Foreword

The International Law Studies (the "Blue Book") series was inaugurated by the Naval War College in 1901 as a forum for essays, treatises, and articles that promote a broader understanding of international law. The eighty-second volume of this historic series, *The Law of War in the 21st Century: Weaponry and the Use of Force*, is a compilation of scholarly papers derived from the proceedings of a June 2005 colloquium hosted by the Naval War College.

The purpose of this colloquium was to examine international legal standards applicable to the use of force, as well as the development and employment of weapons systems in the 21st century. Participants came to Newport from more than 20 countries and included government officials, military commanders, representatives of nongovernmental organizations, esteemed international law scholars, and military and civilian lawyers. During the course of events, attendees grappled with vexing issues such as the suitability of principles developed for inter-State conflict to a global threat environment increasingly influenced by non-State actors. Undoubtedly, the ideas generated during the summer colloquium and revisited in this Blue Book volume will contribute substantially to the ongoing examination of the major legal challenges accompanying 21st-century armed conflict.

On behalf of the Secretary of the Navy, the Chief of Naval Operations, and the Commandant of the Marine Corps, I extend a warm thank you to Professor Charles Garraway, the 2004–2005 Stockton Professor of International Law, and Major Richard Jaques, USMC, under whose leadership this colloquium was organized. I also wish to thank the authors and editors for their invaluable contributions and for engendering a greater understanding of international law. Thanks also to the Lieber Society of the American Society of International Law and Roger Williams University's Ralph R. Papitto School of Law, gracious cosponsors of this colloquium. And, finally, a very special note of gratitude goes to the Naval War College Foundation and Israel Yearbook on Human Rights, whose tremendous support made this conference and, particularly, this "Blue Book" possible.

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The opinions shared in this paper are those of the author and do not necessarily reflect the views and opinions of the U.S. Naval War College, the Dept. of the Navy, or Dept. of Defense.

Introduction

The Naval War College hosts an annual conference to examine international law issues and developments that affect military operations, both in peacetime and during armed conflict. The 2001 conference examined the *Legal and Ethical Lessons of NATO's Kosovo Campaign*. In 2002, following the tragic events of 9/11, we looked at *International Law and the War on Terror*. In 2003, a broad spectrum of issues were analyzed in *Current Issues in International Law and Military Operations*, including, of course, a discussion of the initial events of Operation Iraqi Freedom, which had begun on March 20th of that year. In 2004 the work of the 2002 conference was continued in *Homeland Security & Combating Terrorism*.

By 2005, we determined that it was time to examine the manner in which rapid advances in the types and capabilities of weapons and the methods of warfare were changing how warfare will be conducted in the future, and the implications of that change for the law of armed conflict. The conference began with a discussion of the International Committee of the Red Cross's then just published *Customary International Humanitarian Law* study (hereinafter the Study). We were fortunate enough to have Jean-Marie Henckaerts, one of the authors, present an overview of the Study, which purports to be a "restatement of contemporary customary international law." A panel of equally distinguished scholars and government and military lawyers questioned both the methodology of the Study and certain of its conclusions, while acknowledging it was an indispensable resource. The scholarly articles contributed to this volume by Mr. Henckaerts and the panelists provide valuable insight into the Study.

Another important development is that participation by the United States in future conflicts is likely to be as one member of a coalition of nations, as was the case in Operations Allied Force, Desert Storm, Enduring Freedom, and Iraqi Freedom. The panel on coalition warfare addressed the implications and challenges of bringing together warfighters whose nations may have differing views on the content of customary law and are parties to different treaties.

Immediately following the conclusion of the conference, a Conference Summary was prepared and distributed to the participants. This excellent review summarized the remarks of the speakers and the discussion that followed. It has been incorporated into the Preface. I encourage you to read it.

The conference was cosponsored by the Lieber Society on the Law of Armed Conflict of the American Society of International Law and was organized under the

leadership of Professor Charles Garraway, the Naval War College's Charles H. Stockton Professor of International Law, and Major Richard Jaques, US Marine Corps, of the International Law Department. It was made possible with the support of the Naval War College Foundation and the Israel Yearbook on Human Rights. Without the dedicated efforts and support and assistance of these individuals and organizations, neither the conference nor this volume would have been possible.

