Chapter 4

Terrorist Targeting of U.S. Military Forces

We are locked today in a war against a global extremist network that is fixed on defeating the United States and destroying our way of life…This foe will not go away, nor will he give up easily. And the next decade is likely to be one of persistent conflict. We are engaged in a long war.

General George Casey
U.S. Army Chief of Staff
April 2007

Terrorist targeting of U.S. military forces is a norm of the contemporary operational environment. This chapter examines terrorist targeting threats to U.S. military forces. The descriptions are neither a region specific product nor an exhaustive list of terrorist scenarios. Nonetheless, describing the targeting threat addresses three main components. Section I defines three operational areas of U.S. military forces: deployed, in-transit, and institutional. Section II presents circumstances and influences on terrorist targeting of U.S. military forces. Section III provides an array of tactics and techniques that terrorists use to attack U.S. military forces.
Section I: Operational Environments and U.S. Military Forces

In many regions of the world, terrorism challenges political stability, economic progress, and democratic initiatives. To discuss the likelihood of particular terrorist threats to U.S. military forces, defining operational area and contemporary operational environment provides a setting of where and how particular threats may emerge. The operational environment (OE) is a composite of the conditions, circumstances, and influences that affect employment of capabilities and bear on the decisions of the commander. This environment includes physical areas and factors of land, air, maritime and space, as well as the cyber domain of information.  

![Diagram of COE Awareness](image)

**Figure 4-2. Dynamics of COE Awareness**

The contemporary operational environment (COE) is a combination of all critical variables and actors that affect military operations today and in the near-term and mid-term. US Army TRADOC appreciates this real-world context for analysis and situational awareness of the environment through use of critical variables. The US joint community use of a systems perspective on political, military, economic, social, information, and infrastructure (PMESII) components of several operational environments. Two additional domains complement this approach with an appreciation of varied physical environments such as geography-topography-hydrology and time (PMESII+PT).

The Contemporary Operational Environment (COE) is the overarching construct in which multiple operational environments exist. A model of PMESII+PT can be used to spotlight the complexity and uncertainty of the COE. Additional intangible yet significant issues for scrutiny include the culture, perceptions, beliefs, and values of all the actors in an OE. This complexity acknowledges a synergistic combination of all critical variables and actors that create the conditions, circumstances, and influences that can affect U.S. military operations. Situational awareness is a holistic analysis of the OE rather than a discrete assessment of a specific issue or action.

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120 Ibid.
Deployed Forces

For this handbook, deployed forces are those U.S. military forces and individuals operating away from their permanent locations on either operational missions or training exercises. This category includes programmed unit rotations into stability operations or training assistance to foreign militaries, and can apply to all individual assignments in overseas locations such as military attachés or foreign study students. An example is an infantry battalion in Iraq.

In-Transit Forces

These U.S. military forces are either preparing for or in the process of deployment and redeployment phases of an operational mission. This includes active component units within the U.S. or positioned overseas, and reserve component units identified for operations, mobilization, or demobilization. Examples include an Army National Guard battalion returning from an operational mission in Iraq or an Army Reserve postal detachment deploying to Afghanistan.

Institutional Forces

These U.S. military forces are active and reserve component garrisons, training and logistic facilities, and other activities or installations that do not deploy to accomplish their organizational mission. Examples are an activity such as a provost marshal office assigned to an installation garrison or an institutional organization such as a military college located on an Army installation.

Section II: Circumstances and Influences

A principal consideration in terrorist targeting is the psychological impact of an attack on a selected audience. Attacking U.S. forces can provide a psychological impact that serves the goals of the terrorist. Assessing risk to potential targets will often focus less on specific military value, and consider the value to a terrorist intention to cause fear and anxiety.

During the post-colonial and nationalist insurgencies of the Cold War, terrorists might consider one civilian casualty more effective than several military casualties. With many insurgencies conducting simultaneous military and terror campaigns, military casualties usually caused less impact on the civilian population.121 Terrorists also considered what soft targets could achieve the most significant attention while employing minimal risk to their own assets. A saying attributed to several terrorists is, “Why hunt wolves when

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there are so many sheep about?” However, recent operations by terrorists indicate that a recurring number of civilian deaths and mayhem can be an effective tool in a campaign of terror to break the resolve of a population and discourage a popularly elected representative government.

Reasons for Targeting

Why attack U.S. military forces? Large numbers of U.S. military forces located in varied areas of the world make military forces a lucrative target. Accessibility is one key factor. For example, during the 1970s to 1990s U.S. military installations and personnel were frequently targeted in by anti-NATO European terrorists and by state sponsored terrorists acting on behalf of a variety of regimes. These attacks generally struck at military targets that were not engaged in hostilities but were accessible to terrorists of the geographic region. Today, the expansive presence of U.S. military forces is clearly evident in the Middle East and Persian Gulf region, and many other regions of the world due to political and economic factors as a global superpower.

Several terrorist rationales exist for targeting U.S. military forces. Whether terrorism comes from an individual with a single issue concern or a terrorist organization with global reach, many factors are considered in target selection, vulnerability analysis, and risk management before attacking a target. With the variety of terrorist motivations and goals, the reasons to target U.S. military forces or individuals are equally varied. The most common rationales are:

Identify Target Accessibility

Presence of military members, units, and activities in large numbers makes an inviting target. Presence of U.S. forces in some regions of the world may offend particular political or religious sensibilities and can be presented as a justification for terrorist attack.

Choose Symbolic Value

Commitment of military forces is a significant indicator of national interest and carries major political consequences. Targeting military forces can often achieve a greater notoriety for terrorists than targeting civilian targets such as diplomats, commercial businessmen, or government officials and facilities.

An example of successful terrorism is the Khobar Towers attack in Saudi Arabia. To Islamic fundamentalists, the presence of U.S. military forces in Saudi Arabia is considered particularly offensive due to the religious importance of the Saudi city of Mecca. In June of 1996, a housing facility for U.S. Air Force personnel near Dhahran, Saudi Arabia was attacked with a large truck bomb. [The acronym of VBIED for vehicle

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borne improvised explosive device was not commonly used yet.] The Khobar Towers attack killed nineteen U.S. Air Force personnel and wounded about 400 other U.S. military members, and demonstrated terrorist ability to back up terrorist threats with effective action. Members of Saudi Hizballah, a terrorist organization associated with Lebanese Hizballah, and an unnamed Iranian were indicted by the U.S. Department of Justice for this act of terrorism. Soon after this attack, terrorists declared war on American forces in the Persian Gulf region in August 1996, and announced that all U.S. forces must be withdrawn, or suffer further attacks. Terrorists could claim they caused U.S. military forces to relocate from this urban setting to remote locations in Saudi Arabia.

Fig. 4-4. Khobar Towers

Demonstrate Organizational Capability

Terrorist action that demonstrates the capability to negate U.S. military operations security and force protection can promote individual terrorist or organizational terrorist agenda when they attack U.S. military forces.

