Chapter XVII

International Environmental Law Considerations During Military Operations Other Than War

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I. INTRODUCTION

S. forces are increasingly being tasked to conduct military operations other than war. Military operations other than war include a very broad range of missions, from nonconsensual situations, such as peace enforcement, which may include combat, to operations under consensual circumstances such as humanitarian assistance and disaster relief. At the same time, environmental awareness and concern for protection and conservation of the environment is developing at all levels, from national leaders to citizens, from commanders to soldiers. It is therefore not surprising that discussion and debate of the relationship between international environmental law and military operations other than war is occurring. This paper will briefly discuss existing international environmental law principles, comment on emerging principles, and then relate the discussion to military operations other than war.

II. CUSTOMARY PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW

Overview

While numerous treaties exist regarding environmental matters between nations, most address narrow regional, and often bilateral issues, and do not have universal application. There are, however, a few principles having global application. The primary principle of international environmental law is the duty not to cause significant environmental damage to other States and areas beyond national jurisdiction. This principle is accepted as customary international law. Growing out of this central principle of international environmental law are several corollary principles.

Central Principle - Duty Not to Damage Other States and Areas Beyond National Jurisdiction.

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Principle 21 of the Declaration of the United Nations Conference on the Human Environment sets forth this basic principle:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

The principle is also expressed in numerous treaties,² found in international case law,³ and has been adopted in the Foreign Relations Law of the United States Restatement of the Law Third.⁴

The principle does not establish a duty to protect the environment, but instead establishes a duty not to damage another State's environment or the environment beyond the limits of any national jurisdiction. The principle affirms the right of a sovereign to exploit its own resources, although it does assume that "environmental policies" exist. The Restatement sets forth the rule by stating:

A State is obligated to take such measures as may be necessary, to the extent practicable under the circumstances, to ensure that activities within its jurisdiction or control (a)conform to generally accepted international rules and standards for the prevention, reduction, and control of injury to the environment of another State or of areas beyond the limits of national jurisdiction; and (b) are conducted so as not to cause significant injury to the environment of another State or of areas beyond the limits of national jurisdiction.⁵

The Restatement adds two important qualifiers to the principle. First, the State's obligation to not cause damage to another State's environment, or the environment of areas beyond national jurisdiction, is limited "to the extent practicable under the circumstances." Second, the obligation is not to cause "significant injury." Neither of these qualifiers are defined or developed in the international arena.

The inclusion of the obligation not to cause significant injury to areas beyond the limits of national jurisdiction, is important because it portends emerging principles of international environmental law to the effect that States have an affirmative obligation to protect the environment. In addition, it suggests that injury to the global environment is a concern of all States, another trend emerging in the law.

It is also significant that the principle applies to activities within a State's "jurisdiction and control." Certainly the actions of a State's armed forces are within its "control" and thus fall under the obligation to not cause significant injury to another State's environment, to the extent practicable under the circumstances. This obligation is consistent with principles found in the law of

armed conflict which disallow destruction of the environment when not justified by military necessity.⁶

Corollary Principles - Duty to Notify and to Take Measures to Prevent and Reduce Significant Environmental Damage or the Potential for Such Damage.

Related to the principle that a State is responsible not to cause significant environmental injury to other States and areas beyond national jurisdiction is the duty to inform States and competent global or regional international organizations of such damage. If a State becomes aware that an activity in its jurisdiction or under its control may cause significant injury to the environment of another State, it has a duty to notify all States threatened by the pollution and competent international organizations.⁷

Also growing out of the State's duty not to cause significant environmental injury is an obligation to take precautionary measures when an activity is contemplated that poses a substantial risk of significant environmental injury to an area beyond its border and to take measures to mitigate any such injury. Included is an obligation to take affirmative actions to mitigate the damage when its actions have significantly damaged areas beyond national borders. A similar duty to take affirmative action is unclear when significant damage takes place within another State. While there would be an obligation to prevent, reduce or terminate the activity, to the extent practicable under the circumstances, and duty to pay reparations, the obligation to actually assist the impacted State in environmental cleanup and response is subject to questions of sovereignty. A State cannot assist in mitigating environmental damage within another State's jurisdiction other than by agreement, and a State could not be compelled to agree to a course of action it found untenable.

Finally, in order to comply with these duties, a State will need to have some basic mechanism for environmental assessment of actions under its control in place. Without such mechanism, a State cannot assure prevention of significant damage to other States or areas beyond the limits of national jurisdiction which is preventable under the circumstances. Nor can a State provide notification of the potential for such damage to other States and competent international organizations. The emerging duty to assess environmental impacts is discussed later in this paper.