I would particularly like to recognize and express my appreciation to Rear Admiral Joseph Strasser, Executive Director of the Naval War College Foundation, for the continuing contributions of the Foundation to our annual conferences and the publication of the "Blue Book" series that reflect the proceedings of those conferences. On the eve of Admiral Strasser's retirement as Executive Director of the Foundation, we extend to him our profound thanks, both for the Foundation's contributions and his own personal support of the International Law Department.

I also would like to extend my sincere thanks and gratitude to editors *extraordinaire*, Captains Jack Grunawalt and Ralph Thomas, USN JAGC (Ret.). Responsible for the "nuts and bolts" editing of these outstanding papers, Jack and Ralph devoted myriad hours to this project, assuring painstakingly and skillfully that this work would be the best-ever *International Law Studies* volume. Colonel Tony Helm, JAGC, US Army, Deputy Chairman, International Law Department, served as managing editor of this volume. His dedication and perseverance in communicating with contributing authors throughout the world, marshaling authors' papers, packaging the volume, and overseeing the complex publishing and distribution process also are deserving of special thanks. In short, this Department is truly indebted to these three professionals who worked so diligently to bring this Blue Book to its readers.

For over one hundred years the United States Naval War College has committed itself to combining a scholarly understanding of the laws of war with an appreciation for and insight into the perspective of the warfighter—the one who must apply those laws in the crucible of conflict on land, at sea and in the air. This conference and this "Blue Book" continue that tradition.

DENNIS L. MANDSAGER
Professor of Law & Chairman
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Preface

While planning this volume of the International Law Studies series, we concluded that an excellent conference summary prepared painstakingly by Captains Timothy Flynn and Stephen Sarnoski, both reserve officers in the Navy Judge Advocate General's Corps, would be a fitting preface for this book. Major Richard Jaques, USMC, who was the 2005 conference coordinator for the International Law Department, also played a key role in this compilation.

Thus, we offer the following edited summary as both a snapshot of the 2005 International Law Conference and an appropriate retrospective context from which the works in this volume flow. Of course, at the first mention of editing, it is fitting to thank and praise those who breathed life into this volume—Professor Emeritus and Captain Jack Grunawalt and Captain Ralph Thomas, both retired Navy Judge Advocates and long-time supporters of the International Law Department. Indeed, they made tidying up the text and scouring the footnotes of the authors' papers look easy, and it was plain to us from the start that they love their work just as much as we truly enjoy and love having them work side-by-side with us in the Department. I can think of no one else I'd rather entrust my own writings to than Jack and Ralph. They know the law, understand the dynamics of the annual conference, and have internalized the protocols and nuances of the legal writer's bible we refer to respectfully as "the other Bluebook." Indeed, but for their genuine sense of modesty, their names unquestionably should grace the spine of this volume of the *International Law Studies* series. Gentlemen . . . Bravo Zulu—well done. A hearty thank-you is also in order for several key members of the Naval War College Desktop Publishing Office. As Jack and Ralph brought this volume to life, Ms. Susan Meyer was personally responsible for its care and feeding—formatting, providing "camera-ready" copy, and otherwise completely packaging the volume for publication. It would be hard to find a more responsive, thorough, and dedicated professional than Ms. Meyer. Likewise, Ms. Meyer's boss, Mr. Jeremiah Lenihan, was instrumental in resolving ticklish formatting matters, and two superb proofreaders, Ms. Susan Farley and Ms. Angela Daughtry, whose eagle eyes caught every figurative uncrossed "t" and undotted "i," also were indispensable Blue Book contributors. Again, thanks to all at Desktop Publishing for helping deliver such a quality project to our distinguished readers.

Introduction

As alluded to above, as time passed and the dust of conference past settled, we believed it would be useful to recount salient themes and highlights—not just for historic value but as a basis for understanding and appreciating the fine works of this volume's contributors. For example, during the 2005 Conference, *The Law of War in the 21st Century: Weaponry and the Use of Force*, participants debated energetically the measure of importance and authority to be accorded the recently published International Committee of the Red Cross (ICRC) *Customary International Humanitarian Law* study. Attendees and panelists also pointed out the need for careful and timely legal review of weapons development programs to ensure their by-products ultimately would pass legal muster under international law. Another recurring general theme—undoubtedly a truism—was that the realities of today's substantially asymmetrical conflicts raise unique international law issues that demand serious examination. Participants also emphasized the importance of coalitions and stressed the need for a common methodology for conducting combined operations, particularly with regard to rules of engagement (ROE) and detainee treatment. Finally, the colloquium wrestled with an array of challenges emanating from technological advances that will affect future navies and require careful discussion and analysis today.

