

CHAPTER 8

The Law of Targeting

8.1 PRINCIPLES OF LAWFUL TARGETING

The law of targeting is premised upon the three fundamental principles of the law of armed conflict:¹

1. The right of belligerents to adopt means of injuring the enemy is not unlimited.²
2. It is prohibited to launch attacks against the civilian population as such.³
3. Distinctions must be made between combatants and noncombatants, to the effect that noncombatants be spared as much as possible.⁴

These legal principles governing targeting generally parallel the military principles of the objective, mass, and economy of force.⁵ The law requires that only objectives of military importance be attacked but permits the use of sufficient mass to destroy those objectives. At the same time, unnecessary collateral destruction must be avoided to the extent possible and, consistent with mission accomplishment and the security of the force, unnecessary human

¹ The United States considers these three fundamental principles as customary international law. General Counsel, Department of Defense letter of 22 Sept. 1972, *reprinted in* 67 Am. J. Int'l L. 122 (1973). *See also* Res. XXVIII of the XXth International Conference of the Red Cross, Vienna, 1965 (Schindler & Toman 259-60), U.N.G.A. Res. 2444(XXIII), 19 Dec. 1968 (Schindler & Toman 261-62), and U.N.G.A. Res. 2675(XXV), 9 Dec. 1970 (Schindler & Toman 267-68).

² HR, art. 22; *cf.* Lieber Code, art. 30. Art. 22 of the Hague Regulations, which refers to weapons and methods of warfare, is merely an affirmation that the means of warfare are restricted by rules of conventional (*i.e.*, treaty) and customary international law. This principle is applicable to the conduct of naval warfare and is viewed by the United States as customary international law. *See also* GP I, art. 35(1), which is viewed by the United States as declarative of customary international law. The Sixth Annual American Red Cross-Washington College of Law Conference on International Humanitarian Law: A Workshop on Customary International Law and the 1977 Protocols Additional to the 1949 Geneva Conventions, 2 Am. U.J. Int'l L. & Policy 424 (1987) (remarks of U.S. Department of State Deputy Legal Adviser Matheson). *Cf.* CDDH/SR.39, annex (FRG) and Bothe, Partsch & Solf 194. *See* paragraph 5.4.2, note 34 (p. 5-13) regarding the 1987 U.S. decision not to seek ratification of GP I.

³ This customary rule of international law is codified for the first time in GP I, art. 51(2). Bothe, Partsch & Solf 299 & n.3; Green 220-33 FM 27-10, para 25; AFP 110-31, para. 5-3. *See* paragraphs 5.3 (p. 5-7) and 11.2 (p. 11-1).

⁴ This customary rule of international law is codified for the first time in GP I, arts. 57(1) and 57(4). Bothe, Partsch & Solf 359. *See* paragraphs 5.3 (p. 5-7) and 11.2 (p. 11-1).

⁵ *See* paragraph 5.2, note 9 (p. 5-6).

suffering prevented.⁶ The law of targeting, therefore, requires that all reasonable precautions must be taken to ensure that only military objectives are targeted so that civilians and civilian objects are spared as much as possible from the ravages of war.⁷

8.1.1 Military Objectives. Only military objectives may be attacked.⁸ Military objectives are combatants and those objects which, by their nature, location, purpose, or use, effectively contribute to the enemy's war-fighting or war-sustaining capability and whose total or partial destruction, capture, or neutralization would constitute a definite military advantage to the attacker under the circumstances at the time of the attack.⁹ Military advantage may involve a variety of considerations, including the security of the attacking force.

Proper targets for naval attack include such military objectives as enemy warships and military aircraft, naval and military auxiliaries, naval and military bases ashore, warship construction and repair facilities, military depots and warehouses, petroleum/oils/lubricants (POL) storage areas, docks, port facilities, harbors, bridges, airfields, military vehicles, armor, artillery, ammunition stores, troop concentrations and embarkation points, lines of communication and other objects used to conduct or support military operations. Proper naval targets also include geographic targets, such as a mountain pass,¹⁰ and buildings and facilities that provide administrative and personnel support for military and naval operations such as barracks, communications and command and control facilities, headquarters buildings, mess halls, and training areas.

⁶ Bothe, Partsch & Solf 299, 309 & 359-61. See paragraph 8.1.2.1 (p. 8-4).

⁷ This customary rule of international law is also codified for the first time in GP I, art. 57(4). Bothe, Partsch & Solf 369; Green, 168. Compare San Remo Manual, para. 46, which employs the word "feasible" rather than "reasonable."

⁸ This customary rule is codified in GP I, art. 52(2). Military personnel that may not be attacked are discussed in Chapter 11. Military platforms and facilities that enjoy protected status and may not be attacked are discussed in the succeeding paragraphs of this Chapter.

⁹ This definition is accepted by the United States as declarative of the customary rule. See note 11 (p. 8-3). Compare GP I, art. 52(2) and San Remo Manual, para. 40, which utilize the term "make an effective contribution to enemy action." See also Doswald-Beck at 117.

¹⁰ Bothe, Partsch & Solf 325. Some nations have noted that a specific area of land may also be a military objective. Statements of Italy (1986 Int'l Rev. Red Cross 113), the Netherlands (1987 *id.* 426) and New Zealand (1988 *id.* 186) on ratification of, and the United Kingdom (Schindler & Toman 717) on signature to, GP I. See also ICRC, Commentary (GP I) at 621-22.

Proper economic targets for naval attack include enemy lines of communication, rail yards, bridges, rolling stock, barges, lighters, industrial installations producing war-fighting products, and power generation plants. Economic targets of the enemy that indirectly but effectively support and sustain the enemy's war-fighting capability may also be attacked.¹¹

8.1.2 Civilians and Civilian Objects. Civilians and civilian objects may not be made the object of attack.¹² Civilian objects consist of all civilian property and activities other than those used to support or sustain the enemy's war-fighting capability.¹³ Attacks on

¹¹ The United States considers this a statement of customary law. General Counsel, Department of Defense, letter of 22 Sept. 1972, *reprinted in* 67 Am. J. Int'l L. 123-24 (1973). The American-British Claims Commission of 1871 recognized that the destruction of raw cotton within Confederate territory by the Union was justified during the American Civil War since the sale of cotton provided funds for almost all Confederate arms and ammunition. 6 Papers Relating to the Treaty of Washington 52-57 (1874) (Report of U.S. Agent); 7 Moore 693-94; Carnahan, Protecting Civilians Under the Draft Geneva Protocol: A Preliminary Inquiry, 18 A.F.L. Rev. 47-48 (1976); Hague Cultural Property Convention, art. 8(3). Whether this rule permits attacks on war-sustaining cargo carried in neutral bottoms at sea, such as by Iraq on the tankers carrying oil exported by Iran during the Iran-Iraq war, is not firmly settled. Authorization to attack such targets is likely to be reserved to higher authority. *See* paragraph 7.4 and note 93 thereunder (pp. 7-16 & 7-17) and paragraph 8.2.3 (p. 8-12).

The target sets for the offensive air campaign of OPERATION DESERT STORM illustrate the range of objectives, both military and economic, which may be attacked. The 12 target sets were: Leadership Command Facilities; Electricity Production Facilities; Telecommunications and Command, Control and Communication Nodes (to include microwave relay towers, telephone exchanges, switching rooms, fiber optic nodes, bridges that carried coaxial communications cables, and civil television and radio installations since they could easily be used for C-3 backup for military purposes and were used as the principal media for Iraqi propaganda); Strategic Integrated Air-Defense System; Air Forces and Air Fields; Nuclear, Biological, and Chemical Weapons Research, Production, and Storage Facilities; Scud Missile Launchers and Production and Storage Facilities; Naval Forces and Port Facilities; Oil Refining and Distribution Facilities; Railroads and Bridges; Iraqi Army Units; and Military Storage and Production Sites. Title V Report, 125-130.

When civil aircraft form part of enemy lines of communication, they are legitimate military objectives. *But see* paragraph 8.2.3, subparagraph 6 (p. 8-18) for the special rules regarding destruction of civil airliners in flight.

Civilian vessels, aircraft, vehicles, and buildings may be lawfully attacked if they are used for military purposes, including the housing of military personnel, equipment or supplies, or are otherwise associated with combat activity inconsistent with their civilian status and if collateral damage and incidental injury would not be excessive under the circumstances (*see* paragraphs 8.1.2.1 (p. 8-4) and 8.2.2.2 (p. 8-10)). (For other circumstances when civilian objects may be attacked, *see* paragraphs 8.3 through 8.5.1.7 (pp. 8-19 through 8-27).) *See also* paragraph 11.3 (p. 11-3).

Hospital ships, medical units, medical vehicles and aircraft, noninterfering neutral vessels, civilian and military churches and chapels, civilian educational institutions, and cultural objects (among others) may not, of course, be attacked unless they are being used by the enemy for prohibited purposes. For details, *see* paragraphs 8.2.3 (p. 8-12), 8.3.2 (p. 8-21), 8.4.1 (p. 8-23), and 8.5.1.4 to 8.5.1.6 (pp. 8-25 & 8-26).

¹² GP I, art. 51(1), codifying customary international law. *See* Bothe, Partsch & Solf 299; Green 151. However, that portion of art. 52(1) stating that civilian objects shall not be the object of reprisals creates new law for nations party to GP I. *See* paragraph 6.2.3, note 36 (p. 6-16).

¹³ GP I, art. 52(1), defines civilian objects as "all objects which are not military objectives as defined in paragraph 2." The definition of military objectives in paragraph 8.1.1 (p. 8-2), although not identical to that in GP I, art. 52(2), is similar. *See* note 11 (p. 8-3).

installations such as dikes and dams are prohibited if their breach or destruction would result in the loss of civilian lives disproportionate to the military advantage to be gained.¹⁴ (See also paragraph 8.5.1.7.) Similarly, the intentional destruction of food, crops, livestock, drinking water, and other objects indispensable to the survival of the civilian population, for the specific purpose of denying the civilian population of their use, is prohibited.¹⁵

8.1.2.1 Incidental Injury and Collateral Damage. It is not unlawful to cause incidental injury to civilians, or collateral damage to civilian objects, during an attack upon a legitimate military objective.¹⁶ Incidental injury or collateral damage must not, however, be excessive in light of the military advantage anticipated by the attack.¹⁷ Naval commanders must take all reasonable precautions, taking into account military and humanitarian considerations, to

¹⁴ GP I, art. 56, would create new law to prohibit, except in very limited circumstances, attacks on this limited class of objects even if the attack was proportional. Such a restriction does not reflect customary international law and is militarily unacceptable to the U.S. Matheson Remarks, paragraph 8.1, note 2 (p. 8-1) at 427. *See also* Green 149-50. For historic development, *see* Human Rights and Armed Conflict: Conflicting Views, 1973 Proc. Am. Soc. Int'l L. 141; President Nixon's News Conference of 27 July 1972, 67 Dep't St. Bull. 173, 201, 203 (1972). For a detailed analysis of art. 56, *see* Bothe, Partsch & Solf 350-57 and ICRC, Commentary (GP I) 666-75.

¹⁵ This customary rule is accepted by the United States, Letter from DoD General Counsel to Chairman, Sen. Comm. on For. Rel., 5 April 1971, *reprinted in* 10 Int'l Leg. Mat'ls 1301 (1971), and is codified in GP I, art. 54(2).

Art. 54(1) of GP I would create a new prohibition on the starvation of civilians as a method of warfare (Bothe, Partsch & Solf 336-38; Solf, Protection of Civilians Against the Effects of Hostilities Under Customary International Law and Under Protocol I, 1 A.U.J. Int'l L. & Pol'y 117, 133 (1986)) which the United States believes should be observed and in due course recognized as customary law (Matheson, Remarks, paragraph 8.1, note 2 (p. 8-1), at 426). *See also*, Allen, Civilian Starvation and Relief During Armed Conflict: the Modern Humanitarian Law, 19 Ga. J. Int'l & Comp. L. 1 (1989); Green 135-36. Starvation of civilians as a method of warfare has potential implications on the law of blockade and categories of contraband which are discussed in Bothe, Partsch & Solf at 338-39 & 433-35, and ICRC, Commentary (GP I) 653-54. Blockade is discussed in detail in paragraph 7.7 (p. 7-26).