Fig. 4-5. General Haig

Senior military officials are often a target. In the 1970s and 1980s, The Red Army Faction (RAF) conducted numerous terrorist activities against military presence in Germany and countries of the North Atlantic Treaty Organization (NATO). Shifting from original goals for a complete revolution of German society, the RAF concentrated much of their capabilities on a campaign to reduce NATO and U.S. military presence in Germany as a way to possibly build a more sympathetic understanding for societal change in Germany. In 1979, the RAF attempted to assassinate General Alexander Haig, the Supreme Allied Commander in Europe and NATO. RAF surveillance confirmed that a road near Casteau, Belgium that was used frequently by General Haig. A remotely controlled bomb placed in a culvert of the road had a detonator of nine-volt batteries and a household switch with wire camouflaged by earth and grass. The blast lifted the general’s car into the air and damaged the accompanying security

vehicle; three guards in the security vehicle were lightly injured. General Haig was physically unharmed.

Penetrating U.S. facilities and locations deemed secure can aim to cause a large number of casualties and increase the requirements for additional security forces and measures. An example is the individual terrorist suicide bombing of the military dining facility in Mosul, Iraq in 2004. A civilian was able to gain entry through security stations and detonated a suicide vest bomb in a group of U.S. military members and civilian workers eating in a large military tent. Fourteen U.S. soldiers were killed in the explosion. Four American civilian contractors and four Iraqi security soldiers were also reported killed in the blast. Many more occupants were wounded by the explosion and ball bearings of the suicide vest bomb. Fortunately, rehearsed mass casualty medical plans and first aid medical response at the site quickly treated and stabilized casualties and prevented even more deaths from injuries.

Fig. 4-6. Mosul Dining Tent

Delay or Prevent Movements

During Operation Desert Shield, Saddam Hussein called for terrorist activity to be directed against the countries of the coalition preparing to invade Iraq. Attacks conducted by indigenous terrorist groups Dev Sol and 17 November occurred against U.S. staging areas in Turkey and Greece. Iraq directly supported these overseas attacks with weapons components delivered via diplomatic pouch and other assistance. Although Saddam Hussein did not have the influence to convince or compel a larger Middle East surge in terrorism, terrorist activities in general did increase during the period of the air campaign and subsequent invasion of Iraq, totaling 275 incidents. Due to extensive counterterrorism efforts and international coordination, the overall effort to disrupt coalition deployments was ineffective. This period indicates a terrorist threat that deployed and deploying or redeploying units may encounter.

129 Ibid., 52.
During Operation Desert Shield and preparations for the liberation of Kuwait, Iraq conducted what amounted to the largest hostage taking crisis in modern time. They seized Kuwaiti citizens and hundreds of foreigners resident in Iraq and exploited them in the media as human shields. In one instance, about 350 passengers on a British Airways flight were held captive as the airplane attempted a refueling stop in Kuwait. Unfortunately, this event occurred on the first day of Iraq’s invasion of Kuwait in 1990.\(^{130}\) Most of the United Kingdom hostages and other UK citizens were released before the initiation of Operation Desert Storm.\(^{131}\)

Disruption of transportation may take place by sabotage or direct attack upon the unit being transported and its mode of transportation. Methods of attack would be selected depending upon their effectiveness versus the mode of unit transport. Air, rail and sea are normal modes of transport for long voyages or distances, but may also be motor transportation means such as buses or organic unit vehicles to move to a destination. Weapons likely to be employed include bombs, antitank rockets, rocket propelled grenades, and small arms gunfire. In some cases, sophisticated shoulder fired missiles could be used. Sabotage may be designed to produce maximum casualties in the ensuing crash, derailment, or fire. In January 2003, intelligence sources detected the targeting of chartered aircraft participating in the build up of forces against Iraq.\(^{132}\) In the past, U.S. domestic terrorists have derailed U.S. passenger and cargo trains.\(^{133}\) Attacks on ships in port and at sea are within the capabilities of selected transnational and international terror groups.

Destroying facilities such as docks, airfields, refueling facilities, and cargo terminals at intermediate stops or at the final destination is another way for terrorists to prevent or delay deployment. Attacking critical private infrastructure through physical and cyber means could cause similar effects. Adding depth to a conflict does not necessarily require the projection of physical terrorist assets and weapons into more distant countries. If timed to coincide with the arrival or departure of military units, such destructive attacks could cause significant casualties. In 1975, the Montoneras terrorists of Argentina advanced from individual terrorist acts to paramilitary guerrilla operations and achieved significant physical and psychological effects to Argentine military forces. Placing explosives in an abandoned tunnel underneath an airfield runway, the bomb was detonated as a C-130 aircraft carrying an antiguerilla unit was starting its departure. The C-130 was destroyed resulting in four killed and forty injured, as well as damaging the


runway. This was a psychological blow to the Army’s image with its nation, and a publicized instance of a military force defeat.\footnote{Alan C. Lowe, “Todo o Nada: Montonerosa Versus the Army: Urban Terrorism in Argentina,” ed. William G. Robertson and Lawrence A. Yates, in \textit{Block by Block: The Challenges of Urban Operations} (Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 2003), 395.}

### Reduce Operational Capability

Terrorists may target U.S. military forces to reduce or remove a specific capability or impair effectiveness. The intent would be to cause additional employment of military forces and further stress finite unit and soldier assets weaken morale. A likely method of attack would be a small to medium size improvised explosive device (IED) or an ambush conducted with light weapons (automatic weapons, grenades, and antitank rockets). Terrorists may seek to seize U.S. military members as prisoners and exploit them for media attention or a military reaction by U.S. forces. A May 2007 raid on a U.S. military observation post near Mahmoudiya, Iraq killed four U.S. soldiers and one Iraqi interpreter. Three missing U.S. soldiers were presumed to be captured. Reports stated about ten individuals attacked the two U.S. vehicles and their crews in limited visibility with small arms gunfire and grenades. Before departing the area, the terrorists belonging to an al-Qaida affiliated cell used IEDs to slow any U.S. response force into the attack site.\footnote{Robert Ried, “Search for missing soldiers intensifies,” 15 May 2007, available from \url{http://news.yahoo.com/s/ap/20070515/ap_on_re_mi_ea/iraq&printer=1;_ylt=AujoSQGJ62...; Internet; accessed 16 May 2007.} See also, Kim Gamel, “Militants: stop hunt for U.S. soldiers,” available from \url{http://news.yahoo.com/s/ap/20070514/ap_on_re_mi_ea/iraq&printer=1;_ylt=ApG9rDwam...; Internet; accessed 16 May 2007.}

Subsequent search missions for the missing U.S. soldiers reduced available U.S. forces planned for other operations.

The suicide boat bombing of the USS \textit{Cole} in 2000 occurred while the ship was moored at a refueling point in Aden, Yemen. Terrorists exploited access control measures and perimeter security vulnerabilities of waterside approaches to the naval ship while near the coastline. The result, besides the international media attention, killed 17 sailors killed and wounded 42 crewmembers.

The explosion caused extensive damage to the ship.\footnote{Statement Before the 107th [U.S.] Congress, Chairman of the Joint Chiefs of Staff, Senate Armed Services Committee May 3, 2001; [database on-line] available from \url{http://www.dtic.mil/jcs/chairman/3MAY01_SASC_CJCS.htm}; Internet; accessed 18 February 2004.}

In more recent military operations, during the preparation for and conduct of Operation Iraqi Freedom, threat of terrorist attacks contributed to decisions by Turkey that significantly limited U.S. use of Turkish territory, facilities, and materiel.