Keynote Address

In his keynote address, Professor David Kennedy observed initially that the aspirations of international humanitarian law proponents and the goals of those who practice the military arts are inextricably intertwined. He observed that evolving principles of the law of armed conflict have engendered an alliance between military and civilian practitioners and between warriors and their lawyers. Recognizing that conflict presents more than a set of easily recognizable legal problems, Professor Kennedy addressed the future of international humanitarian law by challenging the colloquium to answer several incisive questions. Do law of war principles differ depending upon the nature of a conflict? Does it matter whether the survival of a nation is at stake or a coalition of nations is simply enforcing a United Nations mandate to preserve or restore peace following a low-intensity conflict? If conflict presents something more than a complex set of legal problems resolved by application of a discrete set of principles and procedures, does application of the modern law of armed conflict also require moral judgments using a broader interpretive framework? Professor Kennedy concluded by inviting the conference attendees to

answer these and other questions, recognizing that "[l]aw doesn't provide the answers . . . we do."

Conference Panel I—Defining Customary International Humanitarian Law

Following Dr. Kennedy's presentation, Conference Panel I opened with a stimulating debate about the efficacy of the ICRC *Customary International Humanitarian Law* study. Mr. Jean-Marie Henckaerts, ICRC legal adviser and co-author of the study, explained that the study was commissioned in 1995 by the 26th International Conference of the Red Cross and the Red Crescent in Geneva, Switzerland. During the course of the study, members consulted extensively with 35 law of armed conflict experts, reviewed the practices of 47 States, and delved into ICRC archives covering more than 40 international and non-international armed conflicts. Study members adopted an inductive reasoning process, reviewing State practices and producing 161 rules, most of which address both international and non-international conflicts. Mr. Henckaerts also explained the principal reasons for embarking on a study aimed at defining principles reflective of customary international law: international humanitarian law treaties bind only those States that ratify them, and parties to the same conflict may be bound by different treaty obligations; treaties governing non-international armed conflict are not always well developed; and characterizing a conflict is required before determining which treaties or protocols apply. In fact, Mr. Henckaerts emphasized that while certain aspects of international humanitarian law exist in treaties, not all States are parties to such treaties and not all elements of international humanitarian law are codified in such treaties. Likewise, according to Mr. Henckaerts, not all current treaties reflect a normative framework for non-international conflicts.

Professor Tim McCormack, the Australian Red Cross Professor of International Humanitarian Law at Melbourne University and the Director of the Asia-Pacific Centre for Military Law in Australia, characterized the ICRC study as an invaluable primary source of information on the practice of States in international humanitarian law. He asserted, however, that criticism of the study was inevitable because any attempt to identify the content of customary international law is invariably controversial and because the authors of the study have relied on official documents which in some cases were drafted and tabled with no thought to their status as examples of State practice.

Mr. Joshua Dorosin, Assistant Legal Adviser for Political-Military Affairs in the U.S. State Department Office of the Legal Adviser, noted the ICRC study is an indispensable resource, but he also expressed concern over the methodology of formulating the rules in the study. In his view, the rules are not adequately analyzed

and do not reflect a separate consideration of State practice versus opinio juris. Indeed, in some parts of the study, there are very few references to State practice.

Former Charles H. Stockton Professor of International Law, Professor Yoram Dinstein from Tel Aviv University expressed grave concern over the ICRC study's reliance on numerous statements that have no bearing on the practice of States, which is the bedrock of customary international law. As examples, he referred to various reports submitted by rapporteurs to United Nations bodies and to comments made by persons not representing States. Professor Dinstein also observed that, although military Manuals are indeed a primary source of customary international law, at least two of the so-called manuals referred to in the study are not real manuals. He also highlighted a number of inconsistencies and errors in both the black-letter rules and commentary of the study.