Law of Armed Conflict Principles and Environmental Protection

The law of armed conflict seeks to prevent unnecessary suffering and destruction by controlling and mitigating the harmful effects of hostilities through minimum standards of protection to be accorded to combatants and to noncombatants and their property. Certain of the principles of the law of armed

conflict may also shield the environment from wanton destruction during international armed conflict.¹⁰

The underlying principle is set forth in Article 22 of the Regulations annexed to the 1907 Hague Convention Respecting the Laws and Customs of War on Land. Article 22 states that "The right of belligerents to adopt means of injuring the enemy is not unlimited." Article 23 of the Regulations then prohibits the use of poison or poisoned weapons. That article also prohibits the destruction of property unless such destruction is demanded by the necessities of war. The Geneva Conventions reiterate these principles and make extensive destruction not justified by military necessity a grave breach of international law.

The 1977 Protocol I Additional to the 1949 Geneva Conventions Relating to the Protection of Victims of International Armed Conflicts¹⁴ explicitly addresses protection of the natural environment in Articles 35 and 55. Article 55 also links human health and survival to the environment. Article 55—Protection of the Natural Environment, states:

- 1. Care shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health or survival of the population.
- 2. Attacks against the natural environment by way of reprisals are prohibited.

Although this provision of Additional Protocol I is not accepted as customary international law, its linkage of human health and protection of the environment is significant as it contributes to a trend connecting human health, human rights and protection of the environment. This trend moves international environmental law away from its early foundation of merely obligating States to protect against injury to other States, towards a broader obligation to protect the environment in general.

Protocol III of the Convention on Prohibition or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects also contains a provision which protects the natural environment. Article 2 of Protocol III, entitled "Protection of civilians and civilian objects," prohibits the use of incendiary weapons to attack forests or other kinds of plant cover unless they are being used to conceal or camouflage combatants or other military objectives, or are themselves military objectives. Like some provisions of Additional Protocol I, Protocol III of the Conventional Weapons Convention is not accepted as customary international law.

III. EMERGING PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW

Overview

International environmental law is emerging and will continue to emerge rapidly. The impetus for rapid development includes growing scientific understanding of the interdependence of ecosystems, and the recognition that the survival of entire ecosystems are being threatened by population growth and ever increasing demands for land and natural resources. Against this backdrop of growing scientific understanding, the relationship between national security interests in a stable and self-sustaining world order and environmental degradation is being debated and evaluated. In addition, human rights law has begun to explore and develop the relationship between human rights and the right to an environment meeting the needs of basic human development. While its foundation rests in traditional bilateral and multilateral treaties addressing specific regional resource issues, its trend is to go beyond issues of bilateral or multilateral State conflict, towards principles that protect the environment in a global manner, towards the formation of obligations erga omnes. Obligations erga omnes are international norms which the global community of nations recognize a common interest in protecting and enforcing, such as the protection of basic human rights. The central underlying principle of these emerging duties is the concept that natural areas of outstanding universal value from the scientific, conservation, or aesthetic point of view, while under the sovereign control of one particular State, are of global value and that all States have a duty to cooperate in the preservation and protection of these areas for this and future generations. At the most basic level, it is recognized that human survival depends on the preservation of a minimum environmental quality.

Duty to Protect and Conserve the Environment and Natural Resources

At present, international environmental law does not explicitly require a State to protect and conserve the environment nor its natural resources within its boundaries. While many States have entered treaties and have enacted national laws requiring them to protect and conserve the environment, or particular parts of the environment, there is not an underlying principle of international law requiring such protection and conservation.

However, a general duty to protect and conserve the environment and natural resources is beginning to emerge. It can be detected in the growth of national laws protecting the environment, ¹⁷ in the declarations and nonbinding resolutions of international organizations and conferences, ¹⁸ and in the proliferation of multilateral treaties protecting different aspects of the environment. ¹⁹

In regard to national laws, at least 40 nations now incorporate the right to environment in their law or constitutions. The term "right to environment" is

used to refer to the concept that a fundamental human right exists in maintaining a certain level of environmental quality. The level of protection provided by this "right to environment" is not well defined and ranges from an environment minimally able to support human life to an environment which is healthy and ecologically balanced. Almost all constitutions adopted or revised since 1970 include a right to environment. The right to environment places on the State an affirmative duty to protect the environment to some extent. 20 It must be reiterated that the minimum environmental quality acceptable is, at best, ill defined. In the United States, while no right to environment has been articulated, the number of Federal statutes designed to protect the environment has grown from 5 in 1970 to 47 in 1995. In addition, in accordance with the National Environmental Policy Act, Federal Agencies must consider the environmental impact of any major Federal action undertaken.²¹ Also indicative of the growing practice of States to assume a duty to protect the environment are the environmental principles enunciated by the members of the European Union. The members have agreed to the following principles of action: to preserve, protect, and improve the quality of the environment; to contribute to the protection of the health of individuals; and, to ensure a prudent and rational utilization of natural resources.²²