A terrorist group with a rudimentary biological weapons capability could have the potential to infect enough of a unit with a debilitating or contagious disease. Quarantine
and other medical treatment would delay a planned deployment sequence. Additionally, terrorist capability and suspected or known intention to use biological weapons against U.S. military forces could cause extraordinary processes for vaccination of U.S. military forces. These additional preventive medicine and safety issues could complicate deployment timeframes for U.S. military forces.

Acquisition and use of chemical, biological, radiological, or nuclear material and weapons by terrorists is a significant concern. See Army TRADOC G2 Handbook No.1.04, *Terrorism and WMD in the Contemporary Operational Environment* published in 2007 for a discussion of this looming threat to U.S. military forces.

**Degrade Social Environment**

Terrorists prefer an environment that is chaotic. A fluid, poorly policed or uncontrolled situation often permits normally suspicious activities to go unnoticed. However, hostile environments put military forces on their guard, reduce the opportunities to get close to targets without being challenged or detained, and increase the difficulty of achieving any degree of operational surprise.

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The enemy today is not an empire, but a shadowy movement of terrorists cells; the threats today are not conventional, they’re unconventional; and al-Qaida and other terrorists have…no hesitation to kill innocent men, women, and children.

Honorable Donald Rumsfeld
U.S. Secretary of Defense
March 2006

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Attacks on personnel at social gatherings can occur at clubs on military installations or during unit functions at private homes or commercial establishments off post. Traditional observances of organizational days, town hall meetings, and family support briefings are often publicized in advance and give attackers planning dates for possible gatherings in accessible locations. Attacks at commercial entertainment establishments such as bars, clubs and restaurants could be targeted because the density or presence of military personnel. The most likely attack method will be a small to large sized IED, although terrorists could employ improvised mortars or other weapons from a standoff distance.

In some cases urban terrain favors the terrorist in accomplishing these ends. Cities provide the terrorist with a population to conceal personnel, structures and facilities to hide and store equipment or weapons, and transportation nodes for movement. Terrorists may use the advantages of surprise and security by hiding within a population. Sometimes terrorists may forego specific terror activities and operate as guerillas in areas of active combat operations. They can also operate as part of an insurgency force in combat operations.
Disrupt Economic Environment

Other terrorist incidents indicate the potential for disrupting deployments or materiel in transit. The tensions of political, environmental, and economic impacts add to the specific damage or destruction of an incident. The terrorist suicide boat bombing in 2002 of the French tanker ship Limburg near Ash Shihr and east of Aden, Yemen spilled 90,000 barrels of oil into the ocean and contaminated 45 miles of coastline.\(^{137}\) One immediate economic impact of this small boat attack on the Limburg was a maritime insurance increase in rates that tripled in the Yemeni area.\(^{138}\)

Influence U.S. Policy

Terrorists can attack U.S. military forces with the intent to force a change in U.S. policy. Hizballah and Syrian sponsors were concerned that deployment of international peacekeeping forces into Lebanon in the spring of 1983 would reduce their freedom of action in the ongoing Lebanese Civil War. Suicide truck bomb attacks on the U.S. Marine Corps and French Army barracks in October of 1983 killed 241 U.S. Marines and 60 French soldiers. Combined with an earlier bombing campaign against the embassies of the U.S. and other countries, these attacks resulted in the withdrawal of the international military force.

The desire to discredit U.S. Federal, state, and local governments can result in military members, units, or infrastructure being targeted by domestic terror groups. For example, during the Vietnam War anti-war extremist groups targeted Army cadet (ROTC) detachments, draft board offices, and university facilities involved in military research.\(^{139}\) During the same period, the Weather Underground targeted recruiting offices in the late 1970’s. In contemporary times, terrorists operating in foreign nations attempt similar influence with threats against U.S. military members or U.S. tourists in Germany. Several

Islamic extremist organizations have threatened violence unless Germany withdraws its troops from the NATO force in Afghanistan.\textsuperscript{140}

\begin{table}[h]
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\begin{tabular}{|l|l|l|}
\hline
\textbf{Target Environment} & \textbf{Attack Means} & \textbf{Attack Rationale} \\
\hline
\textbf{Deployed Forces} & Threat-Hoax & Select Accessible Target within means of terrorist cell \\
& Arson & Diminish Symbolic Prestige of nation-coalition-alliance \\
& Sabotage & \\
& Kidnapping & Gain Notoriety for terrorist cell or ideology \\
& Hostage Taking & Delay-Prevent Movements of US military forces \\
& Assassination & \\
& Bombing & Reduce Operational Capability of US military forces \\
& Gunfire-RPG & \\
& Raid-Ambush & Degradate Social Stability-Trust of nation and region \\
In-Transit Forces & Seizure & Disrupt Economic Confidence of nation-supporting nations \\
& Aerial-MANPADS & Influence Political Policy of nation-supporting nations \\
& WMD & \\
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\end{tabular}
\caption{Terrorist Targeting U.S. Military Forces}
\end{table}

In more recent decades, domestic antigovernment groups, some with bizarre conspiracy theories, targeted military bases or posts in the U.S. homeland believing them to be staging areas for United Nations directed foreign military forces. During the twenty year period from 1980 to 1999, thirteen specifically domestic military targets were attacked by terrorist activities. This does not count military facilities or personnel who were

A January 2007 snapshot of global commitments of the U.S. Army highlights many areas of concentrated Army activity throughout the world. The illustration (above) from the U.S. Army’s 2007 Posture Statement displays almost 600,000 Soldiers on active duty. In early 2007 the Army was comprised of 507,000 active component, 46,000 Army National Guard and 28,000 Army Reserve. Over 40 percent (243,000) of them are deployed or forward stationed, serving in 76 countries worldwide. More than 4,600 Army Civilians are serving side-by-side with them in the field, performing a variety of missions vital to America’s national defense. The other Services of the U.S. Armed Forces provide similar presence and mission conduct on a day to day basis on land in the continents of the world, in the maritime regions of the world, and in the air and space.

Section III: Terrorist Attack Threats to U.S. Forces

General

The terrorist uses a wide array of tactics and techniques in conducting terror. This section is not an exhaustive presentation of methods or approaches. One norm regarding terror operations is the use of surprise, secrecy, innovation, and indirect methods of attack. Tactics are as broad and diverse as the resources of the terrorist cell and the imagination of the group leader. Use of the Internet and training exchanges information among terrorists on tactics that yield success. Al-Qaeda assembled written training material, training videos, and attempted to sustain training initiatives and encouragement even after much of its network of training camps were disrupted or destroyed.143 Terrorists continue to improve techniques as field tests demonstrate degrees of effectiveness in real-world situations such as Chechnya, Kashmir, Afghanistan, the Balkans, and Iraq.

Contemporary Setting

The terrorist will utilize tactics, forces, and weapons specifically tailored to a particular mission. Terrorist operations are individualistic in that each is planned for a specific target and effect. A terrorist relies upon prior planning and reconnaissance to counter and overmatch the target. If changes to the target or unexpected conditions render success unlikely, the terrorist may cancel the operation and return later or choose a different target and continue his planning and attack process.