In an afternoon session, Mr. Henckaerts noted that the ICRC study was not intended to be the last word on customary international humanitarian law. Instead, the study is where enlightened discussion about further development and clarification of the subject must begin. During ensuing general discussion, conference attendees emphasized that there is a clear distinction between State practice, as such, and customary international law. Likewise, Professor Dinstein stressed the need to distinguish between State practice and *opinio juris*, a distinction that, in his view, was not made adequately in the study. He also challenged the leap from treaty law to customary law and emphasized that, although treaties may stimulate custom, the evidence must be found in the practice of or vis-à-vis non-contracting Parties. Others also noted that the ICRC study cannot be viewed as evidence of a substantive body of customary international law merely because States have signed Additional Protocol I to the 1949 Geneva Conventions. In this regard, it was widely agreed that evidence of any State practice in support of the existence of customary international law must be formulated independently of the voluntarily assumed treaty obligations of signatory States.

Conference Panel II—Disseminating International Humanitarian Law

Conference Panel II focused on the public awareness of and appreciation for international humanitarian law. Commentators emphasized that the Red Cross and Red Crescent Societies (RCRC) were founded and operate on the fundamental principles of humanity, neutrality, and impartiality. In particular, Dr. Mohammed Al-Hadid, President, Jordanian National Red Crescent Society, emphasized that there is no religious connotation associated with either the Red Cross or the Red Crescent emblems. Both are meant to be purely humanitarian symbols. Dr. Hadid also voiced his support for the creation of a third additional protocol to the 1949

Geneva Conventions that would adopt a new emblem—the Red Crystal—to enhance the protection of victims and the status of humanitarian assistance, especially during armed conflict, where in recent years respect for protective emblems has eroded. This third protocol also would promote the universality of the ICRC movement and help overcome the objection of certain States to the use of the two traditional symbols.

Ms. Lucy Brown, Senior Adviser, International Humanitarian Law, American National Red Cross Society, emphasized the need to increase public awareness of and support for the principles of international humanitarian law, particularly among school age children and youth. Ms. Brown introduced the "Exploring Humanitarian Law" curriculum to the conference and noted that it is being piloted or implemented in the United States and 94 other countries. Ms. Brown observed that a necessary by-product of dissemination is the reinforcement of principles of peaceful coexistence and facilitation of a return to peace in the event of an armed conflict.

Mr. David Lloyd Roberts, MBE, and formerly of the ICRC addressed the efforts of the ICRC to bring international humanitarian law training to the armed forces. He cited the importance of the supporting role played by the ICRC and urged conference participants to ensure training is completed during peacetime because "[o]nce the fighting has started, it's too late." Mr. Roberts outlined certain potential obstacles to successful implementation of international humanitarian law training and noted the lack of support for international humanitarian law principles among some senior military personnel, skepticism concerning the effectiveness of training, and the difficulty of adapting such training to the realities and pressures of combat.

Conference Panel III—Modern Weaponry and Warfare

On a completely different tack and heading, Conference Panel III addressed issues associated with modern weaponry and warfare. Mr. Ed Cummings, Assistant Legal Adviser for Arms Control, Office of the Legal Adviser, US State Department, began by recounting the substantial development of conventional weapons principles over the past 100 years. Reminding the audience that weapons treaty negotiations necessarily occur in a political context, he reinforced the fact that the United States always seeks treaty consensus with an overriding goal of reducing human suffering during armed conflict. Mr. Cummings noted that the rules focused originally on the effect of weapons on combatants but that rules tend now to concentrate on effects on civilians. Mr. Cummings also explained that States are reluctant to be too technical when negotiating agreements because rapid technological advances may make definitions and descriptions of weapons obsolete shortly after agreements

are executed. On the other hand, he observed that advances in technology can improve the reliability of weapons and reduce casualty rates. Indeed, the US Department of Defense has directed that at least 99 percent of its submunitions produced detonate properly and has proposed an amendment to the treaty covering antivehicle mines that calls for inclusion of detection devices for such weapons.

Doctor Marie Jacobsson, Principal Legal Adviser on International Law to the Swedish Ministry for Foreign Affairs, discussed Sweden's compliance with Article 36 of Additional Protocol I to the Geneva Conventions. This article requires that a State party determine whether employment of a new weapon would be prohibited by Protocol I or any other rule of international law applicable to that State party. She averred that very few States complete weapons studies and that ICRC representatives have been discussing what the parameters for such studies should be. In 1974, it established a delegation to review conventional weapons, which factors humanitarian, human rights, and disarmament laws into its Article 36 studies. The delegation may set conditions on the development of weapons relating to primary, secondary, and indiscriminate effects, and occasionally it proposes alternative designs or limits the use of a weapon in military or law enforcement applications. In 2003, Sweden pledged to review whether international humanitarian law also should be considered when evaluating weapons for export. Dr. Jacobsson commented further that weapons reviews occasionally are stymied by the absence of a clear distinction between interstate armed conflict and operations such as peacekeeping.

