellaneous Publications


Appendix E


h. Center for Army Lessons Learned (CALL). Fort Leavenworth: US Army Combined Arms Center. call.army.mil/fmso/fmsopubs


p. Ellefsen, Richard and Liu, Jack. *Urban Terrain Zone Based GIS for MOUT.*

q. Finch, MAJ Raymond C., III, USA. *Why the Russian Military Failed in Chechnya.* Center For Army Lessons Learned.

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kk. Mordica, George J., II. *It’s a Dirty Business, But Somebody Has to Do It (Urban Combat)*. Center for Army Lessons Learned.

ll. The MOUT Homepage: Operations in Built Up Areas (OBUA). www.geocities.com/Pentagon/6453


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Forces Confront Chechnya III. The Battle for Grozny, 1–16 January 1995.”  *Journal of Slavic 


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(November 1992-May 1993) and Special Envoy, Somalia (October 1993). Interview. PBS On-

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APPENDIX F
ADMINISTRATIVE INSTRUCTIONS

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Users in the field are highly encouraged to submit comments on this publication to: Commander, United States Joint Forces Command, Joint Warfighting Center Code JW100, 116 Lake View Parkway, Suffolk, VA 23435-2697. These comments should address content (accuracy, usefulness, consistency, and organization), writing, and appearance.

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# GLOSSARY

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<td>AADC</td>
<td>area air defense commander</td>
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<td>ACA</td>
<td>airspace control authority</td>
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<td>airspace control plan</td>
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<td>AT</td>
<td>antiterrorism</td>
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<tr>
<td>C2</td>
<td>command and control</td>
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<td>C4</td>
<td>command, control, communications, and computers</td>
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<td>C4I</td>
<td>command, control, communications, computers, and intelligence</td>
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<td>C4ISR</td>
<td>command, control, communications, computers, intelligence, surveillance, and reconnaissance</td>
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<td>combatting terrorism</td>
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<td>CCIR</td>
<td>commander’s critical information requirements</td>
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<td>CM</td>
<td>consequence management</td>
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<td>CMO</td>
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<td>CMOC</td>
<td>civil-military operations center</td>
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<td>course of action</td>
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<td>center of gravity</td>
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<td>CP</td>
<td>counterproliferation</td>
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<td>CT</td>
<td>counterterrorism</td>
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<td>DA</td>
<td>direct action</td>
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<td>DOD</td>
<td>Department of Defense</td>
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<td>DOS</td>
<td>Department of State</td>
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<td>DP</td>
<td>decisive point</td>
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<td>EW</td>
<td>electronic warfare</td>
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<td>FHA</td>
<td>foreign humanitarian assistance</td>
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<td>foreign internal defense</td>
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<td>GPS</td>
<td>global positioning system</td>
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<td>HN</td>
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<td>HSS</td>
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<td>HUMINT</td>
<td>human intelligence</td>
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<td>IMINT</td>
<td>imagery intelligence</td>
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<td>IPB</td>
<td>intelligence preparation of the battlespace</td>
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<td>information operations</td>
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<td>intelligence, surveillance, and reconnaissance</td>
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<tr>
<td>JCCC</td>
<td>joint communications control center</td>
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<td>JFC</td>
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<td>joint intelligence preparation of the battlespace</td>
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<td>JOA</td>
<td>joint operations area</td>
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<td>JP</td>
<td>joint publication</td>
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<td>JUO</td>
<td>joint urban operation</td>
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<td>LOAC</td>
<td>law of armed conflict</td>
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<td>LOC</td>
<td>line of communications</td>
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<td>LOS</td>
<td>line of sight</td>
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<td>MCOO</td>
<td>modified combined obstacle overlay</td>
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<td>MOOTW</td>
<td>military operations other than war</td>
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<td>MOUT</td>
<td>military operations on urbanized terrain</td>
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<td>NGO</td>
<td>nongovernmental organization</td>
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<td>operations security</td>
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<td>psychological operations</td>
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<td>rules of engagement</td>
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<td>SIGINT</td>
<td>signals intelligence</td>
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<td>SJA</td>
<td>Staff Judge Advocate</td>
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<td>SOF</td>
<td>special operations forces</td>
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<td>SR</td>
<td>special reconnaissance</td>
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<td>TST</td>
<td>time-sensitive target</td>
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<td>UAV</td>
<td>unmanned aerial vehicle</td>
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<td>USG</td>
<td>United States Government</td>
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<td>UW</td>
<td>unconventional warfare</td>
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<td>WMD</td>
<td>weapons of mass destruction</td>
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**airborne battlefield command and control center.** A United States Air Force aircraft equipped with communications, data link, and display equipment; it may be employed as an airborne command post or a communications and intelligence relay facility. Also called ABCCC. (JP 1-02)