Some groups will actually publish their targeting guidance. One example was noticed in March 2004. An al-Qaida affiliate published a nine page article in their training publication, “Camp al-Battar Magazine” that presented new targeting guidance to its members and other affiliated groups. This publication contained information on small arms skills, physical fitness, targeting, tactics, and secure communications. The new

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guidance specifically covered targets within cities addressing faith institution targets, economic targets, and human targets.\footnote{Ben N. Venzke, \textit{al Qaeda Targeting Guidance} - Version 1.0 (Alexandria, VA: IntelCenter/Tempest Publishing, LLC, 2004), 3-5.}

**Forms of Terrorism**

**Threat or Hoax**

A terrorist cell can use threats to coerce or preclude actions by a targeted individual or population. Threats and hoaxes can dull the effectiveness of preventive or countermeasures when a targeted individual or population loses situational awareness of an actual terrorist target or disperses finite assets against many possible threats. At the less lethal end of the spectrum, hoaxes can simply be methods to annoy and wear down security forces and keep the population constantly agitated. Bomb threats, leaving suspicious items in public places, and ploys consume time and effort from other security operations and contribute to uncertainty and anxiety.

![Fig. 4-10. Ruse and Deception](image)

Such activities can be used to gain information about the target’s response to a potential attack. Where the occupants go during the evacuation of a building, and how long it takes them to exit are useful elements of information in operational planning, and can be obtained through simply making an anonymous phone call or activating a fire alarm. Observation of regularly scheduled exercises or drills of emergency response procedures can provide similar information. This technique can also be combined with an actual attack to circumvent fixed security measures. For example, the occupants of a bomb-resistant building with controlled access and a guard force could be forced to evacuate by a plausible but false threat. Most security plans would respect the potential danger such a threat represented and evacuate the building. Unless assembly areas are properly secured, the evacuation could make the occupants more vulnerable to weapons such as a car bomb or other mass casualty technique placed near the exits or at designated assembly points.

Extortion is an example of a threat that obtains money, materiel, information, or support by force or intimidation. Extortion is often used during the formative period of a group or by groups that fail to develop more sophisticated financial resources. However, the opportunity to engage in more lucrative money making activities such as drug trafficking may eventually replace the need to extort by some groups. Depending on the structure of the terrorist organization, the cells may extort money from local businesses in exchange for protection. The Basque terrorists are an example of a group that uses extortion. They have extorted money for years from businesses to finance their battle for regional independence. When Spain converted from the peseta to the euro, ETA even sent letters to
Basque businesses demanding payments ranging from 30,000 to 60,000 euros. Although many of the large companies in the Basque region refuse to pay ETA’s revolutionary tax, ETA extorts money from smaller businesses that cannot afford to hire bodyguards.\footnote{“Terrorists Demand Extortion Cash in Euros,” TCM Breaking News (4 September 2001): 1; available from http://archives.tcm.ie/breakingnews/2001/09/04/story22584.asp; Internet; accessed 31 March 2004.}

Intimidation is another form of extortion. Intelligence cells or a specialized team can intimidate people to obtain information on a target location or to provide resources. Death threats against an individual or his family may cause him to provide information or resources to a group with which he has no interest or allegiance. A terrorist cell can also intimidate people not to take an action. For example, enemy security personnel may not implement required security measures because of intimidation. The power of coercing individuals can be significant; several terrorist groups have successfully used these techniques to force individuals to carry out suicide bombing missions.

**Arson**

Arson uses fire to damage, sabotage, or destroy property. Effects can be accomplished with simple equipment and minimal training.\footnote{Department of Justice, Federal Bureau of Investigation, Counterterrorism Threat Assessment and Warning Unit, Counterterrorism Division, Terrorism in the United States 1999, Report 0308, (Washington, D.C., n.d.), 41.} Since arson is primarily used against property, it is not normally planned as a casualty producer. However, arson can result in fatalities. Arson is most often used for symbolic attacks and economic effects. Single-issue groups, such as the Earth Liberation Front (ELF), particularly favor it for these purposes. Although ELF has claimed responsibility for dozens of arsons, probably the most costly arson committed by this group was in San Diego, California in August 2003. Claiming it was targeting rampant urban development, ELF started a fire that caused an estimated $50 million worth of damage in San Diego’s fast-growing northern edge suburbs.\footnote{Seth Hettena, “Earth Liberation Front Claims Responsibility for San Diego Arson,” The Mercury News, 18 August 2003; available from http://www.mercurynews.com/mld/mercurynews/news/local/6562462.htm; Internet; accessed 17 March 2004.}

**Sabotage**

Sabotage is the planned destruction of the enemy’s equipment or infrastructure. The purpose of sabotage is to inflict both psychological and physical damage. This can result from an incident creating a large number of casualties or from a severe disruption of services for the population. Destroying or disrupting key services or facilities impresses the power of the saboteur on the public consciousness and either increases a target population frustration with the ineffectiveness of the government or may inspire others to resist.
A terrorist group normally aims its sabotage actions at elements of infrastructure, in order to reinforce the perception that nothing is safe. Oil pipelines, water purification plants, sewage treatment facilities, air traffic control hubs, and medical treatment or research facilities are several examples of potential targets. Terrorist groups use many techniques such as bombing, arson, cyber, or use of contaminates to conduct sabotage.

Examples of sabotage have been evident in Iraq since the end of major combat operations where attacks have been conducted against power generation facilities and water pipelines. Attacks on Iraq’s oil pipeline were persistent in 2003 and estimates spotlighted that the country was losing $7 million daily because of damage to the pipeline that carried oil from the Kirkuk fields to a Mediterranean port in Turkey.\(^{148}\)

**Fig.4-12. Sabotaged Oil Refinery**

**Bombing**

Bombs are a favored weapon for terrorists.\(^{149}\) Bombs are highly destructive and can be easily tailored to the mission, do not require the operator to be present, and have a significant physical and psychological impact. To demonstrate their prominence in terrorist operations, 324 out of 482 total terrorist incidents or planned acts in the U.S. between 1980 and 2001 were bombings,\(^{150}\) and 119 of 208 international terrorist incidents in 2003 were bombings.\(^{151}\) In 2006, the U.S. National Counterterrorism Center (NCTC) reports that bombing incidents increased by 30 percent from those in 2005 and the death toll in these incidents during 2006 increased by 39 percent and injuries by 45 percent.\(^{152}\) Given the NCTC parameters for measuring noncombatant terrorist incidents, over 6400 people were killed by terrorist bombs in 2006.\(^{153}\)

Bombs have a significant historical record, and a particular place in early anarchist and revolutionary thought, where dynamite was viewed as the equalizing force between the state and the individual.\(^{154}\) Interaction between Terrorist cells using the Internet and common training sites facilitate the proliferation of effective devices and tactics throughout the terrorist network. Bombings may be used as a technique to conduct other

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151 Department of State, Office for Counterterrorism, Patterns of Global Terrorism 2003 (Washington, D.C., April 2004, revised 22 June 2004), 5.


153 Ibid., 19.

operations, such as sabotage or assassination, or can simply be a tactic to cause terror through the destruction and casualties produced by an explosion.