¹⁶ Lieber Code, art. 15; AFP 110-31, para. 5-3c.(2)(b), at 5-10. *Accord*, An Introduction to Air Force Targeting, AFP 200-17, attach. 2, para. A2-3a,(2) (1989); AFP 110-34, para. 3-8.

¹⁷ This rule of proportionality, which is inherent in both the principles of humanity and necessity upon which the law of armed conflict is based (*see* paragraph 5.2 (p. 5-3)), is codified in GP I, arts. 51(5)(b) and 57(2)(ii) & (iii). Bothe, Partsch and Solf 309-11 & 359-67; Matheson, Remarks, paragraph 8.1, note 2 (p. 8-1) at 426. Fenrick, while viewing as unsettled the principle of proportionality as customary law, views the requirement to reconcile humanitarian imperatives and military requirements during armed conflict as widely recognized. Fenrick, The Rule of Proportionality and Protocol I in Conventional Warfare, 98 Mil. L. Rev. 91, 125 (1982). *Cf.* FM 27-10, para. 41 (ch. 1, 15 July 1976); Green 120-21, 330-32. Some nations have asserted that the advantage anticipated must consider the attack as a whole and not only isolated or particular parts of the attack: on ratification of GP I, Belgium (1986 Int'l Rev. Red Cross 174), the Netherlands (1987 *id.* 426), Italy (1986 *id.* 113); and the United Kingdom on signature (Schindler & Toman 717). These and other nuances are examined in ICRC, Commentary (GP I) 683-85, and Kalshoven, Constraints on the Waging of War 99-100 (1987). *See also* paragraph 5.2, note 7 (p. 5-5).

keep civilian casualties and damage to the minimum consistent with mission accomplishment and the security of the force.¹⁸ In each instance, the commander must determine whether incidental injuries and collateral damage would be excessive, on the basis of an honest and reasonable estimate of the facts available to him. Similarly, the commander must decide, in light of all the facts known or reasonably available to him,¹⁹ including the need to conserve resources and complete the mission successfully, whether to adopt an alternative method of attack, if reasonably available, to reduce civilian casualties and damage.²⁰

8.1.3 Environmental Considerations. It is not unlawful to cause collateral damage to the natural environment during an attack upon a legitimate military objective. However, the commander has an affirmative obligation to avoid unnecessary damage to the environment to the extent that it is practicable to do so consistent with mission accomplishment. To that end, and as far as military requirements permit, methods or means of warfare should be employed with due regard to the protection and preservation of the natural environment. Destruction of the natural environment not necessitated by mission accomplishment and carried out wantonly is prohibited.²¹ Therefore, a commander should consider the environmental damage which

¹⁸ This principle, reflected in GP I, art. 57(4), is supported by the United States as customary law. Bothe, Partsch & Solf 359. *See also* Title V Report, App. O, at 0-13. *Compare* the requirement of GP I, arts. 56-58, to take "feasible" precautions which NATO and other nations understood to mean "that which is practicable or practically possible, taking into account all circumstances at the time, including those relevant to the success of military operations." Bothe, Partsch & Solf 373; declarations on ratification of GP I by Belgium, the Netherlands, and Italy, and by the United Kingdom on signature, note 17. *See also* paragraph 8.1, note 7 (p. 8-2).

¹⁹ GP I, art. 57(2)(iii), as interpreted on ratification by Belgium, the Netherlands, and Italy; by the United Kingdom on signature, note 17 above; and Bothe, Partsch and Solf 279-80, 310 & 363. Cf. FM 27-10, para. 41 (ch. 1, 15 July 1976).

²⁰ GP I, art. 57(3), as interpreted by governments and commentators *cited in* note 19 (p. 8-5). *See* Green 147-48. Altering a method of attack may involve such factors as choice of attack platforms, weaponeering, fusing of ordnance, time of attack, and angle of approach to the target.

²¹ This provision is responsive to U.N.G.A. Resolutions A/47/37 and A/49/50, adopted by consensus on 25 November 1992 and 9 December 1994, respectively, which call upon States to incorporate into their military manuals guidance on the international law applicable to protection of the environment in time of armed conflict. I.C.R.C. compiled "Guidance for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict," which were annexed to U.N. Doc. A/49/323 (1994), are set out in Annex A8-1 (p. 8-30). *See* Gasser, *The Debate to Assess the Need for New International Accords*, in Grunawalt, King & McClain at 521.

Para. 44 of the San Remo Manual states that:

Methods and means of warfare should be employed with due regard for the natural environment taking into account the relevant rules of international law. Damage to or destruction of the natural environment not justified by military necessity and carried out wantonly is prohibited.

For a commentary on this provision of the San Remo Manual *see* Doswald-Beck at 119-21.

(continued...)

will result from an attack on a legitimate military objective as one of the factors during targeting analysis.

²¹(...continued)

During the Persian Gulf War (1991), between seven and nine million barrels of oil were intentionally released into the Gulf by Iraqi action. Five hundred and ninety oil well heads in Kuwait were deliberately damaged or destroyed. Five hundred and eight were set on fire, and eighty-two were damaged so that oil was flowing freely from them. In July 1991, a conference of international experts convened in Ottawa, Canada to examine the law of war implications of these actions. The conference concluded they constituted violations of the law of war, namely:

- Art. 23g of the Annex to Hague IV, which forbids the destruction of "enemy property, unless . . . imperatively demanded by the necessities of war;" and
- Art. 147 of the GC, which makes a Grave Breach the "extensive destruction . . . of property, not justified by military necessity and carried out unlawfully and wantonly."

See Title V Report, App. O at 0-26.

In September 1995, the Naval War College hosted a Law of Naval Warfare Symposium on the Protection of the Environment During Armed Conflict and Other Military Operations. The papers and proceedings of that conference of forty eminent government officials, legal scholars, scientists, environmentalists and military commanders from the U.S., the U.K., Australia, Argentina, Canada, Germany, the Netherlands and Switzerland that participated in the Symposium are set out in Grunawalt, King & McClain. It was the general consensus of the participants in the Symposium that it is the failure of enforcement actions for violation of existing norms rather than the lack of standards for protection of the environment that is the principal deficiency of this area of international law generally, and of the law of armed conflict in particular. See Grunawalt, King & McClain at XIX. See also Green, The Environment and the Law of Conventional Warfare, 29 Can. Y.B. Int'l L. 222-37 (1991); and Baker, Legal Protections for the Environment in Times of Armed Conflict, 33 Va. J. Int'l L. 351 (1993).

The United States is a party to the 1977 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD), 31 UST 233, T.I.A.S. 9614, *reprinted in* 16 Int'l Leg. Mat'ls 90 (1977). That Convention provides that it is prohibited to engage in military or any other hostile use of environmental modification techniques having widespread, long lasting, or severe effects as a means of destruction, damage, or injury to any other State Party. The Convention defines "environmental modification techniques" to include any technique for changing - through the deliberate manipulation of natural processes - the dynamics, composition, or structure of the Earth, including its biota, lithosphere, hydrosphere, and atmosphere, or of outer space. Contemporaneous "Understandings" defined "widespread" as encompassing an area on the scale of several hundred square kilometers; "long-lasting" as lasting for a period of months, or approximately a season; and "severe" as involving serious or significant disruption or harm to human life, natural and economic resources, or other assets. See Bothe, Partsch & Solf at 347.

The ENMOD Convention is an arms control measure meant to prevent the use of the environment as an instrument of war. The Convention does not, nor was it ever intended to, constrain peaceful activities or hostile activities other than those involving environmental modification techniques as defined in the preceding paragraph. Accordingly, the ENMOD Convention was not applicable to Iraqi actions since they were undertaken, not as techniques to modify the environment, but simply as wanton acts of destruction. See McNeill, Protection of the Environment in Time of Armed Conflict: Environmental Protection in Military Practice, in Grunawalt, King & McClain at 538; Green 131-32.

8.2 SURFACE WARFARE

As a general rule, surface warships may employ their conventional weapons systems to²² attack enemy surface, subsurface, and air targets wherever located beyond neutral territory.²³ (Special circumstances in which enemy warships and military aircraft may be attacked in neutral territory are discussed in Chapter 7.) The law of armed conflict pertaining to surface warfare is concerned primarily with the protection of noncombatants²⁴ through rules establishing lawful targets of attack. For that purpose, all enemy vessels and aircraft fall into one of three general classes, i.e., warships and military aircraft,²⁵ merchant vessels and civilian aircraft,²⁶ and exempt vessels and aircraft.²⁷

8.2.1 Enemy Warships and Military Aircraft. Enemy warships and military aircraft, including naval and military auxiliaries, are subject to attack, destruction, or capture anywhere beyond neutral territory.²⁸ It is forbidden, however, to target an enemy warship or military aircraft that in good faith clearly conveys a timely offer of surrender.²⁹ Once an enemy warship has clearly indicated a readiness to surrender by hauling down her flag, by hoisting a white flag, by surfacing (in the case of submarines), by stopping engines and responding to the attacker's signals, or by taking to lifeboats, the attack must be

²² Conventional weapons are discussed in Chapter 9, Conventional Weapons and Weapons Systems. Nuclear weapons are discussed in Chapter 10, Nuclear, Chemical, and Biological Weapons.

²³ Neutral territory consists of the lands, internal waters, archipelagic waters, territorial seas and national airspace of neutral nations. *See* paragraph 7.3 (p. 7-6). "Beyond neutral territory" therefore refers to all waters, airspace and seabed beyond the outer edge of the 12 NM territorial sea.

²⁴ Noncombatants are discussed in Chapter 11, Noncombatant Persons.

²⁵ Discussed in paragraph 8.2.1.

²⁶ Discussed in paragraph 8.2.2 (p. 8-9).

²⁷ Discussed in paragraph 8.2.3 (p. 8-12).

²⁸ Although this customary rule is not codified in any treaty on the law of naval warfare, it appears in the 1913 Oxford Manual of Naval War, arts. 1 & 31, (*reprinted in* Schindler & Toman 858 & 860); in the San Remo Manual, para. 10; and in NWIP 10-2, arts. 430a, 441 & 503a. The sinking of the Argentine cruiser GENERAL BELGRANO during the Falklands (Malvinas) Conflict by the U.K. submarine HMS CONQUEROR beyond the U.K.-declared 200 NM "Total Exclusion Zone" around the Falkland (Malvinas) Islands was a legitimate act of war. For a discussion of this incident *see* Woodward, *One Hundred Days* 149-63 (1992).

²⁹ HR, art. 23(c), reaffirmed in more modern language in GP I, art. 41. *See also* San Remo Manual para. 46(i). Art. 40 of GP I and art. 4(1) of GP II reaffirm the prohibition of Hague Regulations, art. 23(d), against ordering that there shall be no survivors. Matheson, *Remarks*, paragraph 8.1, note 2 (p. 8-1), at 425; Green 166-67.

discontinued.³⁰ Disabled enemy aircraft in air combat are frequently pursued to destruction because of the impossibility of verifying their true status and inability to enforce surrender.³¹ Although disabled, the aircraft may or may not have lost its means of combat. Moreover, it still may represent a valuable military asset. Accordingly, surrender in air combat is not generally offered.³² However, if surrender is offered in good faith so that circumstances do not preclude enforcement, it must be respected.³³ Officers and crews of captured or destroyed enemy warships, military aircraft, and naval and military auxiliaries should be made prisoners of war.³⁴ (See Chapter 11 for further discussion of surrender and prisoners of war.) As far as military exigencies permit, after each engagement all possible measures should be taken without delay to search for and collect the shipwrecked, wounded, and sick and to recover the dead.³⁵

Prize procedure is not used for captured enemy warships and naval auxiliaries because their ownership vests immediately in the captor's government by the fact of capture.³⁶

³⁰ NWIP 10-2, para. 511c and nn. 35-37, and Mallison 134 (summarizing customary practice described in the *Trial of Von Ruchteschell*, 1 Reps. U.N. Comm. 89 (1947), 9 LRTWC 89 (1949)). See also Robertson, *The Obligation to Accept Surrender*, Nav. War Coll. Rev., Spring 1993, 102.