**antiterrorism.** Defensive measures used to reduce the vulnerability of individuals and property to terrorist acts, to include limited response and containment by local military forces. Also called AT. (JP 1-02)

**battlespace.** The environment, factors, and conditions that must be understood to successfully apply combat power, protect the force, or complete the mission. This includes the air, land, sea, space and the included enemy and friendly forces; facilities; weather; terrain; the electromagnetic spectrum; and the information environment within the operational areas and areas of interest. (JP 1-02)

**campaign.** A series of related military operations aimed at accomplishing a strategic or operational objective within a given time and space. (JP 1-02)

**campaign plan.** A plan for a series of related military operations aimed at accomplishing a strategic or operational objective within a given time and space. (JP 1-02)

**centers of gravity.** Those characteristics, capabilities, or sources of power from which a military force derives its freedom of action, physical strength, or will to fight. Also called COGs. (JP 1-02)

**civil affairs.** Designated Active and Reserve component forces and units organized, trained, and equipped specifically to conduct civil affairs activities and to support civil-military operations. Also called CA. (JP 1-02)

**civil-military operations.** The activities of a commander that establish, maintain, influence, or exploit relations between military forces, governmental and nongovernmental civilian organizations and authorities, and the civilian populace in a friendly, neutral, or hostile operational area in order to facilitate military operations, to consolidate and achieve operational US objectives. Civil-military operations may include performance by military forces of activities and functions normally the responsibility of the local, regional, or national government. These activities may occur prior to, during, or subsequent to other military actions. They may also occur, if directed, in the absence of other military operations. Civil-military operations may be performed by designated civil affairs, by other military forces, or by a combination of civil affairs and other forces. Also called CMO. (JP 1-02)

**civil-military operations center.** An ad hoc organization, normally established by the geographic combatant commander or subordinate joint force commander, to assist in the coordination of activities of engaged military forces, and other United States Government agencies, nongovernmental organizations, and regional and international organizations. There is no
established structure, and its size and composition are situation dependent. Also called CMOC. (JP 1-02)

**command and control.** The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. Also called C2. (JP 1-02)

**consequence management.** Those measures taken to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of a chemical, biological, nuclear, and/or high-yield explosive situation. For domestic consequence management, the primary authority rests with the States to respond and the Federal Government to provide assistance as required. Also called CM. (JP 1-02)

**counterterrorism.** Offensive measures taken to prevent, deter, and respond to terrorism. Also called CT. (JP 1-02)

**course of action.** 1. Any sequence of activities that an individual or unit may follow. 2. A possible plan open to an individual or commander that would accomplish, or is related to the accomplishment of the mission. 3. The scheme adopted to accomplish a job or mission. 4. A line of conduct in an engagement. 5. A product of the Joint Operation Planning and Execution System concept development phase. Also called COA. (JP 1-02)

**critical node.** An element, position, or command and control entity whose disruption or destruction immediately degrades the ability of a force to command, control, or effectively conduct combat operations. Also called target critical damage point. (JP 1-02)