Numerous methods exist for emplacing and detonating bombs. For example, directional bombs have been disguised as bricks in roadside walls and radio command detonated in the Israeli-occupied territories. The Irish Republican Army (IRA) improved methods of remote detonation of a bomb using police laser speed detection devices. Detonation would occur from a particular laser pulse within line of sight.\(^{155}\)

Car bombs, commonly referred to as vehicle borne improvised explosive devices (VBIED), are used regularly by terrorists. Besides the use of airplanes on September 11, 2001 to hit the World Trade Center and the Pentagon, probably the best-known U.S. domestic incident occurred on April 19, 1995, when a truck bomb exploded outside the Alfred P. Murrah building in Oklahoma City killing 168 people and injuring hundreds of other people. Timothy McVeigh was convicted and later executed for the bombing. Overseas, a suicide truck bombing of the U.S. Corps Marine Barracks in Beirut in October 1983 killing 241 Americans. A truck bomb that exploded near the Khobar Towers military complex in Dhahran, Saudi Arabia on June 25, 1996 killed 19 people and injured over 500 people.

The Department of Homeland Security distributed a warning reflecting new tactics being used by terrorists in this area based on the bombings in Riyadh, Saudi Arabia in May 2003. These included terrorists hitting multiple targets, conducting simultaneous attacks, using multiple vehicles per target, and using assault and breaching teams armed with small arms to accompany the VBIED to kill security personnel and gain access to the target area.\(^{156}\) The NCTC report on terrorism incidents in 2006 notes that terrorists continue techniques of an initial bomb explosion followed by secondary bomb detonations as first responders or other people arrive at the attack site.\(^{157}\)

![Fig. 4-13. Jeddah US Consulate](image)

In 2006, bombs and in particular improvised explosive devices (IEDs) increased in lethality and adaptation of techniques used by terrorists. Terrorists have mastered the employment of roadside explosives to attack both individuals and motorcades or convoys. Some IEDs are bulky devices often made from artillery shells and detonated with garage door openers or doorbells. However, terrorists are now producing smaller devices that can be planted quickly and can be detonated from longer distances.

Another IED innovation is use a device called an explosively formed projectile (EFP). This penetrating principle is common to some types of munitions. The innovation in recent conflicts is its increasing use as an IED to outmatch armor protection. Although some technical skill and machining is required to obtain an optimum effect, a simple looking illustration of the EFP is a section of pipe filled with explosives and capped by a shaped copper disk. When the explosive detonates, the EFP liner is generally folded into its final shape, typically a rod, for maximum penetration of armor plating.

Devices can be placed at a target site and remotely detonated. The terrorist bombing attack in Spain in March 2004 used ten backpack bombs with nails and screws packed around the explosives for shrapnel. Bombs were detonated on four trains almost simultaneously using cell phones as the initiation device. The results were nearly 200 dead and over 1,800 injured people.

Kidnapping

Kidnapping is usually an action taken against a prominent individual for a specific reason. The most common reasons for kidnapping are ransom, release of a fellow terrorist, or the desire to publicize a demand or an issue. The terrorist cell conducts detailed planning, especially regarding movement of the kidnapped individual. The kidnapped victim is moved to a location controlled by the cell. The group makes demands and is often willing to hold a victim for a significant time.

Success of kidnapping relies on balancing the cost to the government represented by the threat of harm to the victim, with the costs of meeting the kidnappers’ demands. Some kidnapping operations are actually assassinations with killing the victim as an intended outcome. The terrorists intended objective in this case being the intermediate concessions and publicity obtained during the negotiation process that they would not receive from a simple assassination.

Kidnapping can also be used as a means of financing the organization. Ransom from seized individuals or groups are a significant slice of income for groups in several regions of the world. Latin America has long been a victim of terrorist kidnapping, especially by the FARC and ELN in Colombia. The Abu Sayyaf Group in the Philippines uses this method to finance their operations. Ransoms vary but often demand significant payment. Ten employees of a Spanish energy consortium were kidnapped in Ecuador in October 2004.

The oil companies eventually paid $13 million in ransom for their release. Some regions experience kidnapping as a regular means of terror. In Nepal in 2006, Maoist rebels continued acts of kidnapping, extortion, and murder. Even with some accommodations and cease fire agreements that ended the insurgency between Nepal and the Communist Party of Nepal (CPN/M), a separatist terror group emerged from the Maoist rebels declaring their intent to secede a portion of the plains and countryside from Nepal.\footnote{Department of State, \textit{Country Reports on terrorism} 2006, April 2007, 120; available from \url{http://www.terrorisminfo.mipt.org/Patterns-of-global-terrorism.asp}; Internet; accessed 2 May 2007.}

In Nigeria in 2007, kidnapping of foreigners remains a regular danger as rebels struggle for control of oil and mineral wealth in the Niger Delta.\footnote{“Nigeria Gunmen Seize Six Foreigners,” available from \url{http://www.cnn.com/2007/WORLD/Africa/06/03/Nigeria.kidnap.reut/}; Internet; accessed 5 June 2007.}

An example of kidnapping a U.S. military member is Lieutenant Colonel William Higgins, USMC. He disappeared on May 17, 1988, while serving as the Chief, Observer Group Lebanon and Senior Military Observer, United States Military Observer Group, United Nations Truce Supervision Organization. He was kidnapped and held by Iranian-backed Hizballah terrorists and later murdered. A picture of his body hanging from a noose was released to the news media in July 1989. His remains continued to be held until they were released in December 1991.

Another example was the kidnapping of Brigadier General James Dozier, senior American official at a NATO headquarters in Verona, Italy, by Red Brigade terrorists on December 17, 1981. The targeting of General Dozier broke the pattern of previous terrorist activities in Italy since terrorist groups had previously concentrated their actions against key Italian personalities such as senior Italian politicians, industrialists, jurists, newspaper publishers and police officials. Following General Dozier's kidnapping, numerous additional threats were received which provided a clear indication that the terrorism situation had changed in Italy and other Americans and U.S. facilities were potential targets for terrorist actions.\footnote{COL Thomas D. Phillips, “The Dozier Kidnapping: Confronting the Red Brigades,” \textit{Air and Space Power Chronicles} (February 2002): 1; available from \url{http://www.airpower.maxwell.af.mil/airchronicles/cc/phillips.html}; Internet; accessed 31 March 2004.}
readers. Two men pretending to be plumbers conducted the actual kidnapping. They told General Dozier that there was a leak in the apartment below and wanted to determine if it was coming from Dozier’s apartment. Since leaks were common in the building, he let them into the apartment, at which time the kidnapping was executed. After being held for 42 days, he was rescued by Italian police.\textsuperscript{162}

Consider the amount of media attention given the abduction and eventual murder of reporter Daniel Pearl in 2002, and how the video of his murder was nearly presented on cable television networks. Subsequent murders since then have involved kidnapping and beheading. Nicholas Berg was kidnapped in Iraq and beheaded in May 2004. Another American, Paul Johnson who worked in Saudi Arabia as a contractor, was kidnapped and beheaded in June 2004. In both cases, the terrorists distributed videos or photographs to the media and posted similar exploitation means on websites.