³¹ AFP 110-31, para. 4-2d, at 4-1; Spaight 125-27. Spaight, at 128-30, describes a few cases of surrender in the air during World War I.

³² AFP 110-31, para. 4-2d.

³³ *Ibid*; AFP 110-34, para. 3-3b, at 3-2.

³⁴ GWS-Sea, art. 16.

³⁵ NWIP 10-2, para. 511b; Hague X, art. 16; GWS-Sea, art. 18. The corresponding provision in land warfare is set forth in GWS, art. 15; there is no corresponding requirement in the GC. A new duty to search for the missing is imposed by GP I, art. 33, which the United States supports. Matheson, *Remarks*, paragraph 8.1, note 2 (p. 8-1), at 424. See also paragraph 11.4, note 19 (p. 11-5).

Procedures set forth in *Combat Search and Rescue Procedures* (NWP 19-2/AFDD-34/AR 525-90), *Doctrine for Joint Combat Search and Rescue* (Joint Pub 3-50.2) and *Search and Rescue* (ATP 10), are designed for recovery of own and allied forces. Nevertheless, those procedures should be followed, to the extent they are applicable, in complying with the requirement set forth in the text.

³⁶ NWIP 10-2, art. 503a(2). See paragraphs 2.1.2.2 (p. 2-3) and 2.1.3 (p. 2-4).

8.2.2 Enemy Merchant Vessels and Civil Aircraft

8.2.2.1 Capture. Enemy merchant vessels and civil aircraft may be captured wherever located beyond neutral territory.³⁷ Prior exercise of visit and search is not required, provided positive determination of enemy status can be made by other means.³⁸ When military circumstances preclude sending or taking in such vessel or aircraft for adjudication as an enemy prize, it may be destroyed after all possible measures are taken to provide for the safety of passengers and crew.³⁹ Documents and papers relating to the prize should be safeguarded and, if practicable, the personal effects of passengers should be saved.⁴⁰ Every case of destruction of a captured enemy prize should be reported promptly to higher command.⁴¹

Officers and crews of captured enemy merchant ships and civilian aircraft may be made prisoners of war.⁴² Other enemy nationals on board such captured ships and aircraft as private passengers are subject to the discipline of the captor.⁴³ Nationals of a neutral nation on board captured enemy merchant vessels and civilian aircraft are not made prisoners of

³⁷ This rule, previously set forth in NWIP 10-2, para. 503b(1) (1956), Tentative Instructions for the Navy of the United States Governing Maritime and Aerial Warfare, May 1941, para. 67, and Instructions for the Navy of the United States Governing Maritime Warfare, June 1917, para. 62, reflects the rejection by the United States of Hague VI relating, *inter alia*, to the exemption from capture of enemy merchant vessels located in ports of their adversary at the outbreak of hostilities. Although originally parties to Hague VI, Japan, France, the UK and the former USSR subsequently denounced it, and it does not articulate customary international norms. Green 76-7; Ronzitti, 102 & 108. *See also* Tucker 74-75, 102-03 & 108-09, and U.S. Naval War College, International Law Topics and Discussions 1905, at 9-20 (1906), for discussions of this rule which is opposite to that applicable in land warfare, where the private property of the enemy population may not, as a general rule, be seized and confiscated. *See also* Mallison 101.

³⁸ NWIP 10-2, para. 502a & n. 9; Tucker 103-04 & n. 31; Mallison 101 & n. 19; San Remo Manual, para. 135.

³⁹ NWIP 10-2, para. 502b(2) & nn. 18, 19 & 21; Tucker 106-08 & n. 40; San Remo Manual, para. 139. As against an enemy, title to captured enemy merchant vessels or aircraft vests in the captor's government by virtue of the fact of capture. However, claims may be made by neutrals, either with respect to the captured vessel or aircraft, or with respect to the cargo (normally, noncontraband neutral cargo on board a captured enemy vessel is not liable to confiscation). For these reasons, it is always preferable that captured enemy prizes be sent in for adjudication, whenever possible.

⁴⁰ NWIP 10-2, para. 503b(2) & n. 20; San Remo Manual, para. 139. All the documents and papers of a prize, as required by 10 U.S.C. sec. 7657, should be taken on board the capturing vessel of war and should be inventoried and sealed, in accordance with the procedure set forth in that section, for delivery to the prize court, with particular attention being paid to the protection of the interests of the owners of innocent neutral cargo on board, if such exists.

⁴¹ NWIP 10-2, para. 503b(2).

⁴² GPW, art. 4A(5); NWIP 10-2, para. 512 and n. 38. The evolution of the law regarding the treatment of persons found on captured enemy merchant ships and aircraft is described in Tucker 112-15. *See also* San Remo Manual, para. 165.

⁴³ NWIP 10-2, para. 512. *See also* GC, arts. 4 & 41. If necessary, enemy nationals, particularly those in the public service of the enemy, found on board captured enemy merchant vessels may be treated as prisoners of war. NWIP 10-2, para. 512, and n. 39.

war unless they have participated in acts of hostility or resistance against the captor or are otherwise in the service of the enemy.⁴⁴

8.2.2.2 Destruction. Prior to World War II, both customary and conventional international law prohibited the destruction of enemy merchant vessels by surface warships unless the safety of passengers and crew was first assured. This requirement did not apply, however, if the merchant vessel engaged in active resistance to capture or refused to stop when ordered to do so.⁴⁵ Specifically, the London Protocol of 1936, to which almost all of the belligerents of World War II expressly acceded,⁴⁶ provides in part that:

In particular, except in the case of persistent refusal to stop on being duly summoned, or of active resistance to visit or search, a warship, whether surface vessel or submarine, may not sink or render incapable of navigation a merchant vessel without having first placed passengers, crew and ship's papers in a place of safety. For this purpose the ship's boats are not regarded as a place of safety unless the safety of the passengers and crew is assured, in the existing sea and weather conditions, by the proximity of land, or the presence of another vessel which is in a position to take them on board.

During World War II, the practice of attacking and sinking enemy merchant vessels by surface warships and submarines without prior warning and without first providing for the safety of passengers and crew was widespread on both sides.⁴⁷ Rationale for these apparent departures from the agreed rules of the 1936 London Protocol varied. Initially, such acts were justified as reprisals against illegal acts of the enemy. As the war progressed, however,

⁴⁴ Hague XI, arts. 5 & 8; GPW, art. 5; NWIP 10-2, para. 512; Tucker 113-14 & n. 60 & n. 62. If there is doubt as to entitlement of such detained neutral nationals to treatment as prisoners of war, they are to be given the benefit of that doubt until the contrary is determined by a "competent tribunal." GPW, art. 5(2); GP I, art. 45(1). Nationals of a neutral nation who have not so participated in acts of hostility or resistance are to be released. *See San Remo Manual*, para. 166.

⁴⁵ NWIP 10-2, para. (503b(3) and n. 22; Treaty Relating to the Use of Submarines and Noxious Gases in Warfare, Washington, 6 February 1922, never came into force, 3 Malloy 3118, 6 Wiktor 398-99, preamble & art. I; Treaty for the Limitation and Reduction of Naval Armaments, London, 22 April 1930 [hereinafter Treaty of London], entered into force for the United States 31 December 1930, 46 Stat. 2881-82, T.S. 380, 112 L.N.T.S. 88, 4 Malloy 5281, 2 Bevans 1070, 2 Hackworth 691, art. 22; Proces-Verbal Relating to the Rules of Submarine Warfare set forth in Part IV of the Treaty of London, 6 November 1936 [hereinafter 1936 London Protocol], 3 Bevans 298-99, 173 L.N.T.S. 357, 7 Hudson 492. The developments are considered in detail in Tucker 55-70 and Mallison 106-23. *See also* Levie, *Submarine Warfare: With Emphasis on the 1936 London Protocol*, in Grunawalt at 28-71.

⁴⁶ China and Romania were the World War II belligerents who had not acceded to the London Protocol of 1936.

⁴⁷ *See* Mallison & Mallison, *The Naval Practices of Belligerents in World War II: Legal Criteria and Development*, in Grunawalt at 87-103. Enemy merchant vessels were also destroyed by military aircraft without warning and without first providing for the safety of passengers and crew. However, this practice did not constitute a departure from the 1936 London Protocol which does not address the destruction of merchant shipping by aircraft.

merchant vessels were regularly armed and convoyed, participated in intelligence collection, and were otherwise incorporated directly or indirectly into the enemy's war-fighting/war-sustaining effort. Consequently, enemy merchant vessels were widely regarded as legitimate military targets subject to destruction on sight.⁴⁸

Although the rules of the 1936 London Protocol continue to apply to surface warships, they must be interpreted in light of current technology, including satellite communications, over-the-horizon weapons, and antiship missile systems, as well as the customary practice of belligerents that evolved during and following World War II.⁴⁹ Accordingly, enemy merchant vessels may be attacked and destroyed by surface warships, either with or without prior warning, in any of the following circumstances:⁵⁰

1. Persistently refusing to stop upon being duly summoned to do so⁵¹
2. Actively resisting visit and search or capture⁵²
3. Sailing under convoy of enemy warships or enemy military aircraft⁵³

⁴⁸ Mallison & Mallison, *id.* at 90-91.

⁴⁹ Nwogugu, Commentary on the 1936 London Proces-Verbal, *in* Ronzitti at 353.

⁵⁰ The 1936 London Protocol was designed to protect only those merchant ships which "at the moment" were not "participating in hostilities in such a manner as to cause [them] to lose [their] right to the immunities of a merchant vessel." Report of the Committee of Jurists, 3 April 1930, which drafted article 22, *reprinted in* Dep't of State, Proceedings of the London Naval Conference of 1930 and Supplementary Documents 189 (Dep't of State Conf. Ser. No. 6, 1931), and *quoted in* U.S. Naval War College, International Law Situations 1930, at 5 (1931), Mallison 120, and Tucker 63. Unfortunately the Conference delegates were unable to agree on the circumstances that would cause the loss of the immunities of a merchant vessel. The list of circumstances set out in the text of paragraph 8.2.2.2 reflects the practice of nations and the judgment of the International Military Tribunal on Admiral Doenitz. 1 TWC 313, 40 U.S. Naval War College, International Law Documents 1946-47, at 300-301 (1948); Levie, 1 The Code of International Armed Conflict 162-63; and Jacobson, The Law of Submarine Warfare Today, *in* Robertson at 205. *Contra*, Parks, Conventional Aerial Bombing and the Law of War, U.S. Naval Inst. Proc., May 1982, at 106 (the London Protocol is "of historical interest only"), and O'Connell, International Law and Contemporary Naval Operations, 44 Br. Y.B. Int'l L. 52 (1970) ("submarines operating in times of war are today governed by no legal text"). *See also* Green 163.

⁵¹ The refusal must be *persistent* to meet the standard of the first exception to the general rule of the London Protocol quoted in the text of paragraph 8.2.2.2. *See* paragraph 8.2.3, note 77 and accompanying text (p. 8-18).

⁵² Second exception to the general rule of the 1936 London Protocol *quoted in* the text of paragraph 8.2.2.2 (p. 8-10). *See* paragraph 7.6 (p. 7-23) for a general discussion of visit and search.

⁵³ This "accurately reflects the traditional law as well as the uniform practice of the two World Wars." Mallison 122; Jacobson, note 50 (p. 8-11) at 231.