There is also a growing link between protection of human rights and the environment. This relationship is reflected in several international documents and in recent cases undertaken by the European Commission on Human Rights. The 1972 Stockholm Declaration suggests a "fundamental right" to "an environment of a quality that permits a life of dignity and well-being. In 1990, the U.N. Human Rights Commission adopted a resolution directly linking human rights to the preservation of the environment. The 1992 Rio Declaration on Environment and Development states that persons are "entitled" to a healthy and productive life in harmony with nature. The protection of the environment as a fundamental human right can be seen as one strand in the emerging duty to protect and conserve the environment and natural resources. This relationship, between the need to protect the environment at a minimum level and the protection and promotion of human rights, is still being explored and defined. It is interesting to note that, at the same time, the relationship between national security, global and regional stability, and the status of the environment is being discovered and debated.

There are also several international declarations and resolutions reflecting a duty to protect and conserve the environment. The Declaration of the United Nations Conference on the Environment states, in Principle 1:

Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.²⁷

Subsequently, in Principle 21, the Declaration concedes that environmental protection within a State is a sovereign right to be executed in accordance with its own environmental policies and that the State's only international obligation is to ensure that its activities do not cause damage to another State or to areas beyond its national jurisdiction.²⁸ As stated earlier, the allusion to national environmental policies is significant in this early international declaration on the environment.

The 1982 World Charter for Nature declares:

- 3. All areas of the earth, both land and sea, shall be subject to these principles of conservation; special protection shall be given to unique areas, to representative samples of all the different types of ecosystems and to the habitats of rare or endangered species.
- 14. The principles set forth in the present Charter shall be reflected in the law and practice of each State, as well as at the international level.
- 22. Taking fully into account the sovereignty of States over their natural resources, each State shall give effect to the provisions of the present Charter through its competent organs and in co-operation with other States.²⁹

The 1982 World Charter, while still conceding that each State has the sovereign right to manage natural resources under its jurisdiction, goes much further then the 1972 Stockholm Declaration by stating that the principles, including the principle of conservation, "shall be reflected" in national law and practice, as well as at the international level. Comparison of these two United Nations sponsored documents on the environment, set ten years apart, reflects the emergence of an obligation to protect the environment.

This emerging concept is also seen in treaty law. The most direct and leading example of the concept that a State has a duty to protect and conserve the environment in marine areas under its jurisdiction and control is found in the 1982 United Nations Convention on the Law of the Sea. Articles 192 and 193 of the Convention provide:

Article 192: States have the obligation to protect and preserve the marine environment.

Article 193: States have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment.³⁰

While only addressing the marine environment, the concept that a State has a duty to protect and conserve the environment is strongly stated in a document with wide acceptance in the international community. In regards to the marine environment, this duty to protect and conserve can also be found in the eight

Conventions and 14 Protocols of the United Nations Environmental Program regional sea program.³¹

The principle of conservation is also reflected in the Ramsar Convention on Conservation of Wetlands of International Importance, the UNESCO Convention on the Protection of the World Cultural and Natural Heritage, and the Treaty on the Conservation of Wild Migratory Species.³² In each, the international significance of natural resources, including wildlife, is recognized and the parties agree to protect and conserve for the benefit of mankind these resources through the application of national law and policy. These treaties are important in the development of an international obligation to protect the environment because they recognize and reinforce the principle that conservation of the environment and natural resources is of universal value. There are also numerous regional treaties where the parties agree to protect and conserve the environment and natural resources. Examples of these include: The Bern Convention on the Conservation of European Wildlife and Natural Habitats, 33 which recognizes that wild flora and fauna are a natural heritage which should be preserved for future generations; The ASEAN Convention on the Conservation of Nature and Natural Resources,³⁴ which recognizes the importance of natural resources for present and future generations and requires the parties to adopt, within the framework of national laws, conservation strategies and coordinate those strategies within a framework of conservation for the Region; and, The African Convention on the Conservation of Nature and Natural Resources, 35 in which the parties agree to adopt the necessary measures to ensure conservation, utilization and development of soil, water, flora and fauna resources in accordance with scientific principles and with due regard to the best interest of the people.

Certainly, the development of this general obligation to protect and conserve the environment will be subject to the "practicable under the circumstances" rule, just as the duty to not cause significant environmental damage to another State is subject to this qualification. Nonetheless, this developing duty expands the existing principle both in a geographic and qualitative sense. The emerging duty obligates the State to protect and conserve the environment within and without its boundaries through affirmative efforts and not just to avoid significant environmental damage.