**deception.** Those measures designed to mislead the enemy by manipulation, distortion, or falsification of evidence to induce the enemy to react in a manner prejudicial to the enemy’s interests. (JP 1-02)

**decisive point.** A geographic place, specific key event, critical system, or function that allows commanders to gain a marked advantage over an enemy and greatly influence the outcome of an attack. See also centers of gravity. (JP 1-02)

**defensive information operations.** The integration and coordination of policies and procedures, operations, personnel, and technology to protect and defend information and information systems. Defensive information operations are conducted through information assurance, physical security, operations security, counter-deception, counter-psychological operations, counterintelligence, electronic warfare, and special information operations. Defensive information operations ensure timely, accurate, and relevant information access while denying
adversaries the opportunity to exploit friendly information and information systems for their own purposes. (JP 1-02)

direct action. Short-duration strikes and other small-scale offensive actions by special operations forces or special operations capable units to seize, destroy, capture, recover, or inflict damage on designated personnel or materiel. In the conduct of these operations, special operations forces or special operations capable units may employ raid, ambush, or direct assault tactics; emplace mines and other munitions; conduct standoff attacks by fire from air, ground, or maritime platforms; provide terminal guidance for precision-guided munitions; conduct independent sabotage; and conduct anti-ship operations. Also called DA. (JP 1-02)

electronic warfare. Any military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy. Also called EW. The three major subdivisions within electronic warfare are: electronic attack, electronic protection, and electronic warfare support. a. electronic attack. That division of electronic warfare involving the use of electromagnetic energy, directed energy, or antiradiation weapons to attack personnel, facilities, or equipment with the intent of degrading, neutralizing, or destroying enemy combat capability and is considered a form of fires. Also called EA. EA includes: 1) actions taken to prevent or reduce an enemy’s effective use of the electromagnetic spectrum, such as jamming and electromagnetic deception, and 2) employment of weapons that use either electromagnetic or directed energy as their primary destructive mechanism (lasers, radio frequency weapons, particle beams). b. electronic protection. That division of electronic warfare involving passive and active means taken to protect personnel, facilities, and equipment from any effects of friendly or enemy employment of electronic warfare that degrade, neutralize, or destroy friendly combat capability. Also called EP. c. electronic warfare support. That division of electronic warfare involving actions tasked by, or under direct control of, an operational commander to search for, intercept, identify, and locate or localize sources of intentional and unintentional radiated electromagnetic energy for the purpose of immediate threat recognition, targeting, planning and conduct of future operations. Thus, electronic warfare support provides information required for decisions involving electronic warfare operations and other tactical actions such as threat avoidance, targeting, and homing. Also called ES. Electronic warfare support data can be used to produce signals intelligence, provide targeting for electronic or destructive attack, and produce measurement and signature intelligence. (JP 1-02)

evasion and recovery. The full spectrum of coordinated actions carried out by evaders, recovery forces, and operational recovery planners to effect the successful return of personnel isolated in hostile territory to friendly control. (JP 1-02)

fires. The effects of lethal or nonlethal weapons. (JP 1-02)

force protection. Actions taken to prevent or mitigate hostile actions against Department of Defense personnel (to include family members), resources, facilities, and critical information. These actions conserve the force’s fighting potential so it can be applied at the decisive time and place and incorporate the coordinated and synchronized offensive and defensive measures to enable the effective
employment of the joint force while degrading opportunities for the enemy. Force protection does not include actions to defeat the enemy or protect against accidents, weather, or disease. Also called FP. (JP 1-02)

**foreign humanitarian assistance.** Programs conducted to relieve or reduce the results of natural or manmade disasters or other endemic conditions such as human pain, disease, hunger, or privation that might present a serious threat to life or that can result in great damage to or loss of property. Foreign humanitarian assistance (FHA) provided by US forces is limited in scope and duration. The foreign assistance provided is designed to supplement or complement the efforts of the host nation civil authorities or agencies that may have the primary responsibility for providing FHA. FHA operations are those conducted outside the United States, its territories, and possessions. Also called FHA. (JP 1-02)