4. If armed⁵⁴
5. If incorporated into, or assisting in any way, the intelligence system of the enemy's armed forces⁵⁵
6. If acting in any capacity as a naval or military auxiliary to an enemy's armed forces⁵⁶
7. If integrated into the enemy's war-fighting/war-sustaining effort and compliance with the rules of the 1936 London Protocol would, under the circumstances of the specific encounter, subject the surface warship to imminent danger or would otherwise preclude mission accomplishment.⁵⁷

Rules relating to surrendering and to the search for and collection of the shipwrecked, wounded, and sick and the recovery of the dead, set forth in paragraph 8.2.1, apply also to enemy merchant vessels and civilian aircraft that may become subject to attack and destruction.⁵⁸

8.2.3 Enemy Vessels and Aircraft Exempt from Destruction or Capture. Certain classes of enemy vessels and aircraft are exempt under the law of naval warfare from capture or

⁵⁴ In light of modern weapons, it is impossible to determine, if it ever was possible, whether the armament on merchant ships is to be used offensively against an enemy or merely defensively. It is unrealistic to expect enemy forces to be able to make that determination. Accordingly, this rule has been modified in this text from that previously appearing in NWIP 10-2, para. 503b(3)(4). See U.S. Naval War College, *International Law Situations 1930*, at 9-19 & 21-25 for a discussion of earlier conflicting views of nations on armed merchant vessels. See also Levie, paragraph 8.2.2.2, note 45 (p. 8-10), at 36-41; Fenrick, Comments, in Grunawalt at 113-18. Crew members bearing side arms for personal protection against pirates and other marauders do not render a merchant vessel "armed" for purposes of this listing. While the presence on board of shoulder-fired missiles and rockets would likely constitute arming of a merchant vessel, the equipping of the vessel with chaff launchers would not. See San Remo Manual, para. 60(f) and Doswald-Beck at 151. See also paragraph 8.2.3, note 66 (p. 8-15).

⁵⁵ This reflects the traditional law as it developed during the two World Wars. Mallison 122-23.

⁵⁶ An enemy merchant ship designed for carrying cargo and actually carrying cargo of substantial military importance is not a "military or naval auxiliary" unless it is owned by or under the exclusive control of the armed forces. Mallison 123. (See paragraph 2.1.2.3 (p. 2-4) for a discussion of auxiliaries). Such a vessel would not be subject to destruction unless it otherwise falls under one of the other numbered headings of paragraph 8.2.2.2.

⁵⁷ This paragraph addresses the circumstance described in the preceding note and reflects the actual practice of nations, at least in general wars. See Mallison 120-21 & 123. Although the term "war-sustaining" is not subject to precise definition, "effort" that indirectly but effectively supports and sustains the belligerent's war-fighting capability properly falls within the scope of the term. See also paragraph 7.4, note 88 (p. 7-16) and paragraph 8.1.1, note 11 (p. 8-3). Compare San Remo Manual, para. 60(g) and see Doswald-Beck at 150.

⁵⁸ See note 35 and accompanying text (p. 8-8).

destruction provided they are innocently employed in their exempt category.⁵⁹ These specially protected vessels and aircraft must not take part in the hostilities, must not hamper the movement of combatants, must submit to identification and inspection procedures, and may be ordered out of harm's way.⁶⁰ These specifically exempt vessels and aircraft include:

1. Vessels and aircraft designated for and engaged in the exchange of prisoners of war (cartel vessels).⁶¹
2. Properly designated and marked hospital ships, medical transports, and medical aircraft.⁶² Names and descriptions of hospital ships must be provided to the parties to

⁵⁹ The granting of this protection is consistent with the "maintenance of military efficiency." Mallison 16. These classes of exempt vessels are discussed *in* Tucker 86-98 and Mallison 123-29.

⁶⁰ In such a way, the law fairly balances the rights of opposing belligerents. As reflected in the succeeding notes to this paragraph, the practice of nations is generally consistent with this balance. *See also* San Remo Manual, paras. 48 & 137.

⁶¹ Tucker 97-98; Mallison 126; NWIP 10-2, para. 503c(1); San Remo Manual, paras. 47(c) & 136(c). Cartel ships were used at the conclusion of the Falklands/Malvinas conflict to repatriate about 10,000 Argentine PWs. The British used three requisitioned merchant ships, Argentina two of its hospital ships. Each ship was identified by flying the flag of truce and the colors of the two nations. Junod, *Protection of the Victims of Armed Conflict Falkland-Malvinas Islands* (1982), at 31. During World War II at least 15,000 PWs and civilian internees disappeared at sea as a result of attacks against non-cartel ships that were carrying them. Report of the ICRC on its Activities During the Second World War 319. Temporary detention of PWs and others aboard naval vessels is discussed in paragraph 11.7.4 (p. 11-14).

⁶² GWS-Sea, arts. 22 & 29 (hospital ships) and 39 (medical aircraft); Tucker 97 & 123-34; Mallison 124-25; NWIP 10-2, para 503c(2); San Remo Manual, para. 47(a). Coastal rescue craft are also exempt from capture and destruction. GWS-Sea, art. 27; Eberlin, *The Protection of Rescue Craft in Periods of Armed Conflict*, 1985 *Int'l Rev. Red Cross* 140; San Remo Manual, para. 47(b). Temporary medical ships would be granted a lesser degree of protection by GP I, art. 23.

GWS-Sea, art. 14 permits warships to demand the surrender to them of enemy military wounded, sick and shipwrecked personnel found in hospital ships and other craft "provided they are in a fit state to be moved and that the warship can provide adequate facilities for necessary medical treatment." GWS-Sea, art. 36, provides the hospital ship's medical personnel and crew may not be attacked or captured, even if there are no sick and wounded on board. This extensive protection reflects the facts that hospital ships without crew cannot function, and that the protection and care of the sick and wounded would be impossible without a medical staff. They must, however, not be used for any other purpose during the conflict, particularly in an attempt to shield military objectives from attack. To ensure this, an opposing force may visit and search hospital ships, put on board a commissioner temporarily or put on neutral observers (as was done in the 1982 Falklands war), detain the ship for no more than seven days (if required by the gravity of the circumstances), and control the ship's means of communications. The opposing force may also order hospital ships to depart, make them take a certain course, or refuse assistance to them. GWS-Sea, arts. 30-31.

Sick bays and their medical personnel aboard other naval vessels must also be respected by boarding parties and spared as much as possible. They remain subject to the laws of warfare, but cannot be diverted from their medical purposes if required for the care of the wounded or sick. If a naval commander can ensure the proper care of the sick and wounded, and if there is urgent military necessity, the sick bays may be used for other purposes. GWS-Sea, art. 28.

(continued...)

the conflict not later than ten days before they are first employed.⁶³ Thereafter, hospital ships must be used exclusively to assist, treat and transport the wounded, sick and shipwrecked.⁶⁴ All exterior surfaces of hospital ships are painted white and the distinctive emblem of the Red Cross or Red Crescent is displayed on the hull and on horizontal surfaces.⁶⁵ Hospital ships may not be armed although crew members may

⁶²(...continued)

Hospital ships can leave port even if the port falls into enemy hands. Hospital ships are not classified as warships with regard to the length of their stay in neutral ports. GWS-Sea, art. 29 & 32. *See* paragraph 7.3.2.1 (p. 7-7). *See generally*, Green 215-18.

⁶³ GWS-Sea, art. 22, provides that at least ten days prior to placing a hospital ship into service, notification must be effected to the parties to the conflict of the vessel's characteristics and name. The characteristics include at least the gross registered tonnage, length and the number of masts and funnels and may also include, for example, the vessel's silhouette. (*See also* San Remo Manual, para. 169.) The notification can be made in peacetime (to other nations party to the 1949 Geneva Conventions), when the ship is nearing completion, or even after the outbreak of hostilities. As a precaution, it is advisable to confirm earlier notification at the opening of hostilities. 2 Pictet, Commentary 161. *See also* the useful summary provided in Smith, Safeguarding the Hospital Ships, U.S. Naval Inst. Proc., Nov. 1988, at 56.

⁶⁴ GWS-Sea, art. 22.

⁶⁵ GWS-Sea, art. 43. To ensure maximum protection for its hospital ships, U.S. practice has been to mark and illuminate them as follows:

1. Exterior surfaces shall be white except those areas designated for identifying insignia.
2. Weather decks covered with wood shall be unpainted except for a square white area to be painted around the distinctive emblem, *i.e.*, red crosses.
3. Steel weather decks outside of walking areas shall be painted white and walking areas thereon shall be gray.
4. Outer smoke pipe casing, booms, masts, and boats shall be white except that a black band shall be painted around the top of smoke stacks.
5. Three red crosses, as large as possible, shall be painted on each side of the hull (forward, center and aft).
6. Two red crosses, as large as possible, shall be painted on top of the superstructure (forward and aft) with an additional red cross as large as possible on the forward superstructure.
7. One red cross, as large as possible, shall be painted on each side of the stern of boats and on each side of life rafts. Each boat may also be equipped with a mast on which a red cross flag measuring at least 6 by 6 feet can be hoisted.
8. To provide the desired contrast where infra-red instruments and infra-red film are used, the red cross may be painted over a black cross.
9. Optional flashing blue lights may be installed. *See also* paragraph 11.10.2 (p. 11-20)).
10. The whole ship, particularly the red crosses, should be fully illuminated at night.

(continued...)

carry light individual weapons for the maintenance of order, for their own defense and that of the wounded, sick and shipwrecked.⁶⁶ Use or possession of cryptographic means of transmitting message traffic by hospital ships is prohibited under current law.⁶⁷ Medical aircraft, whether civilian or military, and whether permanently or temporarily so employed, must be used exclusively for the removal and transportation of the wounded, sick and shipwrecked, or for the transportation of medical personnel or medical equipment.⁶⁸ They may not be armed nor may they be reconnaissance configured.⁶⁹ Medical aircraft must be clearly marked with the emblem of the red cross or

⁶⁵(...continued)

See International Code of Signals, Pub. No. 102, at 136 (Notice to Mariners 52/85, at II-2.4); and Figures 11-1a and 11-1b (p. 11-20). See also Eberlin, Identification of Hospital ships and Ships Protected by the Geneva Conventions of 12 August 1949, 1982 Int'l Rev. Red Cross 315; and Eberlin, Underwater acoustic identification of hospital ships, 1988 *id.* 505. GWS-Sea, art. 27, extends these rules to rescue craft "so far as operational requirements permit." See also paragraph 11.10 (p. 11-20).

⁶⁶ GWS-Sea, art. 35. See 2 Pictet 194. The taking of other limited self-defense measures against antiship missile attack, such as equipping hospital ships with chaff, ECM and infra red decoy dispensers, as *suggested in* Oreck, Hospital Ships: The Right of Limited Self Defense, U.S. Naval Inst. Proc., Nov. 1988, at 65, and as *provided in* San Remo Manual, para. 170, would not violate their protected status. However, equipping of such ships with the Phalanx close-in weapon system (CIWS) would, under the San Remo Manual rule, be inconsistent with their protected status. See Doswald-Beck at 235 and paragraph 8.2.2.2, note 54 (p. 8-12).

Portable arms and ammunition, taken from the wounded, sick and shipwrecked, may be retained on board for eventual turn-over to proper authority; similarly, arming crews of sick bays with light individual weapons for the maintenance of order, for their own defense or that of the sick and wounded, does not deprive a sick bay on a warship of its guaranteed protection and does not permit attacks on it (GWS-Sea, art. 36).

⁶⁷ GWS-Sea, art. 35(2), authorizes hospital ships to carry and employ communications equipment necessary for their movement and navigation. GWS-Sea, art. 34, however, restricts the use of cryptographic means of communication. The English language version of art. 34 implies that the possession or use of such means for both *sending* and *receiving* encrypted communications are prohibited. The equally authentic Spanish and French texts of art. 34(2), however, prohibit only the *sending* ("pour leurs émissions") of encrypted traffic. See Revision of Annex I to Protocol I, 1983 Int'l Rev. Red Cross, 22 at 26. The requirement that hospital ships must transmit in the clear is undergoing critical review in various international fora and it is anticipated that this prescription will eventually be either relaxed or abandoned. Indeed, the San Remo Manual, para. 171, would permit the use of cryptographic equipment in hospital ships to "fulfill most effectively their humanitarian mission."

⁶⁸ GWS, art. 36; GWS-Sea, art. 39; GC, art. 22; and GP I, art. 8. Medical aircraft may not be used to collect or transmit intelligence data since they may not be used to commit, outside their humanitarian duties, acts harmful to the enemy. This prohibition does not preclude the presence or use on board medical aircraft of communications equipment and encryption materials solely to facilitate navigation, identification or communication in support of medical operations.

See paragraph 7.3.7 (p. 7-15) for guidance regarding flight of medical aircraft over, or landing on, neutral territory.