Duty to Give Special Consideration to the Preservation of Endangered Species and Their Habitats

Along with the emerging duty to protect and conserve the environment in general, there is an increasing concern over preservation of endangered species and their habitats. Consideration for the protection of endangered species and their habitats can be seen as a special area of responsibility developing under international environmental law. States have demonstrated a strong and urgent

interest in cooperating in preserving these disappearing elements of earth's ecosystem, both on the global and regional level. With an estimated one species expiring per day and predictions of one species per hour by the year 2000, there is an urgency lent to preserving species and habitats that has and will continue to unite international efforts.³⁶

There has been a great proliferation of national laws providing special protection to endangered species and their habitats. The Endangered Species Act (ESA) of the United States is a leading and well developed example of this type of legislation.³⁷ The legislation sets forth a mandate that all Federal Agencies will protect and preserve endangered species and their habitats. The ESA places an extremely high value on preserving endangered species and applies to U.S. actions extraterritorially.³⁸ The U.S. Supreme Court has concluded that Congress' intent was to "halt and reverse the trend towards species extinction whatever the cost."³⁹

There is also special attention given to, and calls for additional protection and consideration of endangered species among international declarations and resolutions. While not binding, such declarations and resolutions reflect international concerns which, over time, may develop into international principles of customary law. The 1972 Stockholm Declaration on the Human Environment contains a rather bland declaration on the issue of endangered species:

Man has a special responsibility to safeguard and wisely manage the heritage of wildlife and its habitat which are gravely imperiled by a combination of adverse factors.⁴⁰

Ten years later, in the United Nations World Charter for Nature, the call for consideration and protection of endangered species has grown much stronger and more direct:

... special protection shall be given to unique areas, to representative samples of all the different types of ecosystems and to the habitats of rare or endangered species...⁴¹

In addition, The World Conservation Union and the Worldwide Fund for Nature, both well known, respected, and influential nongovernmental organizations, have emphasized the need to provide protection to endangered species and habitats. In this regard, the organizations cooperatively publish and widely distribute to governments and other organizations the Red Data Books which serve to list threatened and endangered species and to encourage efforts to preserve these vanishing portions of the global environment. The Red Data Books provide an excellent and necessary tool for States if they are to consider in their actions the preservation of endangered species and their habitats.

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The emerging international commitment to consider the protection of endangered species is also found in treaty law. Perhaps the leading example of this commitment is found in the Convention on International Trade in Endangered Species of Wild Fauna and Flora. 42 The contracting States agree that wild fauna and flora are an irreplaceable part of the natural systems of the earth, which must be protected for present and future generations. Further, the parties agree that international cooperation is essential to the protection of endangered species. The Ramsar Convention is another example of an international agreement of global application which addresses the need to protect endangered species and their habitats. 43

There are several regional treaties which address the duty of providing protection for endangered species and their habitats. The ASEAN Agreement is a leading example of a regional treaty specifically protecting endangered species. The parties agree to prohibit the taking of endangered species, to regulate trade in specimens and products of endangered species and to provide special protection for their habitats. 45

In addition, several treaties exist which are designed to protect individual species. ⁴⁶ The Convention on the Conservation of Polar Bears is an example of this type of treaty. The parties agree that a special responsibility and interest exists in protecting the Arctic region and the polar bear. ⁴⁷

In light of the proliferation of national laws, declarations and efforts of international organizations, and the growing body of treaty obligations to preserve endangered species and their habitats, it is fair to conclude that an international consensus is forming regarding a duty to give special consideration to preservation of endangered species and habitats. As with the emerging obligation to protect and conserve the environment, the exact extent and form of this obligation is still being explored and developed. This emerging obligation will likely be required only to the extent "practicable under the circumstances."

Duty to Preserve Properties of Natural Heritage

Similar to the emerging duty to preserve endangered species and their habitats is an emerging duty to identify and preserve natural areas of outstanding and universal scientific, conservation, or aesthetic value. These areas of natural heritage are akin to areas of cultural heritage which are already recognized as warranting special protection from the destructive forces of war.⁴⁸

The leading document regarding the concept that certain properties have a universal value which should be identified and cooperatively protected by all States for all future generations, is the World Cultural and Natural Heritage Convention. ⁴⁹ The 112 parties to the Convention declare that:

it is essential... to adopt new provisions in the form of a convention establishing an effective system of collective protection of the cultural and natural heritage of

outstanding universal value, organized on a permanent basis and in accordance with modern scientific methods.

Article 5 of the Convention sets forth the obligations of the State parties in regard to property and areas within their own jurisdiction, which possess special cultural and natural heritage. Among them are obligations to integrate the conservation of these properties into planning programs for their protection; and, to take the necessary measures to identify, protect, conserve, and rehabilitate properties of cultural and natural heritage. Article 6, paragraphs 1 and 3, set forth the obligations States undertake to protect and preserve these properties on an international level:

- 1. Whilst fully respecting the sovereignty of the States on whose territory the cultural and natural heritage mentioned in Articles 1 and 2 is situated, and without prejudice to property rights provided by national legislation, the States Parties to this Convention recognize that such heritage constitutes a world heritage for whose protection it is the duty of the international community as a whole to cooperate.
- 3. Each State Party to this Convention undertakes not to take any deliberate measures which might damage directly or indirectly the cultural and natural heritage referred to in Articles 1 and 2 situated on the territory of other States Parties to this Convention.