**host nation.** A nation that receives the forces and/or supplies of allied nations, coalition partners, and/or NATO organizations to be located on, to operate in, or to transit through its territory. Also called HN. (JP 1-02)

**human intelligence.** A category of intelligence derived from information collected and provided by human sources. Also called HUMINT. (JP 1-02)

**imagery intelligence.** Intelligence derived from the exploitation of collection by visual photography, infrared sensors, lasers, electro-optics, and radar sensors such as synthetic aperture radar wherein images of objects are reproduced optically or electronically on film, electronic display devices, or other media. Also called IMINT. (JP 1-02)

**information operations.** Use of offensive and defensive information means to degrade, destroy, and exploit an adversary’s information-based process while protecting one’s own. Also called IO. (JP 1-02)

**intelligence.** 1. The product resulting from the collection, processing, integration, analysis, evaluation, and interpretation of available information concerning foreign countries or areas. 2. Information and knowledge about an adversary obtained through observation, investigation, analysis, or understanding. (JP 1-02)

**intelligence preparation of the battlespace.** An analytical methodology employed to reduce uncertainties concerning the enemy, environment, and terrain for all types of operations. Intelligence preparation of the battlespace builds an extensive database for each potential area in which a unit may be required to operate. The database is then analyzed in detail to determine the impact of the enemy, environment, and terrain on operations and presents it in graphic form. Intelligence preparation of the battlespace is a continuing process. Also called IPB. (JP 1-02)

**interagency coordination.** Within the context of Department of Defense involvement, the coordination that occurs between elements of Department of Defense, and engaged US Government agencies,
nongovernmental organizations, and regional and international organizations for the purpose of accomplishing an objective. (JP 1-02)

**interdiction.** An action to divert, disrupt, delay, or destroy the enemy’s surface military potential before it can be used effectively against friendly forces. (JP 1-02)

**joint fires.** Fires produced during the employment of forces from two or more components in coordinated action toward a common objective. (JP 1-02)

**joint force commander.** A general term applied to a combatant commander, subunified commander, or joint task force commander authorized to exercise combatant command (command authority) or operational control over a joint force. Also called JFC. (JP 1-02)

**joint intelligence center.** The intelligence center of the combatant command headquarters. The joint intelligence center is responsible for providing and producing the intelligence required to support the combatant commander and staff, components, subordinate joint forces and elements, and the national intelligence community. Also called JIC. (JP 1-02)

**joint intelligence preparation of the battlespace.** The analytical process used by joint intelligence organizations to produce intelligence assessments, estimates and other intelligence products in support of the joint force commander’s decisionmaking process. It is a continuous process that includes defining the total battlespace environment; describing the battlespace’s effects; evaluating the adversary; and determining and describing adversary potential courses of action. The process is used to analyze the air, land, sea, space, electromagnetic, cyberspace, and human dimensions of the environment and to determine an opponent’s capabilities to operate in each. Joint intelligence preparation of the battlespace products are used by the joint force and component command staffs in preparing their estimates and are also applied during the analysis and selection of friendly courses of action. Also called JIPB. (JP 1-02)

**joint operations area.** An area of land, sea, and airspace, defined by a geographic combatant commander or subordinate unified commander, in which a joint force commander (normally a joint task force commander) conducts military operations to accomplish a specific mission. Joint operations areas are particularly useful when operations are limited in scope and geographic area or when operations are to be conducted on the boundaries between theaters. Also called JOA. (JP 1-02)

**joint task force.** A joint force that is constituted and so designated by the Secretary of Defense, a combatant commander, a subunified commander, or an existing joint task force commander. Also called JTF. (JP 1-02)