⁶⁹ See Pictet, Vol. I, 289. Medical aircraft shall contain no armament other than small arms and ammunition belonging to the wounded and sick or necessary for the defense of the wounded and sick and the medical personnel. See San Remo Manual, para. 178. As far as practicable under the circumstances, the medical mission shall be performed in such places and
(continued...)

red crescent.⁷⁰ Hospital ships, medical transports and medical aircraft utilized solely for medical purposes and recognized as such are not to be deliberately attacked.⁷¹

⁶⁹(...continued)

in such a manner as to minimize the risk that the conduct of hostilities by combatants may imperil the safety of medical aircraft. *See generally*, AFR 160-4, Medical Service under the 1949 Geneva Convention [sic] on Protection of War Victims. *See also* GP I art. 28.

Aeromedical evacuation also may, of course, be conducted by combat-equipped helicopters and airplanes. They are not, however, exempt from attack, and fly at their own risk of being attacked.

⁷⁰ AFP 110-31. Medical aircraft shall be clearly marked with the red cross/red crescent, as large as possible, on a white background, together with their national colors, on their upper, lateral and lower surfaces. They may be painted white all over. *See* International Code of Signals, Pub. No. 102, at 136 (Notice to Mariners 52/85, at II-2.2) and Figure 11-1a (p. 11-22). *See also* San Remo Manual, para. 175.

⁷¹ As a general rule, medical aircraft, recognized as such, should not be deliberately attacked. AFP 110-34, para. 3-2c. However, there is no specific treaty to which the United States is a party providing this protection. (An earlier Air Force manual would permit attack if "under the circumstances at the time it represents an immediate military threat and other methods of control are not available." AFP 110-31, para. 4-2f.) Medical aircraft, wherever flying, are protected from attack to the extent they are flying at altitudes, times, and on routes specifically agreed upon between the belligerents. GWS, art. 36; GWS-Sea, art. 39; GC, art. 22. Thus, U.S. medical aircraft may not over fly enemy-controlled territory and expect to be immune from attack without prior enemy agreement.

In and over land areas physically controlled by friendly forces, and in and over sea areas not physically controlled by the enemy, medical aircraft will be immune from attack. Before making flights bringing them within range of the enemy's surface-to-air weapons systems, however, the enemy should be notified with a view to ensuring such aircraft will not be attacked. (GP I, art. 25.) Whether or not the parties to the conflict are bound by GP I, prior agreement between them is necessary in order to afford protection from attack to medical aircraft that are flying in and over those parts of the contact zone which are physically controlled by friendly forces, and in and over those areas the physical control of which is not fully established. In the absence of such an agreement, medical aircraft operate at their own risk. Nevertheless, they shall be respected after they have been recognized as medical aircraft. (GP I, art. 26(1); Green 216-18.) These procedures were followed in the 1982 Falklands war where neither belligerent was a party to GP I. *See also* San Remo Manual, para. 180.

"Contact zone" here means any land area where the forward elements of opposing forces are in contact with each other, especially when they are exposed to direct fire from the ground. The breadth of the contact zone will vary according to the tactical situation. (GP I, art. 26(2).)

"Friendly forces" are the forces of the nation operating the aircraft, or its allies or co-belligerents.

Medical aircraft must comply with a request to land for inspection. (GWS, art. 36; GWS-Sea, art. 39; GC, art. 22.) Under GP I, art. 30, these requests are to be given in accordance with the International Civil Aviation Organization (ICAO) standard procedures for interception of civil aircraft. They are found in Section D of the DOD Flight Information Publication (FLIP) (Enroute) IFR Supplement.

Medical aircraft complying with such a request to land must be allowed to continue their flight, with all personnel on board belonging to their forces, to neutral countries, or to countries not a party to the conflict, so long as inspection does not reveal that the aircraft was engaging in acts harmful to the inspecting force or otherwise violating the Geneva Conventions of 1949. Persons of the nationality of the inspecting force found on board may be taken off and retained. Bothe, Partsch & Solf 163. *See also* GP I, art. 30.

(continued...)

3. Vessels charged with religious, non-military scientific, or philanthropic missions. (Vessels engaged in the collection of scientific data of potential military application are not exempt.)⁷²
4. Vessels and aircraft guaranteed safe conduct by prior arrangement between the belligerents.⁷³
5. Small coastal (not deep-sea) fishing vessels and small boats engaged in local coastal trade. Such vessels and boats are subject to the regulations of a belligerent naval commander operating in the area.⁷⁴

⁷¹(...continued)

It is very difficult to ensure the safety of medical aircraft in armed conflict no matter how clear their markings. If possible, therefore, the parties should reach an agreement to facilitate their protection. Although rarely reached in the past, a proposal for such an agreement should state the proposed number of medical aircraft, their flight plans and their means of identification. Receipt of the proposal should be acknowledged and then answered definitively, as rapidly as possible. The substance of any proposal, reply and agreement (including the means of identification to be used) should be rapidly disseminated to the military units concerned. *See* AFP 110-31, para. 2-6e.

See paragraph 11.10 (p. 11-20) for the optional distinctive signals now available for medical aircraft.

⁷² Hague XI, art. 4; NWIP 10-2, para. 503c(3). As noted *in* Tucker 96-97 and Mallison 128, the practice has been to construe this exemption quite narrowly and to grant this exemption by express agreement between the belligerents. The parenthetical exception to the exemption has been added to reflect modern practices in the exploration of the sea and seabed; *see* Mallison 128 and Levie, 1 *The Code of International Armed Conflict* 186. The San Remo Manual, paras. 47(f) and 136(e), reflects this exception as well.

⁷³ NWIP 10-2, para. 503c(4); San Remo Manual, paras. 47(c) and 136(c). One such vessel, the Japanese merchant ship AWA MARU, sailing alone in a fog bank, was torpedoed and sunk by USS QUEENFISH on 1 April 1945 thinking she was a Japanese destroyer. Although QUEENFISH had received notice of the guarantee of safe conduct in a plain language COMSUBPAC message three weeks before, it had not been read by the ship's officers. For details *see* Dep't St. Bull., 3 June, 15 July & 12 August 1945, *reprinted in* U.S. Naval War College, *International Law Documents 1944-45*, at 125-38 (1946); Voge, *Too much Accuracy*, *Naval Inst. Proc.*, March 1950, at 256; Speer, *Let Pass Safely the Awa Maru*, *id.*, April 1964, at 69; Lowman, *Treasure of the Awa Maru*, *id.*, Aug. 1982, 45; Loughlin, *As I Recall "Damned if I Did; Damned if I Didn't," id.* Aug. 1982, at 49; and Innis, *In Pursuit of the Awa Maru* (1980) (describing the events and subsequent general court-martial conviction of QUEENFISH's commanding officer). *See also* Green 166.

In October 1943, the properly marked Japanese hospital ship TACHIBANA MARU was stopped at sea by two U.S. Navy destroyers and was found to be carrying 700 drums of oil, 1500 able-bodied combat troops (dressed in white hospital gowns), and 1500 boxes of ammunition marked with the Red Cross Symbol, all in clear violation of Hague X, art. 4(2). *See* The trial of Takaji Wachi, *recounted in* Levie, *Terrorism in War: the Law of War Crimes*, at 374 (1993).

Ships chartered to convey medical equipment and pharmaceuticals for the wounded and sick only, so long as the particulars of the voyage have been agreed to beforehand between the belligerents, are exempt from capture and destruction. GWS-Sea, art. 38.

⁷⁴ *The Paquete Habana*, 175 U.S. 677 (1900); Hague XI, art. 3; Tuckert 95-96; Mallison 15-16 & 126-28; NWIP 10-2, para. 503c(6); San Remo Manual, paras. 47(g) & 136(f). *See* Cagle & Manson, *The Sea War in Korea 296-97* (1957). It is (continued...)

6. Civilian passenger vessels at sea and civil airliners in flight are subject to capture but are exempt from destruction. Although enemy lines of communication are generally legitimate military targets in modern warfare, civilian passenger vessels at sea, and civil airliners in flight, are exempt from destruction, unless at the time of the encounter they are being utilized by the enemy for a military purpose (e.g., transporting troops or military cargo) or refuse to respond to the directions of the intercepting warship or military aircraft. Such passenger vessels in port and airliners on the ground are not protected from destruction.⁷⁵

If an enemy vessel or aircraft assists the enemy's military effort in any manner, it may be captured or destroyed.⁷⁶ Refusal to provide immediate identification upon demand is ordinarily sufficient legal justification for capture or destruction.⁷⁷ All nations have a legal obligation not to take advantage of the harmless character of exempt vessels and aircraft in order to use them for military purposes while preserving their innocent appearance.⁷⁸ For

⁷⁴(...continued)

necessary to emphasize that the immunity of small coastal fishing vessels and small boats depends entirely upon their "innocent employment." If found to be assisting a belligerent in any manner whatever (e.g., if incorporated into a belligerent's naval intelligence network), they may be captured or destroyed. The British were entirely justified in attacking, on 9 May 1982, the Argentine fishing vessel NARWAL which was used to shadow the British fleet and report its location. Before NARWAL sank, a British boarding party found an Argentine naval officer on board with orders directing him to conduct reconnaissance and to detect and report the position of British units. London Times, 11 May 1982, at 1 & 6; Hastings & Jenkins, *The Battle of the Falklands* 158 (1983); Middleton, *Operation Corporate 186-87* (1985); Woodward, *One Hundred Days* 191-5, 197-8 (1992). See also Levie, 1 *The Code of International Armed Conflict* at 186. Refusal to provide immediate identification upon demand is sufficient basis for capture or destruction of such vessels and boats. See paragraph 8.2.1, note 35 (p. 8-8) and accompanying text (regarding duty to search for the shipwrecked) and paragraph 7.7.4 (p. 7-28) (regarding breach and attempted breach of blockade).

⁷⁵ AFP 110-31, para. 4-3, AFP 110-34, para. 2.3b. Civilian passenger vessels and civil aircraft were not addressed in NWIP 10-2, para. 503c. The rule prohibiting destruction of civilian passenger vessels at sea and civil airliners in flight which have become military objectives by virtue of being part of enemy lines of communication (see paragraph 8.1.1 and note 11 (pp. 8-2 & 8-3)), is premised upon the assessment that the inevitable death of the large number of innocent civilians normally carried in them would in the circumstances described in the text of paragraph 6, be clearly disproportionate to whatever military advantage that might be expected from attacking such vessels or aircraft. The rule denying protection from destruction of passenger vessels in port and airliners on the ground assumes they are not carrying passengers at the time of attack. Green 180-81. Compare the more restrictive approach of San Remo Manual, paras. 47(e), 53(c) and 56.

The list of exempt vessels in paragraph 8.2.3 omits "vessels and aircraft exempt by U.S. or allied proclamation, operation plan, order or other directive" which were included in NWIP 10-2, para. 503c(5), because of the unilateral basis of the exemption. See Tucker 98 n. 14.

⁷⁶ See paragraph 8.2.2.2 (p. 8-10). But also see preceding note.

⁷⁷ Refusal by an exempt vessel or aircraft to provide immediate identification is considered to be an act of refusing to stop upon being summoned, particularly in light of the abilities of modern communications. Compare note 50 and accompanying text (p. 8-11).

⁷⁸ Hague XI, art. 3. See also San Remo Manual, paras. 49-51 (loss of exemption of hospital ships), para. 52 (loss of (continued...))

example, the utilization by North Vietnam of innocent appearing small coastal fishing boats as logistic craft in support of military operations during the Vietnam Conflict was in violation of this obligation.⁷⁹

8.3 SUBMARINE WARFARE

The law of armed conflict imposes essentially the same rules on submarines as apply to surface warships.⁸⁰ Submarines may employ their conventional weapons systems⁸¹ to attack enemy surface, subsurface or airborne targets wherever located beyond neutral territory.⁸² Enemy warships and military aircraft, including naval and military auxiliaries, may be attacked and destroyed without warning.⁸³ Rules applicable to surface warships regarding enemy ships that have surrendered in good faith, or that have indicated clearly their intention to do so, apply as well to submarines.⁸⁴ To the extent that military exigencies permit, submarines are also required to search for and collect the shipwrecked, wounded, and sick following an engagement.⁸⁵ If such humanitarian efforts would subject the submarine to undue additional hazard or prevent it from accomplishing its military mission, the location of possible survivors should be passed at the first opportunity to a surface ship, aircraft, or shore facility capable of rendering assistance.⁸⁶

⁷⁸(...continued)

exemption of other protected vessels), and para. 57 (loss of exemption of protected aircraft).