Article 6 affirmatively steps in the direction of establishing an international duty to not only cooperate in the protection of the "world heritage," but to positively avoid actions which might damage such properties.

The Convention goes on to establish a World Heritage List where items qualifying for protection are published. 332 items, including 75 natural sites, from 112 different nations are presently on the list.

Several other treaties also reflect the concept that certain areas of the global ecosystem have special significance to all nations and should be specially protected. The Ramsar Convention, previously discussed, is an example of a global treaty, structured around the precept that certain areas, (e.g., identified wetlands) have international value which all States share an interest in preserving.

As mentioned earlier, this emerging principle of special duty to protect items of natural heritage closely resembles, although it is not as developed as the customary law of armed conflict principle found in the 1954 Hague Convention on the Protection of Cultural Property in the Event of Armed Conflict. ⁵¹ The law of armed conflict principle prohibits the targeting of cultural property during armed conflict. Of course, the principle also requires a State not to make cultural property a legitimate target by using it for military purposes. Not surprisingly, some commentators on the law of armed conflict have suggested the principle of

protecting cultural property be extended to protect areas of environmental significance. 52

Duty to Assess the Environmental Impact of Actions

As discussed earlier, to the extent required to avoid unnecessary significant environmental damage to other States and areas beyond national borders, and to the extent necessary to provide notice of the potential for significant environmental damage, States should possess some mechanism of environmental assessment. In addition to this existing need for environmental assessment under customary international law, an affirmative State duty to assess the environmental impact of actions under their control is emerging. The concept can be found in national laws, international declarations, and treaties. Such a principle would seem a logical part or precursor to the emerging duty to protect and conserve the environment. Without an assessment of the environmental impact of an action, it is unclear how a State could comply with a duty to protect and conserve the environment. An environmental assessment would allow a State to choose actions which avoid or mitigate adverse impacts to the extent practicable under the circumstances.

The United States' National Environmental Policy Act (NEPA) and Presidential Executive Order (EO) 12114 are leading examples of the adoption of this concept by a State.⁵³ NEPA requires Federal Agencies "to the fullest extent possible" to integrate environmental concerns in the decision making-process, develop procedures and methods to ensure environmental concerns are given appropriate consideration, and prepare environmental impact statements on any major Federal action significantly affecting the quality of the human environment. NEPA also creates a right for public comment and judicial review of the analytical procedures. The ultimate goal is that the Federal Agency will make an informed decision which alleviates or mitigates adverse environmental impacts to the greatest degree possible. Presently, NEPA is not applied extraterritorially, with the exception of actions in the Antarctic.⁵⁴ However, EO 12114 requires NEPA-like analysis to be applied to major Federal actions that significantly affect the environment outside the geographic borders of the U.S., its territories and possessions. The EO does not call for public comment nor establish any judicial cause of action. In addition, it is careful to recognize and give regard to the foreign policy and national defense implications of requiring environmental assessments of U.S. actions beyond U.S. borders.

Other nations, as well as international bodies, have adopted this concept. For example, the European Union has included the requirement for environmental assessment in Council Directive 85/337. Article 2 of the Directive requires Members to establish measures to assess the impact of public or private projects which may have a significant effect on the environment.

The Organization for Economic Cooperation and Development calls for environmental assessments prior to projects potentially having significant effects on the environment in Principle 9 of its Declaration Concerning Environmental Policies. The United Nations Environment Program's Principles of Conduct recites the duty of environmental assessment in Principle 4. The World Bank has established formal environmental procedures for the screening of environmental impacts of proposed projects. 57

The concept can also be found in international treaties.⁵⁸ Once again, the 1982 LOS Convention provides the leading example in Article 206:

When States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of, or significant and harmful changes to, the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment...

The consideration of environmental impacts and assessment of those impacts when potentially significant is emerging as an international environmental obligation. Once again, this emerging obligation will likely be required only to the extent "practicable under the circumstances."

IV. APPLICATION OF INTERNATIONAL ENVIRONMENTAL LAW TO MILITARY OPERATIONS OTHER THAN WAR

Overview

In the post Cold War era, the world community, led by the major powers, has demonstrated an increasing willingness to respond to intra-State conflicts in order to protect human rights and alleviate suffering. This phenomenon can be attributed to the remission of the threat of global nuclear war, the increase in regional and intra-State conflicts resulting from the realignment of the Soviet Union, and the impact of global communications, in particular television. Armed forces are often tasked with these missions, given the rapidity in which they can successfully respond. In general, these missions have been labeled military operations other than war. At the same time that the armed forces are being assigned to perform these missions in foreign States, there is growing environmental awareness. This environmental awareness is fueled by both a greater understanding of the environment and the growing threats to its quality, and by the impact of global communication. Thus, it is appropriate and valuable to explore the environmental principles which should and do apply to these operations.