A May 2007 attack on a U.S. two vehicle army observation post in Iraq resulted in several killed soldiers, an Iraqi soldier, and three missing U.S. soldiers. U.S. officials had credible evidence that the attack was conducted by al-Qaida or an al-Qaida affiliated cell with the intention to capture prisoners. Previous incidents of capturing U.S. soldiers had created immediate media attention. Website postings in May 2007 by terrorists mocked U.S. attempts to find the soldiers and gained significant international media attention of this small squad-size tactical raid.\textsuperscript{163}

**Hostage Taking**

Hostage taking is typically an overt seizure of people to gain publicity for a cause, gain political concessions, political asylum, release of prisoners, or ransom. Many times the terrorists will take hostages with the intent to kill them after they believe they have fully exploited the media coverage from the situation.

Unlike kidnapping where a prominent individual is normally taken and moved to an unknown location, the hostages are usually not well known figures in the enemy’s society. While dramatic, hostage situations are usually risky for the terrorist group especially when conducted in enemy territory. They expose the terrorists to hostile military or police operations, and carry significant possibility of both mission failure and capture. Therefore, terrorists will usually attempt to hold hostages in a neutral or friendly area, rather than in enemy territory.

An example of a hostage crisis was the Moscow theater siege in October 2002. Thirty-four Chechen terrorists seized a movie theater, threatening to kill all of the hostages if the

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Russians did not meet their demands. The rebels were demanding that Russian forces end the war in Chechnya. Following a long stalemate, Russian forces assaulted the theater. Over 60 hostages and over 30 terrorists died. However, 750 hostages were released. In another hostage crisis in 2004, an extremist regional group of over 30 men and at least two women seized a middle school and over 1000 people in Beslan, Russia. A three day crisis culminated in mayhem when an explosion erupted and caused an assault of the school facilities. Over 300 children, men, and women died in the assault.

Fig. 4-16. Beslan Hostage Crisis


Similar issues could arise with captured U.S. soldiers. A case in point occurred during the air campaign against Serbia in the spring of 1999. Three U.S. Army soldiers patrolling the Yugoslav-Macedonian border became separated from a larger patrol and were captured by the Serbians. Serbian President Slobodan Milosevic orchestrated an international media campaign during their month long captivity. Maintaining an ambiguous stance on the status of the prisoners and their possible fate, Milosevic eventually released the three U.S. soldiers to an unofficial mission of prominent American political figures that resulted in even more media coverage. The political and psychological impact far outweighed any operational impact caused by the capture of three soldiers and one vehicle.

Fig. 4-17. Milosevic and US Soldiers

**Hijack-Seizure**

Hijacking involves the forceful commandeering of a conveyance. Although normally associated with planes, it can also include naval vessels or other craft. There are many purposes to hijacking, such as hostage taking activities, obtaining a means of escape, or as a means of suicide. While hijacking of aircraft for hostage taking has declined in frequency since the implementation of improved security measures, the use of hijacked aircraft for escape or as a weapon continues. The attacks on the World Trade Center and the Pentagon in September 2001 are vivid reminders of the hijacking abilities of terrorist groups and the destructive power of hijacked airliners.
Another example is the hijacking of TWA Flight 847 from Athens to Rome in 1985 by members of Hizballah. They held the plane and 153 hostages for 17 days demanding the release of Lebanese and Palestinian prisoners. The hostages from Flight 847 were released after Israel freed 435 prisoners. However, terrorists murdered a U.S. Navy diver, Robert Stethem, and dumped his body on the airport tarmac.

![Hijackers TWA 847](image)

The use of hijacked vehicles for destructive devices is not restricted to aircraft. Trucks carrying cargoes of explosive or flammable materials have also been seized to use as delivery devices. The possibility of such a technique being used with a ship carrying oil, refined petroleum products, or liquefied natural gas (LNG) is of great concern. The results of several accidental explosions and fires from mishaps in handling such vessels in port show the catastrophic potential of this technique. Although not related to terrorism, ships exploding in the harbors of Texas City, Texas in 1947 and Halifax, Nova Scotia in 1917 destroyed significant portions of these towns and caused a combined death toll of over 2500 people.

Seizure of a critical element of infrastructure, similar to hostage taking intentions, can be a physical site such as a facility of importance to a target population, or a cyber node that disrupts or precludes use of selected cyber functions.

**Raid or Ambush**

A terrorist raid is similar in concept to a conventional operation but is usually conducted with smaller forces against targets marked for destruction, hijacking, or hostage operations. A raid permits control of the target for the execution of some other action. The kidnapping or assassination of a target that has a security force can often require a raid to overcome the defenses. Successful conduct of these type attacks requires extensive preoperational surveillance and detailed planning.

Examples of this type tactic are the raids conducted by terrorists on three Riyadh western housing compounds in Saudi Arabia on 11 May 2003. Attackers penetrated each compound and then detonated vehicle borne IEDs. The attack at the al-Hamra compound demonstrates the tactics used in a raid such as this. A sedan pulled up to the gate, followed by another vehicle. A number of terrorists dismounted, shot the guard, and then forced their way into the compound. As both vehicles drove to the center of the compound, terrorists shot into buildings and at any moving targets. Once they reached...

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the housing area, one of the suicide terrorists driving a vehicle detonated the explosive device as a VBIED.\textsuperscript{165}

An ambush is a surprise attack characterized by violent execution and speed of action. The intended objective may be to cause mass casualties, assassinate an individual, or disrupt hostile security operations. Explosives, such as bombs and directional mines, are a common weapon used in terrorist ambushes. Other weapons frequently used are rocket launchers, automatic weapons, and other small arms.

An example of a compound attack was the bombing in Bali on 12 October 2002 attributed to Jemaah Islamiyah, an Islamic terrorist group linked to al-Qaida. Initially, an electronically triggered bomb was detonated in a bar that forced the patrons out into the street. A much more powerful car bomb was detonated in the street in front of another establishment. The sequential bombing caused casualties of 202 killed and 209 injured.\textsuperscript{166}

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{bali-bombings.jpg}
\caption{Bali Sequential Bombings}
\end{figure}

Terrorist ambushes are frequently conducted from a variety of mobile platforms. Cars, vans and motorcycles have been used to conceal the attackers, isolate or immobilize the target, and then allow the attackers to escape. Ambushes from mobile platforms can be conducted while moving, or can be designed to bring the target to a halt in order to allow the attack team to physically close with and attack a target. A more recent example is the March 2004 attack on five U.S. civilians working for a private volunteer organization (PVO) in Iraq. Four were killed and one was wounded in this mobile ambush in the city of Mosul.

\section*{Assassination}

An assassination is a deliberate action to kill specific individuals, usually VIPs such as political leaders, notable citizens, collaborators, particularly effective officials. The terrorist group assassinates people it cannot intimidate, people who support their enemy, or people who have some symbolic significance for the enemy or world community. Terrorist groups often refer to these killings as punishment or justice as an attempt to legitimize their actions. In 1981, President Anwar Sadat of Egypt was assassinated by fundamentalist Islamics for his support of the peace process in the Middle East and his relationship with Western nations. In September 2001, Northern Alliance leader Ahmed Shah Massoud was assassinated in Afghanistan by two suicide bombers believed to be


from al-Qaida. The assassination was due to Massoud’s opposition of the Taliban regime and al-Qaida’s presence in Afghanistan.