⁷⁹ O'Connell, *The Influence of Law on Seapower* 177 (1975). *See generally* Hodgman, *Market Time in the Gulf of Thailand*, in Uhlig, *Vietnam: The Naval Story* 308 (1986).

⁸⁰ The legal principles governing modern submarine warfare are discussed in Gilliland, *Submarines and Targets: Suggestions for New Codified Rules of Submarine Warfare*, 73 *Geo. L.J.* 975 (1985). *See also* Jacobson, paragraph 8.2.2.2, note 50 (p. 8-11) at 205.

⁸¹ Conventional weapons are discussed in Chapter 9, *Conventional Weapons and Weapon Systems*. Nuclear weapons are discussed in Chapter 10, *Nuclear, Clerical and Biological Weapons*.

⁸² *See* paragraph 8.2.1, note 23 (p. 8-7) and paragraph 7.3 (p. 7-6) for a discussion of neutral territory.

⁸³ Mallison 105-06.

⁸⁴ *See* paragraph 8.2.1 (p. 8-7).

⁸⁵ Paragraph 8.2.1 and note 35 (pp. 8-7 & 8-8); Mallison 134-39.

⁸⁶ All ships, including submarines, must "take all possible measures" to search for and collect survivors after each engagement. GWS-Sea, art. 18. Fleet Admiral Nimitz indicated before the International Military Tribunal at Nuremberg trying the German submarine commander Admiral Doenitz that the U.S. policy in the Pacific during World War II was not to search for survivors if such action would cause undue additional hazard to the submarine, or prevent the submarine from accomplishing its military mission. The behavior of the other parties to World War II was similar. Mallison 134-39. *See also* Doenitz, *Memoirs: Ten Years and Twenty Days*, 259 (1958). However, firing upon shipwrecked survivors in the water
(continued...)

8.3.1 Interdiction of Enemy Merchant Shipping by Submarines. The rules of naval warfare pertaining to submarine operations against enemy merchant shipping constitute one of the least developed areas of the law of armed conflict. Although the submarine's effectiveness as a weapons system is dependent upon its capability to remain submerged (and thereby undetected) and despite its vulnerability when surfaced, the London Protocol of 1936 (paragraph 8.2.2.2) makes no distinction between submarines and surface warships with respect to attacks upon enemy merchant shipping. The London Protocol specifies that except in case of persistent refusal to stop when ordered to do so, or in the event of active resistance to capture, a warship "whether surface vessel or submarine" may not destroy an enemy merchant vessel "without having first placed passengers, crew and ship's papers in a place of safety." The impracticality of imposing upon submarines the same targeting constraints as burden surface warships is reflected in the practice of belligerents of both sides during World War II when submarines regularly attacked and destroyed without warning enemy merchant shipping.⁸⁷ As in the case of such attacks by surface warships, this practice was justified either as a reprisal in response to unlawful acts of the enemy or as a necessary consequence of the arming of merchant vessels, of convoying, and of the general integration of merchant shipping into the enemy's war-fighting/war-sustaining effort.⁸⁸

The United States considers that the London Protocol of 1936, coupled with the customary practice of belligerents during and following World War II,⁸⁹ imposes upon submarines the responsibility to provide for the safety of passengers, crew, and ship's papers before destruction of an enemy merchant vessel unless:⁹⁰

1. The enemy merchant vessel persistently refuses to stop when duly summoned to do so⁹¹

⁸⁶(...continued)

is clearly a war crime. See *The Llandovery Castle Case* (1921), 2 Ann. Dig. 436, in which a German tribunal tried and convicted the officers of a U-boat for, "contrary to international law," firing upon and killing survivors of an unlawfully torpedoed hospital ship during WW I. Levie, *Terrorism in War: The Law of War Crimes*, 33 (1993); Green 33, n. 90. See also *The Peleus Case* (1946), 13 Ann. Dig. 248, in which a British tribunal tried and convicted the commanding officer (Heinz Eck) of a German submarine that during WW II had systematically fired upon survivors of a torpedoed merchant vessel as they clung to wreckage and rafts. Levie, *id.* at 105.

⁸⁷ Mallison 106-22; Mallison & Mallison, *The Naval Practices of Belligerents in World War II: Legal Criteria and Developments*, in Grunawalt at 89-102. See also Levie, *Submarine Warfare: With Emphasis on the 1936 London Protocol*, in *id.*, at 28.

⁸⁸ Compare Tucker 63-70 with Mallison 119-20. For a discussion of reprisal, see paragraph 6.2.3 (p. 6-16).

⁸⁹ See Mallison 113-122; Mallison & Mallison, note 87.

⁹⁰ These exceptions are identical to those applicable to surface warfare set forth in paragraph 8.2.2.2 (pp. 8-11 & 8-12).

⁹¹ *Id.*, paragraph 8.2.2.2, subparagraph 1 and note 51 (p. 8-11).

2. It actively resists visit and search or capture⁹²
3. It is sailing under convoy of enemy warships or enemy military aircraft⁹³
4. It is armed⁹⁴
5. It is incorporated into, or is assisting in any way the enemy's military intelligence system⁹⁵
6. It is acting in any capacity as a naval or military auxiliary to an enemy's armed forces⁹⁶
7. The enemy has integrated its merchant shipping into its war-fighting/war-sustaining effort and compliance with the London Protocol of 1936 would, under the circumstances of the specific encounter, subject the submarine to imminent danger or would otherwise preclude mission accomplishment.⁹⁷

8.3.2 Enemy Vessels and Aircraft Exempt From Submarine Interdiction. The rules of naval warfare regarding enemy vessels and aircraft that are exempt from capture and/or destruction by surface warships also apply to submarines. (See paragraph 8.2.3.)

8.4 AIR WARFARE AT SEA

Military aircraft may employ conventional weapons systems⁹⁸ to attack warships and military aircraft, including naval and military auxiliaries, anywhere beyond neutral

⁹² *Id.*, subparagraph 2 and note 52 (p. 8-11).

⁹³ *Id.*, subparagraph 3 and note 53 (p. 8-11).

⁹⁴ *Id.*, subparagraph 4 and note 54 (p. 8-12).

⁹⁵ *Id.*, subparagraph 5 and note 55 (p. 8-12).

⁹⁶ *Id.*, subparagraph 6 and note 56 (p. 8-12).

⁹⁷ *Id.*, subparagraph 7 and note 57 (p. 8-12).

⁹⁸ *See* paragraph 8.3, note 81 (p. 8-19).

territory.⁹⁹ Enemy merchant vessels and civil aircraft may be attacked and destroyed by military aircraft only under the following circumstances:¹⁰⁰

1. When persistently refusing to comply with directions from the intercepting aircraft
2. When sailing under convoy of enemy warships or military aircraft
3. When armed
4. When incorporated into or assisting in any way the enemy's military intelligence system
5. When acting in any capacity as a naval or military auxiliary to an enemy's armed forces
6. When otherwise integrated into the enemy's war-fighting or war—sustaining effort.

To the extent that military exigencies permit, military aircraft are required to search for the shipwrecked, wounded, and sick following an engagement at sea.¹⁰¹ The location of possible survivors should be passed at the first opportunity to a surface vessel, aircraft, or shore facility capable of rendering assistance.¹⁰²

Historically, instances of surrender of enemy vessels to aircraft are rare.¹⁰³ If, however, an enemy has surrendered in good faith, under circumstances that do not preclude enforcement of the surrender, or has clearly indicated an intention to do so, the enemy must not be attacked.¹⁰⁴

⁹⁹ This listing is identical to that for surface warships and for submarines except for the omission of reference to a merchant vessel resisting visit and search or capture. Should visit and search or capture of a merchant vessel by an aircraft be feasible, as perhaps by a helicopter, that provision would apply as it does for surface warships and submarines.

¹⁰⁰ AFP 110-31, paras. 4-2a, 4-2c, & 4-4a, at 4-1 & 4-4. *See* paragraph 8.2, note 23 (p. 8-7) for a discussion of neutral territory. *See also* Green 182.

¹⁰¹ GWS, art. 15; GWS-Sea, art. 18; GC, art. 16; AFP 110-31, para. 4-2d n. 11, at 4-7 ("in the case of aircraft, unfortunately, departure from the scene is usually required"). Under GP I, medical aircraft flying pursuant to agreement between the parties in the contact zone or over areas controlled by the enemy may not search for the wounded, sick and shipwrecked except by prior agreement with the enemy. GP I, art. 28(4).

¹⁰² *See* paragraph 8.2.1 note 35 (p. 8-8).

¹⁰³ Spaight 132-134 describes the surrender of U570 in August 1941, of the British submarine SEAL in May 1940, and of a German convoy on 1 May 1945.

¹⁰⁴ AFP 110-31, para. 4-2d, at 4-1. *See also* paragraph 8.2.1 and notes 29-33 (pp. 8-7 & 8-8).

8.4.1 Enemy Vessels and Aircraft Exempt From Aircraft Interdiction. The rules of naval warfare regarding enemy vessels and aircraft that are exempt from capture and/or destruction by surface warships also apply to military aircraft. (See paragraph 8.2.3.)

8.5 BOMBARDMENT

For purposes of this publication, the term "bombardment" refers to naval and air bombardment of enemy targets on land with conventional weapons, including naval guns, rockets and missiles, and air-delivered ordnance.¹⁰⁵ Land warfare is discussed in paragraph 8.6. Engagement of targets at sea is discussed in paragraphs 8.2 to 8.4.

8.5.1 General Rules. The United States is a party to Hague Convention No. IX (1907) Respecting Bombardment by Naval Forces in Time of War. That convention establishes the general rules of naval bombardment of land targets. These rules have been further developed by customary practice in World Wars I and II, Vietnam, the Falkland/Malvinas Conflict, and the Persian Gulf. Underlying these rules are the broad principles of the law of armed conflict that belligerents are forbidden to make noncombatants the target of direct attack,¹⁰⁶ that superfluous injury and unnecessary suffering are to be avoided,¹⁰⁷ and that wanton destruction of property is prohibited.¹⁰⁸ To give effect to these concepts of humanitarian law, the following general rules governing bombardment must be observed.

8.5.1.1 Destruction of Civilian Habitation. The wanton or deliberate destruction of areas of concentrated civilian habitation, including cities, towns, and villages, is prohibited.¹⁰⁹ A military objective¹¹⁰ within a city, town, or village may, however, be bombarded if required for the submission of the enemy with the minimum expenditure of time, life, and

¹⁰⁵ With regard to aerial bombardment, *see also* AFP 110-31, ch. 5 and para. 6-6a; Parks, Crossing the Line, U.S. Naval Inst. Proc., Nov. 1986, at 40-52; Parks, Linebacker and the Law of War, Air U. Rev., Jan.-Feb. 1983, at 2-30; Parks, Rolling Thunder and the Law of War, Air U. Rev., Jan.-Feb. 1982, at 2-23; Carnahan, "Linebacker II" and Protocol I, The Convergence of Law and Professionalism, 31 Am. U.L. Rev. 861 (1982); Greenwood, International Law and the United States' Air Operations Against Libya, 89 W. Va. L. Rev. 933 (1987); and Green, 147-49, 167-68, 183-85.

¹⁰⁶ *See* paragraph 8.1 and note 3 (p. 8-1).

¹⁰⁷ *See* paragraph 8.1.2.1, Incidental Injury and Collateral Damage, and notes 16-20 thereunder (pp. 8-4 & 8-5).

¹⁰⁸ *Id.*; GWS, art. 50; GWS-Sea, art. 51; GC, art. 147; GP I, art. 85(2); Charter of the International Military Tribunal at Nuremberg, art. 6(b) (paragraph 6.2.5, note 55 (p. 6-72)). *See also* Principle VI(b), Nuremberg Principles. The Nuremberg Principles may be found in DA PAM 27-161-2 at 303.

¹⁰⁹ GWS, art. 50; GWS-Sea, art. 51; GC, art. 147; GP I, art. 85(2).