**joint urban operations.** All joint operations planned and conducted across the range of military operations on, or against objectives on a topographical complex and its adjacent natural terrain where manmade construction or the density of noncombatants are the dominant features. Also called JUOs. (JP 1-02)
**logistics.** The science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense, those aspects of military operations which deal with: a. design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materiel; b. movement, evacuation, and hospitalization of personnel; c. acquisition or construction, maintenance, operation, and disposition of facilities; and d. acquisition or furnishing of services. (JP 1-02)

**maneuver.** 1. A movement to place ships, aircraft, or land forces in a position of advantage over the enemy. 2. A tactical exercise carried out at sea, in the air, on the ground, or on a map in imitation of war. 3. The operation of a ship, aircraft, or vehicle, to cause it to perform desired movements. 4. Employment of forces on the battlespace through movement in combination with fires to achieve a position of advantage in respect to the enemy in order to accomplish the mission. (JP 1-02)

**measurement and signature intelligence.** Scientific and technical intelligence obtained by quantitative and qualitative analysis of data (metric, angle, spatial, wavelength, time dependence, modulation, plasma, and hydromagnetic) derived from specific technical sensors for the purpose of identifying any distinctive features associated with the target, source, emitter or sender measurement of the same. The detected feature may be either reflected or emitted. Also called MASINT. (JP 1-02)

**military deception.** Actions executed to deliberately mislead adversary military decision makers as to friendly military capabilities, intentions, and operations, thereby causing the adversary to take specific actions (or inactions) that will contribute to the accomplishment of the friendly mission. The five categories of military deception are as follows. a. strategic military deception — Military deception planned and executed by and in support of senior military commanders to result in adversary military policies and actions that support the originator’s strategic military objectives, policies, and operations. b. operational military deception — Military deception planned and executed by and in support of operational-level commanders to result in adversary actions that are favorable to the originator’s objectives and operations. Operational military deception is planned and conducted in a theater to support campaigns and major operations. c. tactical military deception — Military deception planned and executed by and in support of tactical commanders to result in adversary actions that are favorable to the originator’s objectives and operations. Tactical military deception is planned and conducted to support battles and engagements. d. Service military deception — Military deception planned and executed by the Services that pertain to Service support to joint operations. Service military deception is designed to protect and enhance the combat capabilities of Service forces and systems. e. military deception in support of operations security (OPSEC) — Military deception planned and executed by and in support of all levels of command to support the prevention of the inadvertent compromise of sensitive or classified activities, capabilities, or intentions. Deceptive OPSEC measures are designed to distract foreign intelligence away from, or provide cover for, military operations and activities. (JP 1-02)

**military operations other than war.** Operations that encompass the use of military capabilities across the range of military operations short of war. These military actions can be applied to complement any combination of the other instruments of national power and occur before, during, and after war. Also called MOOTW. (JP 1-02)
nongovernmental organizations. Transnational organizations of private citizens that maintain a consultative status with the Economic and Social Council of the United Nations. Nongovernmental organizations may be professional associations, foundations, multinational businesses, or simply groups with a common interest in humanitarian assistance activities (development and relief). “Nongovernmental organizations” is a term normally used by non-United States organizations. Also called NGOs. (JP 1-02)

nonlethal weapons. Weapons that are explicitly designed and primarily employed so as to incapacitate personnel or material, while minimizing fatalities, permanent injury to personnel, and undesired damage to property and the environment. a. Unlike conventional lethal weapons that destroy their targets through blast, penetration, and fragmentation, nonlethal weapons employ means other than gross physical destruction to prevent the target from functioning. b. Nonlethal weapons are intended to have one, or both, of the following characteristics: (1) They have relatively reversible effects on personnel or materiel. (2) They affect objects differently within their area of influence. (JP 1-02)

offensive information operations. The integrated use of assigned and supporting capabilities and activities, mutually supported by intelligence, to affect adversary decision makers to achieve or promote specific objectives. These capabilities and activities include but are not limited to operations security, military deception, psychological operations, electronic warfare, physical attack and/or destruction, and special information operations, and could also include computer network attack. (JP 1-02)