Many targets of assassination are symbolic and are intended to have great psychological impact on the enemy. For example, assassinating an enemy government official, a successful businessperson, or a prominent cleric can demonstrate the enemy’s inability to protect its own people. Assassinating local representatives of social or civic order, such as teachers, contributes to disorder while demoralizing other members of the local government and discouraging cooperation with them. An example of this is the attempted assassination of Iraq’s most prominent Shiite cleric, Grand Ayatollah Ali al-Sistani in February 2004. This incident was an attempt to create anger in the long oppressed Shiite community and increase the sectarian and ethnic violence in Iraq. Many assassinations have targeted Iraqis who have assumed leadership positions in support of a transition to a sovereign democratic government.

Extensive target surveillance and reconnaissance of engagement areas are required to select the optimum mode of attack. Although many factors play into the decision, the target’s vulnerabilities determine the method of assassination. For example, a target driving to work along the same route each day may be vulnerable to an emplaced explosive device.167

A publicized assassination attempt during the 1981 Return of Forces to Germany (REFORGER) training exercise was directed against the U.S. military by the Red Army Faction. As the Commander in Chief of United States Army Europe (USAREUR) and Commander of NATO’s Central Army Group (CENTAG), General Frederick Kroesen and his wife were attacked in their sedan as they drove near his headquarters in Heidelberg, Germany.

The assassination attempt used rocket propelled grenades and small arms gunfire when the sedan was at a halt for a city stoplight. After the attack, a site was discovered about 200 yards from the target point with an abandoned tent, radio transmitter, sleeping bag, and food.168 The terrorists had conducted surveillance and developed detailed plans for the assassination attempt. Fortunately, sedan armor plating and bulletproof glass on his vehicle, combined with inaccurate rocket detonations, prevented any serious injuries.

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Unfortunately terrorists have been successful in some assassination attempts. In April 1989, Communist insurgents from the New People’s Army in the Philippines assassinated an American military advisor, Col. James Rowe. He was killed in a moving ambush where small arms fire defeated the protection of his armored official vehicle. This terrorist group was attacking Americans they considered directly linked to the Philippine military campaign being conducted against their group.

**Weapons of Mass Destruction (WMD)**

Listing a category as weapons of mass destruction acknowledges a broad range of capabilities that specific terrorist groups would like to acquire. Once acquired, this capability would allow for catastrophic results through numerous delivery means. These type weapons include chemical, biological, radiological, nuclear, and high yield explosives.


**Aircraft Threats**

A man portable air defense system (MANPADS) is a significant threat in the hands of terrorists. There are a number of surface-to-air weapons that terrorists can use to attack aircraft. Weapons can be as simple as a rocket propelled grenade (RPG) normally used in surface-to-surface combat or as sophisticated as a Stinger or similar Igla air defense missile.

One of the most notable incidents by terrorists-insurgents downing U.S. military aircraft was in Mogadishu, Somalia in 1993. The U.S. Army was conducting a raid to capture some of the close supporters of the leader of one of the rival Somali clans, Mohammed Farah Aideed. During this raid, two UH-60 Blackhawk helicopters were shot down using RPGs. The U.S. had underestimated the ability to shoot down its helicopters using this type system. Aideed had fundamentalist Islamic soldiers from Sudan who had experience shooting down Russian helicopters in Afghanistan. They trained his militia to use RPGs in an air defense role.169

![Fig. 4-22. MANPADS](image)

In a separate area of operations, U.S. military forces realized the threat posed by RPGs in an air defense mission in Afghanistan in 2002 when two MH-47 Chinook helicopters were shot down. Whether in Afghanistan or Iraq, attacks on U.S. military and civilian aircraft continue with various degrees of detail in the media on what type of weapon was used to hit or destroy targeted aircraft. Weapons descriptions in attacks during the last

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several years include massed gunfire, RPGs, or air defense missiles. Some missiles have infrared and ultraviolet detectors that assist in defeating flares.

Shoulder-fired surface-to-air missiles offer a history of effective use in several regions of the world. These systems normally contain an infrared seeker with the speed of the missile providing little opportunity for warning or evasive maneuver by the aircraft. Afghan fighters demonstrated MANPADs lethality by probably destroying over 200 Soviet aircraft during the Soviet Union’s war in Afghanistan.

Missiles are affordable to terrorist groups and they are available on the world weapons market. Unclassified estimates indicate several thousand shoulder-fired weapons are in terrorist control. Number estimates vary considerably. To demonstrate the number of systems in circulation, as of December 2002, coalition forces in Afghanistan had captured over 5,500 shoulder-fired systems from the Taliban and al Qaeda. Some of these weapons included U.S. Stinger and British Blowpipe missiles. A consideration beyond numbers of missiles is the probable lack of maintenance and proper functioning of such missiles; the number of operational missiles could be quite limited.

Most experts consider aircraft departures and landings as the times when aircraft are most vulnerable to these weapons. A survey of 25 years of these incidents totaled 35 civilian aircraft have come under attack from these weapons. Results were 24 aircraft being shot down and causing more than 500 deaths. Of these encounters, five incidents involved large airliners. Unclassified estimates reflect between 25 and 30 nonstate groups possess these MANPADS systems.

Fig. 4-23. **Missile Hit in Iraq**

In November 2004, a civilian cargo airplane was hit by a shoulder-fired missile while departing Baghdad International Airport in Iraq. The missile hit damaged the left wing of the plane. Fortunately, the crew was able to make an emergency landing with no loss of life. The airplane was declared a total loss. The U.S. Department of State estimates that since the 1970s and up until 2003, 40 civilian aircraft have been hit by MANPADS and caused about 25 crashes with a cumulative death toll of over 600 people.

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173 Ibid., 7-9.


175 Department of State, Bureau of Political-Military Affairs and Bureau of International Security and Nonproliferation, “The MANPADS Menace: Combating the Threat to Global Aviation from Man-Portable
Maritime Threats

Terrorist attacks against maritime targets are fairly rare and constitute only two percent of all international incidents over a 30 year period and entry into the twenty-first century. There is a history of maritime terrorism and maritime authorities worldwide are increasingly anxious about terrorist attacks on both ports and ships. In fact, some intelligence analysts believe that because land-based targets are better protected, terrorists will turn to the maritime infrastructure because they see these as soft targets.

Likely operations conducted by maritime terrorism include suicide attacks on commercial and military vessels, and hijacking for the following purposes: (1) carrying out a subsequent suicide attack on a ship or port (2) seeking ransom (3) smuggling weapons and explosives (4) simple piracy. Although few terrorist groups have developed a maritime capability there have been some exceptions to include the Provisional Irish Republican Army, Abu Sayyaf Group based in the Philippines, various Palestinian groups, al-Qaida, and the Liberation Tigers of Tamil Eelam (LTTE) in Sri Lanka. The LTTE claims a large maritime capability of coastal and deepwater craft. They reportedly have roughly 3000 trained personnel and between 100 to 200 surface and underwater vessels, including attack vessels, logistics vessels, fast personnel carriers, suicide craft, and multi-purpose craft. The Tamil Tigers have employed a range of technologies, including suicide stealth craft, mini submarines, and one-man suicide torpedoes.

Information presented at the Terrorism in the Asia Pacific Conference in September 2002 reported that al-Qaida had obtained a variety of vessels and systems capable of carrying out attacks against ships and seaports. These included minisubs, human torpedo systems, and divers trained in underwater demolitions. The larger vessels are commercial ships that are used to generate revenue for al-Qaida. However, there is concern that they could be filled with explosives and used as floating bombs to ram into other ships or port facilities.