¹¹⁰ Military objective is defined in paragraph 8.1.1 (p. 8-2).

physical resources.¹¹¹ Incidental injury to civilians, or collateral damage to civilian objects must not be excessive in light of the military advantage anticipated by the attack. (See Paragraph 8.1.2.1.)

8.5.1.2 Terrorization. Bombardment for the sole purpose of terrorizing the civilian population is prohibited.¹¹²

8.5.1.3 Undefended Cities or Agreed Demilitarized Zones. Belligerents are forbidden to bombard a city or town that is undefended and that is open to immediate entry by their own or allied forces.¹¹³ A city or town behind enemy lines is, by definition, neither undefended nor open, and military targets therein may be destroyed by bombardment.¹¹⁴ An agreed demilitarized zone is also exempt from bombardment.¹¹⁵

¹¹¹ Cf. HR, art. 23(g); 1923 Draft Hague Rules of Air Warfare, art. 24(4); GP I, art. 51(5)(b); Conventional Weapons Convention, Protocol III, art. 3.

¹¹² 1923 Draft Hague Rules of Air Warfare, art. 22; NWIP 10-2, para. 221b at n. 15; codified *in* GP I, art. 51(2), and GP II, art. 13(2); Matheson, Remarks, paragraph 8.1, note 2 (p. 8-1), at 426. Otherwise legal acts which cause incidental terror to civilians, for example in the bombing of a munitions factory the work force of which is civilian, are not prohibited. As a practical matter, some fear and terror will be experienced by civilians whenever military objectives in their vicinity are attacked. Levie, 1 *The Code of International Armed Conflict* 217-218; Bothe, *Partsch & Solf* 300-301.

¹¹³ HR, art. 25; Hague IX, art. 1; clarified in GP I, art. 59. Solf views article 59 as a "clear declaration of well-established customary international law." Solf, *Protection of Civilians*, paragraph 8.1.2, note 15 (p. 8-4), at 135. *See also* Green 97-8, 147-49. *But see* Robertson, *in* Ronzitti, at 161-171, who regards this provision of Hague IX as "moribund" and inappropriate for naval forces. He argues that the test should be whether the city or town, or a portion thereof, is a legitimate military objective. FM 27-10 gives the following conditions that should be fulfilled for a place to be considered undefended:

- (1) Armed forces and all other combatants, as well as mobile weapons and mobile military equipment, must have been evacuated, or otherwise neutralized;
- (2) no hostile use shall be made of fixed military installations or establishments;
- (3) no acts of warfare shall be committed by the authorities or by the population; and
- (4) no activities in support of military operations shall be undertaken.

The presence in the place, of medical units, wounded and sick, and police forces retained for the sole purpose of maintaining law and order does not change the character of such an undefended place.

FM 27-10, para. 39b (Ch. 1, 15 July 1976).

¹¹⁴ Bothe, *Partsch & Solf* 382.

¹¹⁵ The United States considers this to be customary law. Matheson, Remarks, paragraph 8.1, note 2 (p. 8-1), at 427. Standards for the creation of demilitarized zones may be found *in* GP I, art. 60. *See also* Green 96-7.

8.5.1.4 Medical Facilities. Medical establishments and units (both mobile and fixed), medical vehicles, and medical equipment and stores may not be deliberately bombarded.¹¹⁶ Belligerents are required to ensure that such medical facilities are, as far as possible, situated in such a manner that attacks against military targets in the vicinity do not imperil their safety.¹¹⁷ If medical facilities are used for military purposes inconsistent with their humanitarian mission, and if appropriate warnings that continuation of such use will result in loss of protected status are unheeded, the facilities become subject to attack.¹¹⁸ The distinctive medical emblem, a red cross or red crescent, is to be clearly displayed on medical establishments and units in order to identify them as entitled to protected status.¹¹⁹ Any object recognized as being a medical facility may not be attacked whether or not marked with a protective symbol.¹²⁰

8.5.1.5 Special Hospital Zones and Neutralized Zones. When established by agreement between the belligerents, hospital zones and neutralized zones are immune from bombardment in accordance with the terms of the agreement concerned.¹²¹

¹¹⁶ HR, art. 27; Hague IX, art. 5; GWS, arts. 19 & 35; GWS-Sea, art. 23; GC, arts. 18 & 21; GP I, art. 12; GP II, art. 11.

¹¹⁷ GWS, art. 19; GC, art. 18; GP I, art. 12(4).

¹¹⁸ HR, art. 27; Hague IX, art. 5; GWS, art. 21; GWS-Sea, art. 34; GC, art. 19; GP I, art. 13; GP II, art. 11.

¹¹⁹ See paragraph 11.9.1, *The Red Cross and Red Crescent* (p. 11-16).

¹²⁰ See paragraph 11.9.7 (p. 11-19).

¹²¹ GWS, art. 23; GC, arts. 14-15. Annexes to each of these conventions provide sample agreements relating to the establishment of these zones. On 13 June 1982, the British and Argentine authorities, at the suggestion of the ICRC representative on scene in the Falklands, agreed to the establishment of a neutralized zone in the center of Stanley, comprising the Anglican Cathedral and a clearly defined 5 acre area around it. This zone was, however, not used as the surrender was accepted at 2100 (local) 14 June 1982. U.N. Doc. S/15215, 14 June 1982; HMSO, *The Falklands Campaign: A Digest of Debates in the House of Commons 2 April to 15 June 1982*, at 340-47 (1982); *London Times*, 14 June 1982, at 1; *London Times*, 15 June 1982, at 1 & 8; Junod, *Protection of the Victims of Armed Conflict Falkland-Malvinas Islands 1982*, at 33-34. Similarly, a neutralized zone was established at sea in the Falkland (Malvinas) Conflict by the parties to permit hospital ships to hold position to facilitate the exchange of wounded and sick British and Argentine personnel. That zone, referred to as the "Red Cross Box," is discussed in Junod, *id.* at 26. For a discussion of the differences among hospital, safety and neutralized zones, see Pictet, Vol. 1, at 206.

8.5.1.6 Religious, Cultural, and Charitable Buildings and Monuments. Buildings devoted to religion, the arts, or charitable purposes; historic monuments; and other religious, cultural, or charitable facilities should not be bombarded, provided they are not used for military purposes.¹²² It is the responsibility of the local inhabitants to ensure that such

¹²² HR, art. 27; Hague IX, art. 5; GP I, art. 53(a); Convention for the Protection of Cultural Property in the Event of Armed Conflict, The Hague, 14 May 1954, 249 U.N.T.S. 216, [hereinafter 1954 Hague Convention], art. 4. While the United States is not a Party to the 1954 Hague Convention, it considers it to reflect customary law. U.S. and other Coalition forces followed the Convention throughout the Persian Gulf War. Indeed, Coalition forces continued to accord protection to Iraqi cultural property even when Iraqi forces unlawfully used such property to shield military targets from attack. See Title V Report, App. O, at O-2 & O-8. For a comprehensive commentary on the 1954 Hague Convention see Toman, *The Protection of Cultural Property in the Event of Armed Conflict* (1996).

General Eisenhower, as Supreme Allied Commander in Europe preparing to invade Europe, reminded his forces to comply with this customary rule in the following memorandum:

To Bernard Law Montgomery,
Omar Nelson Bradley
Bertram Home Ramsey, and
Trafford Leigh-Mallory

May 26, 1944

Secret [Since declassified]

Subject: Preservation of Historical Monuments

1. Shortly we will be fighting our way across the Continent of Europe in battles designed to preserve our civilization. Inevitably, in the path of our advance will be found historical monuments and cultural centers which symbolize to the world all that we are fighting to preserve.

2. It is the responsibility of every commander to protect and respect these symbols whenever possible.

3. In some circumstances the success of the military operation may be prejudiced in our reluctance to destroy these revered objects. Then, as at Cassino, where the enemy relied on our emotional attachments to shield his defense, the lives of our men are paramount. So, where military necessity dictates, commanders may order the required action even though it involves destruction of some honored site.

4. But there are many circumstances in which damage and destruction are not necessary and cannot be justified. In such cases, through the exercise of restraint and discipline, commanders will preserve centers and objects of historical and cultural significance. Civil Affairs Staffs at higher echelons will advise commanders of the locations of historical monuments of this type, both in advance of the front lines and in occupied areas. This information, together with the necessary instructions, will be passed down through command channels to all echelons.

The Papers of Dwight David Eisenhower: *The War Years: II*, at 1890-91 (Chandler & Ambrose, eds. 1970). See also Schaffer, *Wings of Judgment: American Bombing in World War II*, at 50 (1985); Hapgood, *Monte Cassino 158-59* (1984) (quoting a 29 December 1943 message from General Eisenhower to "all commanders" to the same effect, Historical Research Center, Maxwell Air Force Base, AL, File 622.610.2, Folder 2, 1944-45); and Blumenson, *United States Army in World War II: The Mediterranean Theater of Operations: Salerno to Cassino 397-399* (1969) (quoting Combined Chiefs of Staff messages of 10 and 19 June 1943 to Eisenhower on this effect and some of the actions taken thereon).

(continued...)

buildings and monuments are clearly marked with the distinctive emblem of such sites--a rectangle divided diagonally into two triangular halves, the upper portion black and the lower white.¹²³ (See paragraph 11.9.)

8.5.1.7 Dams and Dikes. Dams, dikes, levees, and other installations, which if breached or destroyed would release flood waters or other forces dangerous to the civilian population, should not be bombarded if the potential for harm to noncombatants would be excessive in relation to the military advantage to be gained by bombardment.¹²⁴ Conversely, installations containing such dangerous forces that are used by belligerents to shield or support military activities are not so protected.¹²⁵

¹²²(...continued)

Development of rules for the protection of cultural property is described *in Verri*, The Condition of Cultural Property in Armed Conflicts, 1985 Int'l Rev. Red Cross 67 (antiquity to the Napoleonic Wars) and 127 (1850s to World War II). *See also*, Green 44, 145-46.

¹²³ Hague IX, art. 5. There is, however, no requirement to observe these signs or any others indicating inviolability with respect to buildings that are known to be used for military purposes.

¹²⁴ *Compare* GP I, art. 56, which, for nations bound thereby, provides a much higher standard of protection for this limited class of objects, as well as nuclear electrical generating stations. For example, even if a dam or dike is a military objective, art. 56 prohibits attacking it if the attack may cause flooding and consequent severe losses among the civilian population. Art. 56 subjects attacks on military objectives in the vicinity of dams and dikes to the same high standard. (The special protection can be lost under the limited circumstances described in art. 56(2).) Green 149-50. Reasons why art. 56 is militarily unacceptable to the United States appear in remarks of U.S. Department of State Legal Advisor Sofaer in Sixth Annual American Red Cross--Washington College of Law Conference, paragraph 8.1, note 2 (p. 8-1), at 468-9. They include the protection given under art. 56 to "modern integrated power grids, where it is impossible to say that electricity from a particular plant goes to a particular customer" and to nuclear power plants "used to produce plutonium for nuclear weapons purposes." *See* paragraph 11.9.2 (p. 11-17) and Figure 11-1i (p. 11-24) for the protective signs associated with these objects. The United States does not, of course, consider the provisions of art. 56 to be customary law. Matheson, Remarks, paragraph 8.1, note 2 (p. 8-1), at 427.

¹²⁵ Attacks on such installations are, of course, subject to the rule of proportionality described in paragraph 8.1.2.1 (p. 8-4). GC, art. 28; GP I, art. 51(7); Solf, Protection of Civilians, paragraph 8.1.2, note 15 (p. 8-4) at 134. The practice of nations has previously indicated great restraint in the attacks of dams and dikes, the breach of which would cause such severe civilian losses. Thus, Solf is of the view that art. 56 "differs little from customary international law." *See*, however, the U.K. destruction of the Ruhr dams during WW II, described *in* V Churchill, Second World War (1954), at 63. For an example of U.S. application of this principle in the Vietnam Conflict *see* President Nixon's news conference of 27 July 1972, paragraph 8.1.2, note 14 (p. 8-4).

8.5.2 Warning Before Bombardment. Where the military situation permits, commanders should make every reasonable effort to warn the civilian population located in close proximity to a military objective targeted for bombardment. Warnings may be general rather than specific lest the bombarding force or the success of its mission be placed in jeopardy.¹²⁶

8.6 LAND WARFARE.

The guidance in this paragraph provides an overview of the basic principles of law governing conflict on land. For a comprehensive treatment of the law of armed conflict applicable to land warfare see FMFM 0-25 "Department of the Army Field Manual FM 27-10, The Law of Land Warfare."