operational art. The employment of military forces to attain strategic and/or operational objectives through the design, organization, integration, and conduct of strategies, campaigns, major operations, and battles. Operational art translates the joint force commander’s strategy into operational design and, ultimately, tactical action, by integrating the key activities at all levels of war. (JP 1-02)

operational level of war. The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or other operational areas. Activities at this level link tactics and strategy by establishing operational objectives needed to accomplish the strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they ensure the logistic and administrative support of tactical forces, and provide the means by which tactical successes are exploited to achieve strategic objectives. (JP 1-02)

operations security. A process of identifying critical information and subsequently analyzing friendly actions attendant to military operations and other activities to: a. identify those actions that can be observed by adversary intelligence systems; b. determine indicators that hostile intelligence systems might obtain that could be interpreted or pieced together to derive critical information in time to be useful to adversaries; and c. select and execute measures that eliminate or reduce to an acceptable level the vulnerabilities of friendly actions to adversary exploitation. Also called OPSEC. (JP 1-02)
**personnel recovery.** The aggregation of military, civil, and political efforts to obtain the release or recovery of personnel from uncertain or hostile environments and denied areas whether they are captured, missing, or isolated. That includes US, allied, coalition, friendly military, or paramilitary, and others as designated by the National Command Authorities. Personnel recovery (PR) is the umbrella term for operations that are focused on the task of recovering captured, missing, or isolated personnel from harm’s way. PR includes but is not limited to theater search and rescue; combat search and rescue; search and rescue; survival, evasion, resistance, and escape; evasion and escape; and the coordination of negotiated as well as forcible recovery options. PR can occur through military action, action by nongovernmental organizations, other US Government-approved action, and/or diplomatic initiatives, or through any of these. Also called PR. (JP 1-02)

**psychological operations.** Planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals. The purpose of psychological operations is to induce or reinforce foreign attitudes and behavior favorable to the originator’s objectives. Also called PSYOP. (JP 1-02)

**public affairs.** Those public information, command information, and community relations activities directed toward both the external and internal publics with interest in the Department of Defense. Also called PA. (JP 1-02)

**reconnaissance.** A mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or potential enemy, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area. Also called RECON. (JP 1-02)

**rules of engagement.** Directives issued by competent military authority that delineate the circumstances and limitations under which United States forces will initiate and/or continue combat engagement with other forces encountered. Also called ROE. (JP 1-02)

**signals intelligence.** 1. A category of intelligence comprising either individually or in combination all communications intelligence, electronic intelligence, and foreign instrumentation signals intelligence, however transmitted. 2. Intelligence derived from communications, electronic, and foreign instrumentation signals. Also called SIGINT. (JP 1-02)

**special operations.** Operations conducted by specially organized, trained, and equipped military and paramilitary forces to achieve military, political, economic, or informational objectives by unconventional military means in hostile, denied, or politically sensitive areas. These operations are conducted across the full range of military operations, independently or in coordination with operations of conventional, non-special operations forces. Political-military considerations frequently shape special operations, requiring clandestine, covert, or low visibility techniques and oversight at the national level. Special operations differ from conventional operations in degree of physical and...
political risk, operational techniques, mode of employment, independence from friendly support, and dependence on detailed operational intelligence and indigenous assets. Also called SO. (JP 1-02)

strategic level of war. The level of war at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) security objectives and guidance, and develops and uses national resources to accomplish these objectives. Activities at this level establish national and multinational military objectives; sequence initiatives; define limits and assess risks for the use of military and other instruments of national power; develop global plans or theater war plans to achieve these objectives; and provide military forces and other capabilities in accordance with strategic plans. (JP 1-02)

surveillance. The systematic observation of aerospace, surface, or subsurface areas, places, persons, or things, by visual, aural, electronic, photographic, or other means. (JP 1-02)