Military Operations Other Than War Defined

Military operations other than war (MOOTW) is defined as the use of military capabilities across the range of military operations, short of war.⁶⁰ Missions will

include peace enforcement, peacekeeping, counterdrug operations, noncombatant evacuation operations and humanitarian assistance and disaster relief. The definition of MOOTW encompasses a very broad range of missions, from missions which will be conducted in a nonconsensual environment, where combat is likely, to missions occurring in a consensual environment with little or no risk of combat. These MOOTW missions will generally occur in a foreign jurisdiction. Current or recent examples of MOOTW involving U.S. forces include: humanitarian assistance efforts in Iraq, Bosnia, Somalia and Rwanda; the mission to re-establish democracy in Haiti; and, response to refugee flow from Cuba.

Environmental Concerns Which May Arise During MOOTW

The range of environmental concerns which may arise during MOOTW are as varied and broad as the missions assigned. Each operation will raise specific environmental issues based on type, size, location and existing environmental factors. Environmental concerns which have been raised during recent MOOTW include transportation and disposal of hazardous waste produced during the operation, disposal of solid waste and sewage produced as a result of the operation, oil spill response and cleanup, and potential impact on endangered species habitat.

What Does Existing International Environmental Law Require of States Involved in MOOTW?

At a minimum, States involved in a MOOTW must, to the extent practicable under the circumstances, not cause significant injury to the environment of another State or of areas beyond the limits of their national jurisdiction, notify affected States if significant environmental damage has or will potentially occur, and take precautionary measures when there is a substantial risk of significant environmental damage. As noted earlier, the terms "to the extent practicable" and "significant injury" are not defined, nor is the term "precautionary measures" developed.

States involved in combat operations must also operate within the constraints of the law of armed conflict. This means that a 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.

What Does Emerging International Environmental Law Suggest Should be Required of States Involved in MOOTW?

During the planning of a MOOTW, consideration and assessment, to the extent practicable, should be given to environmental impacts, and in particular, significant adverse impacts. Such integration of environmental considerations will serve to provide planners with the ability to weigh the value of the operation against adverse environmental impacts and provide alternatives and ways to

mitigate the adverse impacts. U.S. agencies and forces are already under an obligation to complete such assessments in accordance with EO 12114. The Joint Staff has proposed that an Annex addressing environmental considerations be included in operational plans developed under the Joint Operations Planning and Execution System. Appendix 1 to the Annex would include an environmental assessment. It is not difficult to imagine the value, indeed the essential nature, of such an assessment. For example, including environmental considerations in the planning might result in location of a refugee camp away from an area of critical habitat or away from an area where water source contamination would be likely.

States undertaking a MOOTW, to the extent practicable, may also have a duty to consider the potential impacts of their actions on the preservation of endangered species and habitats. Direct coordination with the State where the operation is planned would be, perhaps, the most direct manner of considering the potential impacts of planned operations. As noted earlier, the World Conservation Union and the Worldwide Fund for Nature Red Data Books would also be sources of this information. This information would then be factored into the planning process. U.S. agencies and forces are already under a national obligation to protect endangered species in accordance with the ESA.

In addition to protecting endangered species and habitats to the extent practicable, States would have a duty to protect areas of natural heritage from adverse impacts related to their operations. Once again, the first step would be for the State to identify if any areas of natural heritage exist in the area of the operation. This would most likely be accomplished through coordination with the State involved or through the use of other international listings such as that associated with the World Cultural and Natural Heritage Convention. ⁶²

Finally, States involved in MOOTW would be under a general duty to protect and conserve the environment to the extent practicable under the circumstances. This affirmative obligation would go beyond the duty not to significantly damage the environment. For example, under the existing customary law of not causing significant damage to the environment, a State might be able to dispose of waste oil or solvent by dumping it on the ground; under the emerging duty to affirmatively protect the environment, such an action would be deemed inappropriate.

V. CONCLUSION

Existing international environmental law simply requires States to take necessary measures, to the extent practicable under the circumstances, to not cause significant damage to other States or to areas beyond national jurisdiction. In addition, the general principles of the law of armed conflict provide protection against unnecessary environmental damage during armed conflict.

The trend in international environmental law is towards the establishment of an affirmative obligation to protect and conserve the environment. In this regard, special consideration is given to the issues of endangered species and areas representing natural heritage. Along with this affirmative duty to protect is an obligation to consider environmental protection and conservation in planning and executing projects. Such obligations will continue to develop and are likely to apply to MOOTW to the extent practicable under the circumstances.