8.6.1 Targeting in Land Warfare. Only combatants and other military objectives may be attacked (see paragraph 8.1.1). Noncombatants and civilian objects may not be objects of attack. Incidental injury to noncombatants and collateral damage to civilian objects incurred during an attack upon a legitimate military objective must not be excessive in relation to the military advantage to be achieved by the attack (see paragraph 8.1.2.1). When circumstances permit, advance warning should be given of attacks that might endanger noncombatants in the vicinity (see paragraph 11.2).

8.6.2 Special protection. Under the law of land warfare, certain persons, places and objects enjoy special protection against attack. Protection is, of necessity, dependent upon recognition of protected status and special signs and symbols are employed for that purpose

¹²⁶ See paragraph 11.2, Protected Status (p. 11-1). Warnings are relevant to the protection of the civilian population (so the civilians will have an opportunity to seek safety) and need not be given when they are unlikely to be affected by the attack.

The requirement of warning is longstanding and derives from both Hague Regulations (art. 26) and Hague Convention IX (art. 6). Green 101, 148, 168 & 183. During World War II, practice was lax on warnings because of the heavily defended nature of the targets attacked as well as attempts to conceal targets. More recently, increased emphasis has been placed on the desirability and necessity of prior warnings even to military personnel. For example, on 19 October 1987 Iranian naval personnel were warned of the impending attack by U.S. naval forces on the Rashadat Platform in the Persian Gulf (in response to the attack on the U.S.-flag tanker SS SEA ISLE CITY four days earlier in Kuwaiti territorial waters) and allowed to depart before the attack commenced. Presidential Letter to Congress, 20 Oct. 1987, 23 Weekly Comp. Pres. Docs., 1206 (1987). Similar advance warning was given in the 18 April 1988 attacks on the Sassan and Sirri gas/oil separation platforms (in response to the near-destruction of USS SAMUEL B. ROBERTS (FFG-58) on 14 April 1988 by an Iranian mine in a minefield laid across a neutral shipping channel). Presidential Letter to Congress, 19 Apr. 1988, 24 Weekly Comp. Pres. Docs., 25 Apr. 1988, at 493. See also Perkins, *The Surface View: Operation Praying Mantis*, U.S. Naval Inst. Proc., May 1989, at 68 & 69. Similarly, during the Persian Gulf War Coalition forces frequently dropped leaflets alerting Iraqi ground forces of impending attacks and encouraging them to surrender. Title V Report, at 0-618. Nevertheless, the practice of nations recognizes that warnings need not always be given.

This same requirement is included as a "precaution in attack" in GP I, art. 57(2)(c), which the United States supports as customary law. Matheson, Remarks, paragraph 8.1, note 2 (p. 8-1) at 427.

(see paragraph 11.9). Failure to display protective signs and symbols does not render an otherwise protected person, place or object a legitimate target if that status is otherwise apparent (see paragraph 11.9.6).¹²⁷ However, protected persons participating directly in hostilities lose their protected status and may be attacked while so employed. Similarly, misuse of protected places and objects for military purposes renders them subject to legitimate attack during the period of misuse.

8.6.2.1 Protected Persons. Protected persons include the wounded, sick, and shipwrecked (see paragraph 11.4), certain parachutists¹²⁸ (see paragraph 11.6), and prisoners of war (see paragraph 11.7). Civilians and other noncombatants, such as medical personnel and chaplains (see paragraph 11.5), and interned persons (see paragraph 11.8) also enjoy protected status.

8.6.2.2 Protected Places and Objects. Protected places include undefended cities and towns and agreed demilitarized zones (see paragraph 8.5.1.3), and agreed special hospital zones and neutralized zones (see paragraph 8.5.1.5). Protected objects include historic monuments and structures, works of art, medical facilities and religious, cultural, and charitable buildings and monuments (see paragraph 8.5.1.6).

8.6.2.3. The Environment. A discussion of environmental considerations during armed conflict is contained in paragraph 8.1.3.¹²⁹ The use of herbicidal agents is addressed in paragraph 10.3.3.

¹²⁷ This cite to paragraph 11.9.6 is in error. Correct cite is paragraph 11.9.7.

¹²⁸ Parachutists descending from disabled aircraft are protected. Airborne troops, *etc.*, parachuting into combat are not. See paragraph 11.6, note 41 (p. 11-9).

¹²⁹ See also ICRC Compiled Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict, appended hereto as Annex A8-1 (p. 8-30).

ANNEX 8A-1

INTERNATIONAL COMMITTEE OF THE RED CROSS (ICRC) COMPILED

GUIDELINES FOR MILITARY MANUALS AND INSTRUCTIONS ON THE PROTECTION OF THE ENVIRONMENT IN TIMES OF ARMED CONFLICT

I. PRELIMINARY

(1) The present Guidelines are drawn from existing international legal obligations and from State practice concerning the protection of the environment against the effects of armed conflict. They have been compiled to promote an active interest in, and concern for, the protection of the environment within the armed forces of all States.

(2) Domestic legislation and other measures taken at the national level are essential means of ensuring that international law protecting the environment in times of armed conflict is indeed put into practice.

(3) To the extent that the Guidelines are the expression of international customary law or of treaty law binding a particular State, they must be included in military manuals and instructions on the laws of war. Where they reflect national policy, it is suggested that they be included in such documents.

II. GENERAL PRINCIPLES OF INTERNATIONAL LAW

(4) In addition to the specific rules set out below, the general principles of international law applicable in armed conflict—such as the principle of distinction and the principle of proportionality—provide protection to the environment. In particular, only military objectives may be attacked and no methods or means of warfare which cause excessive damage shall be employed. Precautions shall be taken in military operations as required by international law.

G.P.I Arts. 35, 48, 52 and 57

(5) International environmental agreements and relevant rules of customary law may continue to be applicable in times of armed conflict to the extent that they are not inconsistent with the applicable law of armed conflict.

Obligations relating to the protection of the environment towards States not party to an armed conflict (*e.g.*, neighbouring States) and in relation to areas beyond the limits of national jurisdiction (*e.g.*, the High Seas) are not affected by the existence of the armed conflict to the extent that they are not inconsistent with the applicable law of armed conflict.

(6) Parties to a non-international armed conflict are encouraged to apply the same rules that provide protection to the environment as those which prevail in international armed conflict and, accordingly, States are urged to incorporate such rules in their military manuals and instructions on the laws of war in a way that does not discriminate on the basis of how the conflict is characterized.

(7) In cases not covered by rules of international agreements, the environment remains under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience.

H.IV preamble, G.P.I Art. 1.2, G.P.II preamble

III. SPECIFIC RULES ON THE PROTECTION OF THE ENVIRONMENT

(8) Destruction of the environment not justified by military necessity violates international humanitarian law. Under certain circumstances, such destruction is punishable as a grave breach of international humanitarian law.

H.IV.R Art. 23(g), G.IV Arts. 53 and 147, G.P.I Arts. 35.3 and 55

(9) The general prohibition to destroy civilian objects, unless such destruction is justified by military necessity, also protects the environment.

H. IV. R Art. 23 (g) , G. IV Art. 53, G. P. I Art. 52, G. P. I I Art. 14

In particular, States should take all measures required by international law to avoid:

(a)making forests or other kinds of plant cover the object of attack by incendiary weapons except when such natural elements are used to cover, conceal or camouflage combatants or other military objectives, or are themselves military objectives;

CW.P.IIi

(b)attacks on objects indispensable to the survival of the civilian population, such as foodstuffs, agricultural areas or drinking water installations, if carried out for the purpose of denying such objects to the civilian population;

G.P.I Art. 54, G.P.II Art. 14

(c)attacks on works or installations containing dangerous forces, namely dams, dikes and nuclear electrical generating stations, even where they are military objectives, if such attack may cause the release of dangerous forces and consequent severe losses among

the civilian population and as long as such works or installations are entitled to special protection under Protocol I additional to the Geneva Conventions;

G.P.I Art. 56, G.P.II Art. 15

(d)attacks on historic monuments, works of art or places of worship which constitute the cultural or spiritual heritage of peoples.

H.CP, G.P.I Art. 53, G.P.II Art. 16

(10) The indiscriminate laying of landmines is prohibited. The location of all pre-planned minefields must be recorded. Any unrecorded laying of remotely delivered non-self-neutralizing landmines is prohibited. Special rules limit the emplacement and use of naval mines.

G.P.I Arts. 51.4 and 51.5, CW.P.II Art. 3, H.VIII

(11) Care shall be taken in warfare to protect and preserve the natural environment. It is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment and thereby prejudice the health or survival of the population.

G.P.I Arts. 35.3 and 55

(12) The military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State party is prohibited. The term “environmental modification techniques” refers to any technique for changing—through the deliberate manipulation of natural processes—the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space.

ENMOD Arts. I and II

(13) Attacks against the natural environment by way of reprisals are prohibited for States party to Protocol I additional to the Geneva Conventions.

G.P.I Art. 55.2

(14) States are urged to enter into further agreements providing additional protection to the natural environment in times of armed conflict.

G.P.I Art. 56.6

(15) Works or installations containing dangerous forces, and cultural property shall be clearly marked and identified, in accordance with applicable international rules. Parties to an armed conflict are encouraged to mark and identify also works or installations where hazardous activities are being carried out, as well as sites which are essential to human health or the environment.

e.g., G.P.I Art. 56.7, H.CP. Art. 6

IV. IMPLEMENTATION AND DISSEMINATION

(16) States shall respect and ensure respect for the obligations under international law applicable in armed conflict, including the rules providing protection for the environment in times of armed conflict.

G.IV Art. 1, G.P.I Art. 1.1

(17) States shall disseminate these rules and make them known as widely as possible in their respective countries and include them in their programs of military and civil instruction.

H.IV.R Art. 1, G.IV Art. 144, G.P.I Art. 83, G.P.II Art. 19

(18) In the study, development, acquisition or adoption of a new weapon, means or method of warfare, States are under an obligation to determine whether its employment would, in some or all circumstances, be prohibited by applicable rules of international law, including those providing protection to the environment in times of armed conflict.

G.P.I Art. 36

(19) In the event of armed conflict, parties to such a conflict are encouraged to facilitate and protect the work of impartial organizations contributing to prevent or repair damage to the environment, pursuant to special agreements between the parties concerned or, as the case may be, the permission granted by one of them. Such work should be performed with due regard to the security interests of the parties concerned.

e.g., G.IV Art. 63.2, G.P.I Arts. 61-67

(20) In the event of breaches of rules of international humanitarian law protecting the environment, measures shall be taken to stop any such violation and to prevent further breaches. Military commanders are required to prevent and, where necessary, to suppress and to report to competent authorities breaches of these rules. In serious cases, offenders shall be brought to justice.

G.IV Arts. 146 and 147, G.P.I Arts. 86 and 87

**SOURCES OF INTERNATIONAL OBLIGATIONS
CONCERNING THE PROTECTION OF THE ENVIRONMENT
IN TIMES OF ARMED CONFLICT**

1. General principles of law and international customary law
2. International conventions

Main international treaties with rules on the protection of the environment in times of armed conflict:

Hague Convention (IV) respecting the Laws and Customs of War on Land, of 1907 (H.IV), and Regulations Respecting the Laws and Customs of War on Land (H.IV.R)

Hague Convention (VIII) relative to the Laying of Automatic Submarine Contact Mines, of 1907 (H. VIII)

Geneva Convention relative to the Protection of Civilian Persons in Time of War, of 1949 (GC.IV)

Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict, of 1954 (H.CP)

Convention on the Prohibition of Military or any Other Hostile Use of Environmental Modification Techniques, of 1976 (ENMOD)

Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), of 1977 (G.P.I)

Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), of 1977 (G.P.II)

Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, of 1980 (CW), with:

- Protocol on Prohibitions or Restrictions on the Use of Mines, Booby Traps and Other Devices (CW.P.II)

- Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (CW.P.III)

Source: U.N. Doc. A/49/323, Annex (1994)