The International Maritime Organization has warned that liquefied natural gas (LNG) carriers and other ships carrying volatile cargo could be hijacked and used as weapons of
mass destruction. A briefing at the Maritime Security Council’s annual International
Maritime Security Summit in October 2002 stated that a large ship loaded with LNG
could result in an explosion equivalent to a .7-megaton nuclear detonation. For
comparison, the bomb dropped on Hiroshima, Japan was 15-kilotons.182

A maritime terrorist attack against a U.S. military ship is the attack on the USS Cole.
Two suicide bombers in a small boat loaded with explosives attacked the ship while it
was refueling in Aden Harbor, Yemen. The blast blew a 40 foot by 60 foot hole in the
side of the USS Cole, killed 17 sailors, and injured 39 crewmen. The al-Qaida member
who is believed to have planned the attack on the USS Cole, Abdulrahim Mohammed
Abda Al-Nasheri, was captured in 2002. He confessed also to planning attacks on
shipping in the Strait of Gibraltar by using bomb-laden speedboat attacks against U.S.
and British warships as they pass through the strait. Fortunately, Moroccan intelligence
service thwarted the plot.183

Suicide Tactics

Suicide tactics are particular methods of delivering a bomb or conducting an
assassination. The tactic can be defined as “An act of terror, employing an explosive or
incendiary device that requires the death of the perpetrator for successful
implementation.”184

The prevalent suicide tactic in use today involves an individual wearing or carrying an
explosive device to a target and then detonating the bomb, or driving an explosive laden
vehicle to a target and then detonating the bomb. Suicide attacks differ in concept and
execution from other high risk operations. In a high-risk mission, the likely outcome is
the death of the terrorist, but mission success does not require that the
participants die. The plan will allow for possible escape or survival of the
participants. Some terrorist cells have used people who are unknowingly part of a
suicide attack. An example is an individual associated with a terrorist cell who believes
he is only a courier, but is transporting an improvised explosive device in a vehicle
that is command detonated by an observer against a selected target.

Fig. 2-25. Foreign or Domestic Terror

182 Ibid., 2.
183 Michael Richardson, “A Time Bomb for Global Trade: Maritime-related Terrorism in an Age of
Weapons of Mass Destruction,” Viewpoints (25 February 2004): 8; available from
184 Martha Crenshaw, “Suicide Terrorism in Comparative Perspective,” in Countering Suicide Terrorism
(Herzilya, Israel: The International Policy Institute for Counter Terrorism, The Interdisciplinary Center,
2002), 21.
Another way of describing a suicide bomber is a highly effective precision-guided munition. Psychological impact increases when confronted by a person who plans to intentionally commit suicide and kill other people as a tactic. Although a suicide bomber can be a lone terrorist working independently, the use of suicide terrorism as a tactic is normally the result of a conscious decision on the part of the leaders of terrorist organizations to engage this form of attack. It is frequently conducted as a campaign for a specific objective. Notwithstanding, suicide bombing can be an indication that a terror organization has failed to meet its goals through less extreme measures.

Religioulsy motivated extremist groups as well as secular issue groups have employed this tactic. In addition to the Middle East; suicide attacks have been conducted in India, Panama, Algeria, Pakistan, Argentina, Croatia, Turkey, Tanzania, and Kenya. Other locations include Russia and the United States. The single most prolific suicidal terrorist group is the Tamil Tigers (LTTE) in Sri Lanka. A lone woman belonging to the Tamil Tigers assassinated former Prime Minister Ravij Gandhi with a suicide vest-belt bomb. Tamil Tigers also killed a President of Sri Lanka with a suicide bomber.

Fig. 2-26. Moments to Suicide

As in any other terrorist operation, extensive pre-operational surveillance and reconnaissance, exhaustive planning, rehearsals, and sufficient resources will be devoted to an operation employing suicide as a tactic. Although suicide bombers have been historically a male dominated tactic, women are becoming more involved in conducting these type operations. Women participated in 30 to 40 percent of the LTTE’s nearly 200 suicide bombings in Sri Lanka. Suicide attacks have also been conducted by Chechen and Palestinian women, as well as attacks conducted by women in Iraq, Turkey and

185 Yoram Schweitzer, “Suicide Terrorism: Development and Main Characteristics,” in Countering Suicide Terrorism (Herzilya, Israel: The International Policy Institute for Counter Terrorism, The Interdisciplinary Center, 2002), 85.
Morocco. Additionally an FBI report has expressed concern over the forming of al-Qaida female units.\textsuperscript{191}

Teenagers have been suicide bombers. Palestinian teenagers have been involved in attacks against Israel for several years. In February 2004, three boys, ages 13, 14, and 15 were arrested because they were planning to carry out an attack in the northern Israeli town of Afula. Use of children in suicide attacks became evident on March 16, 2004, when an 11-year-old boy was stopped at an Israeli checkpoint with a bomb in his bag. Although investigation doubted that this boy was aware of the bomb, later that month a 14-year-old was stopped at a checkpoint wearing a suicide explosive vest.\textsuperscript{192}

The first major suicide bombing that struck at U.S. military forces was Hizballah’s attack on the Marine barracks in Lebanon in October 1983 where 241 Americans were killed. Suicide attacks have also been used against coalition forces in Iraq during Operation Iraqi Freedom (OIF). In a one day example on 27 December 2003, 12 Iraqis and six coalition troops were killed, and 100 Iraqis and 26 coalition troops were wounded when four suicide bombers conducted coordinated attacks in the city of Kabala.\textsuperscript{193} Unfortunately, these type of mass casualty producing attacks have continued in Iraq, with no sign of relief in the near future. Suicide is an increasing danger given the number of attempted or successful suicide attacks. Between March 2006 and February 2007 in Iraq, over 30 suicide vest bomb incidents were reported as well as over 275 vehicle borne improvised explosive devices.

Fig. 2-27. \textbf{VBIED at Check Point}

\textbf{Conclusion}

Whether U.S. military forces are deployed, in-transit, or located at institutional locations, U.S. military forces can be vulnerable to terrorist targeting activities. Deployed forces include unit rotations in combat operations, stability missions and training assistance to foreign militaries, and can apply to all individual assignments in overseas locations. In-transit units and members can include active and reserve component units and members. Institutional forces and locations include garrisons, training and logistic facilities, and other activities or installations that do not deploy to accomplish their organizational mission. The operational environment (OE) is a composite of the conditions, circumstances, and influences that affect employment of capabilities and bear on the decisions of the


commander. This includes active component units within the U.S. or positioned overseas, and reserve component units identified for operations, mobilization, or demobilization.

A terrorist may view value as a function of the overall psychological impact that destruction of a target will have on a population, as well as the cascading physical effects of damaging or destroying a critical piece or aspect of an organization or infrastructure.

Reasons for targeting of U.S. military forces include: target accessibility, symbolic value, demonstrate terrorist organizational capability, delay or prevent U.S. movements, reduce U.S. operational capability, delay or prevent U.S. movements, degrade social confidence in supported government, disrupt economic productivity, or influence U.S. policy.