target. 1. An area, complex, installation, force, equipment, capability, function, or behavior identified for possible action to support the commander’s objectives, guidance, and intent. Targets fall into two general categories: planned and immediate. 2. In intelligence usage, a country, area, installation, agency, or person against which intelligence operations are directed. 3. An area designated and numbered for future firing. 4. In gunfire support usage, an impact burst that hits the target. Also called TGT. (JP 1-02)

target complex. A geographically integrated series of target concentrations. (JP 1-02)

targeting. The process of selecting and prioritizing targets and matching the appropriate response to them, taking account of operational requirements and capabilities. (JP 1-02)

target system. 1. All the targets situated in a particular geographic area and functionally related. 2. (DOD only) A group of targets that are so related that their destruction will produce some particular effect desired by the attacker. (JP 1-02)

technical intelligence. Intelligence derived from exploitation of foreign materiel, produced for strategic, operational, and tactical level commanders. Technical intelligence begins when an individual service member finds something new on the battlefield and takes the proper steps to report it. The item is then exploited at successively higher levels until a countermeasure is produced to neutralize the adversary’s technological advantage. Also called TECHINT. (JP 1-02)

terrorism. The calculated use of unlawful violence or threat of unlawful violence to inculcate fear; intended to coerce or to intimidate governments or societies in the pursuit of goals that are generally political, religious, or ideological. (JP 1-02)

urban triad. The three distinguishing characteristics of urban areas: complex manmade physical terrain, a population of significant size and density, and an infrastructure upon which the area depends. (Upon approval of this publication, this term and its definition will be included in JP 1-02.)
**weaponneering.** The process of determining the quantity of a specific type of lethal or nonlethal weapons required to achieve a specific level of damage to a given target, considering target vulnerability, weapons effect, munitions delivery accuracy, damage criteria, probability of kill, and weapon reliability. (JP 1-02)

**weapons of mass destruction.** Weapons that are capable of a high order of destruction and/or of being used in such a manner as to destroy large numbers of people. Weapons of mass destruction can be high explosives or nuclear, biological, chemical, and radiological weapons, but exclude the means of transporting or propelling the weapon where such means is a separable and divisible part of the weapon. Also called WMD. (JP 1-02)
Joint Publication (JP) 3-06 is in the Operations series of joint doctrine publications. The diagram below illustrates an overview of the development process:

**STEP #1**
- **Project Proposal**
  - Submitted by Services, combatant commands, or Joint Staff to fill extant operational void
  - J-7 validates requirement with Services and combatant commands
  - J-7 initiates Program Directive

**STEP #2**
- **Program Directive**
  - J-7 formally staffs with Services and combatant commands
  - Includes scope of project, references, milestones, and who will develop drafts
  - J-7 releases Program Directive to Lead Agent. Lead Agent can be Service, combatant command, or Joint Staff (JS) Directorate

**STEP #3**
- **Two Drafts**
  - Lead Agent selects Primary Review Authority (PRA) to develop the pub
  - PRA develops two draft pubs
  - PRA staffs each draft with combatant commands, Services, and Joint Staff

**STEP #4**
- **CJCS Approval**
  - Lead Agent forwards proposed pub to Joint Staff
  - Joint Staff takes responsibility for pub, makes required changes and prepares pub for coordination with Services and combatant commands
  - Joint Staff conducts formal staffing for approval as a JP

**STEP #5**
- **Assessments/Revision**
  - The combatant commands receive the JP and begin to assess it during use
  - 18 to 24 months following publication, the Director, J-7, will solicit a written report from the combatant commands and Services on the utility and quality of each JP and the need for any urgent changes or earlier-than-scheduled revisions
  - No later than 5 years after development, each JP is revised

All joint doctrine and tactics, techniques, and procedures are organized into a comprehensive hierarchy as shown in the chart above.