The further development and acceptance of the principle that environmental considerations should be included in national planning is an important step in the international acceptance of a duty to conserve and protect the environment. Planning will allow nations to consider environmental impacts, weigh alternatives, and make decisions which protect and conserve the environment to the extent practicable under the circumstances. It will encourage decisions and policies which balance competing interests, including the environment, and will contribute to the development of international norms relating to environmental protection.

It must be recognized that effective measures to protect and conserve the global environment will involve significant costs and policy trade offs. International legal norms designed to protect the environment, unless they are to be observed in the breach, must take into consideration economic, political and national security realities. A well considered, balanced and cost effective international environmental regime, however, could well serve important interests of the international community into the 21st Century.

The United States, in light of the National Environmental Policy Act, Executive Order 12114, the Endangered Species Act, and its global involvement, is a leading agent in the further development of these emerging principles.

Notes

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^{1.} Stockholm Declaration on the Human Environment, U.N. Doc. A/Conf. 48/14/Rev.1 (1973) [hereinafter Stockholm Declaration].

^{2.} Geneva Convention on Long-Range Transboundary Air Pollution, T.I.A.S. No. 10541 (1985) [hereinafter Geneva Convention on Air Pollution]; U.N. Convention on the Law of the Sea, 21 I.L.M. 1261 (1982) [hereinafter LOS Convention]; ASEAN Agreement on the Conservation of Nature and Natural Resources, reprinted in 15 Envt'l Pol. & L. 64 (1985) [hereinafter ASEAN Agreement on Conservation].

^{3.} Trail Smelter Case (Can. v. U.S.) 3 U.N.R.I.A.A. 1911 (1941); Corfu Channel Case (U.K. v. Alb.) Merits, 1949 I.C.J. Rep. 4 [hereinafter Corfu Channel Case].

^{4.} A.L.I. Restatement (Third) of the Foreign Relations Law of the United States §601 [hereinafter Restatement Third].

^{5.} Restatement Third, supra n. 4.

Hague Convention Respecting the Laws and Customs of War on Land with Annex of Regulations, Oct. 18, 1907, 36 Stat. 2277 [hereinafter Hague Convention IV].

^{7.} Restatement Third, supra n. 4, at Reporters' n. 4; see also, Vienna Convention on Early Notification of a Nuclear Accident, 25 I.L.M. 1370 (1986); ASEAN Agreement, supra n. 2; 1982 LOS Convention, supra n. 2; Geneva Convention

on Air Pollution, supra n. 2; Lake Lanoux Arbitration, 12 R. INTL ARB. AWARDS 281 (1987); and, Corfu Channel Case, supra. n. 3.

- 8. Restatement Third, supra n. 4, at Reporters' n. 4; see also, LOS Convention, supra n. 2, at Art. 199; see also Report of the International Law Commission on the Work of its Forty-Second Session, May 1-July 20, 1990, G.A.O.R. Supp. 10, A/45/10/(1990).
 - 9. Supra n. 4, at §602.
- 10. See, McNeill, Protection of the Environment in Times of Armed Conflict: Environmental Protection in Military Practice, 6 Hague Y.B. Int'l L. 79 (1993); but see, Verwey, Observations on the Legal Protection of the Environment in Times of International Armed Conflict, 7 Hague Y.B. Int'l 1. 35 (1994).
 - 11. Hague Convention IV, supra n. 6.
 - 12. Id.
- 13. Geneva Convention Relative to the Protection of Civilian Persons in Time of War, Aug. 12, 1949, 6 U.S.T. 3516 [hereinafter Geneva Convention IV].
- 14. Protocol I Additional to the 1949 Geneva Conventions Relating to the Protection of Victims of International Armed Conflicts, Dec. 12, 1977, 16 I.L.M. 1391 (1977).
- 15. Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III) of the 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, Apr. 10, 1981, 19 I.L.M. 1523 (1980).
 - 16. Id.
 - 17. Kiss & Shelton, International Environmental Law (1991) at 21-31.
- 18. Rio Declaration on Environment and Development, June 14, 1992, U.N. Doc. A/Conf. 151/5/Rev.1 (1992) [hereinafter Rio Declaration]; World Charter for Nature, 1982, U.N. Doc. A/37/51 (1982) [hereinafter World Charter for Nature]; Stockholm Declaration, *supra* n. 1.
- 19. Montreal Protocol on Substances that Deplete the Ozone Layer, 26 I.L.M. 1541 (1987); ASEAN Agreement, supra n. 2; UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage, 27 U.S.T. 37 [hereafter UNESCO Convention]; 1982 LOS Convention, supra n. 2; Convention on the Conservation of European Wildlife and Natural Habitats (Bern), U.K.T.S. 56 (1982) [hereinafter Bern Convention on Conservation]; Geneva Convention on Air Pollution, supra n. 2; Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington) 993 U.N.T.S. 243 (1973) [hereinafter CITES]; Convention on Wetlands of International Importance (Ramsar), 996 U.N.T.S. 245 (1971) [hereinafter Ramsar Convention on Wetlands].
 - 20. Supra n. 17.
 - 21. National Environmental Policy Act, 42 U.S.C. §4321 (1990).
 - 22. Single European Act, E.C. 12 (1986), 25 I.L.M. 506 (1986).
- 23. See, Desgagne, Integrating Environmental Values into the European Convention on Human Rights, 86 A.J.I.L. 263 (1995).
 - 24. Stockholm Declaration, supra n. 1 at Principle 1.
 - 25. U.N. Human Rights Commission, Res. 1990/41, Mar. 6, 1990.
 - 26. Rio Declaration, supra n. 18.
 - 27. Stockholm Declaration, supra n. 1.
 - 28. Id.
 - 29. World Charter for Nature, supra n. 18.
 - 30. LOS Convention, supra n. 2.
 - 31. Supra n. 17, at 166-168.
- 32. UNESCO Convention, supra n. 19; Convention on the Conservation of Migratory Species of Wild Animals (Bonn), 19 I.L.M. 15 (1980) [hereinafter Bonn Convention on Conservation]; Ramsar Convention on Wetlands, supra n. 19.
 - 33. Bern Convention on Conservation, supra n. 19.
 - 34. ASEAN Agreement on Conservation, supra n. 2.
- 35. African Convention on the Conservation of Nature and Natural Resources (Algiers), 68 Int'l Envt'l L. 968 (1969) [hereinafter African Convention on Conservation].
 - 36. Supra n. 17 at 239-304.
 - 37. Endangered Species Act, 16 U.S.C. §1531.
- 38. See, Defenders of Wildlife v. Lujan, 911 F. 2d 117 (8th Cir. 1990); see also, Joy, A Tennessee Snail Darter at Grafenwoehr? The Application of the Endangered Species Act to Military Actions Abroad, Army Lawyer 23 (December 1991).
 - 39. Tennessee Valley Authority v. Hill, 437 U.S. 153, 184 (1978).
 - 40. Stockholm Declaration, supra n. 1, at Principle 1.
 - 41. World Charter for Nature, supra n. 18, at Principle 3.
 - 42. CITES, supra n. 19.
 - 43. Ramsar Convention on Wetlands, supra n. 19.

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- 44. E.g., Protocol on the Conservation of Common Natural Resources (Khartoum), Int'l Envt'l L. 982:10.
- 45. ASEAN Agreement, supra n. 2.
- 46. Convention for the Conservation and Management of Vicuna (Lima), Int'l Envil L. 979:94; Agreement on the Conservation of Polar Bears (Oslo), 27 U.S.T.S. 3918 (1973); Convention for the Regulation of Whaling, 155 L.N.T.S. 349 (1931); Interim Convention on Conservation of North Pacific Fur Seals (Washington), 314 U.N.T.S. 105 (1911).
 - 47. Id.
- 48. Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict, May 14, 1954, [hereinafter Hague Convention on Cultural Property].
 - 49. UNESCO Convention, supra n. 19.
- 50. ASEAN Agreement, supra n. 2; Bern Convention on Conservation, supra n. 19; Ramsar Convention on Wetlands, supra n. 19; African Convention on Conservation, supra n. 35.
 - 51. Hague Convention on Cultural Property, supra n. 48.
 - 52. Oxman, Environmental Warfare (Environmental Terrorism During Wartime and Rules of War), 32 O.D.I.L. 1991.
 - 53. NEPA, 42 U.S.C. §4321.
 - 54. Environmental Defense Fund Inc. v. Massey, CA DC No. 91-5278, Jan. 29, 1993.
 - 55. O.E.C.D. Declaration on Environmental Policy (1974).
- 56. U.N.E.P. Principles of Conduct in the Field of the Environment for the Guidance of States in the Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States, 17 I.L.M. 1097 (1978).
 - 57. World Bank Operational Directive OD 4.0, Oct. 1989.
- 58. Convention Relating to the Status of the River Gambia, Natural Resources Water Sources, No. 134 ST/ES17/141 (1989); ASEAN Agreement, supra n. 2; 1982 LOS Convention, supra n. 2; Geneva Convention on Air Pollution, supra n. 19.
 - 59. RADM William D. Center, USN, address at the Smithsonian Institution (May 18, 1995).
- 60. U.S. Department of Defense, Chairman Joint Chiefs of Staff Instruction 3110.01, Joint Strategic Capabilities
- 61. U.S. Department of Defense, Chairman Joint Chiefs of Staff Memorandum 3122.03, Joint Operation Planning Execution System (U), Annex L, Environmental Considerations (Draft, June 13, 1995).
 - 62. UNESCO Convention, supra n. 19.