Colonel Ken Watkin, Canadian Defense Forces Deputy Judge Advocate General/Operations, offered his views on whether certain legal principles developed for international armed conflict should apply equally to asymmetric warfare between States and non-State actors. Colonel Watkin framed the issue with two weapons in mind—chemical agents and expanding bullets. A large body of well-developed treaty law bars the use of chemical weapons in armed conflict, but not for law enforcement purposes. Colonel Watkin, however, argues that it may be more humane to use prohibited riot control agents to clear a cave in combat than to use a flame thrower or grenade for the same purpose. Certain chemical agents, such as malodorants, calmatives, and darts, though prohibited by treaty law, may offer non-lethal alternatives to deadly force in armed conflict. Colonel Watkin observed that expanding bullets were banned by the 1899 Hague Declaration. He queried, however, whether their use should be prohibited in all aspects of non-international armed conflict particularly where the military forces are executing a law enforcement function. If use by police in a domestic law enforcement context is considered humane, how is it inhumane to use such bullets for similar purposes in armed conflict?

Professor Mike Schmitt from the George C. Marshall European Center for Security Studies, Garmisch, Germany, opined that law and conflict are in a mutually affective relationship and mused how future military technology may affect the existence, application, and interpretation of the law of armed conflict. Professor Schmitt noted further that while a substantial number of treaties govern specific means and methods of warfare, future agreements may cover depleted uranium shells, computer network attacks, and space-based offensive operations. Indeed, in February 2005, the US Defense Advanced Research Projects Agency (DARPA) published a report listing likely future developments in US military technology and means, including detection and destruction of elusive surface targets, robust tactical networks, networked manned and unmanned systems, detection of underground structures, assured use of space, cognitive computing, and the bio-revolution. According to Professor Schmitt, developments of this nature will increase weapon precision, enhance command and control, render the battlespace more transparent, and promote use of autonomous unmanned attack platforms. In the context of the law of armed conflict, these developments also will increase the asymmetry between technologically advantaged and disadvantaged combatants. Professor Schmitt commented further that asymmetry disrupts the balance between military necessity and humanitarian concerns because the law does not operate equally for both sides. Thus, the disadvantaged combatant may resort to tactics prohibited under the law of armed conflict as a way to survive or prevail in battle, because legally permissible tactics likely will be futile. Such tactics may include fighting in civilian clothes, use of human shields and protected places, perfidy, marking mustering points with protected symbols of the ICRC, and resort to suicide bombers. Even if a technologically disadvantaged combatant does not disregard the law of armed conflict, the combatant may instead compensate for its disadvantage by defining military objectives broadly while undervaluing collateral damage. A technologically advantaged combatant may engage in effects-based operations rather than a serial destruction of the enemy's military force. During the question and answer session, Professor Schmitt asserted that many critics are "captured by technology" and have proposed that a State should reduce the asymmetry in armed conflict by foregoing use of advanced weapons.

Conference Panel IV—Coalition Warfare

Conference Panel IV tackled the timely and highly relevant topic of coalition warfare. Discussion began with comments by Brigadier General Charles Dunlap, Jr., USAF, Staff Judge Advocate, Headquarters, Air Combat Command, Langley Air Force Base, Virginia. General Dunlap noted that 21st century warfare has become

increasingly legalistic and complex, and that coalition warfare is no exception. He identified a number of challenges facing coalition partners, including differences in treaty obligations between and among coalition partners, disagreement over what constitutes customary international law, and differences in domestic implementing legislation. General Dunlap emphasized the importance of developing ROE for all coalition forces, but noted the obvious difficulty in achieving this goal, particularly with regard to the definition of self-defense and the meaning of hostile intent. He also cautioned that legal hurdles facing coalition forces, e.g., the inability of US forces to provide logistic support to its coalition partners absent an international agreement concerning reimbursement for costs, have important operational effects that cannot be ignored by military commanders. General Dunlap commented that creating a formal judge advocate general corps among coalition partners would be a positive initiative. He observed that when coalition partners deploy JAGs with their operational forces, coordination is facilitated and synergies result. The General emphasized, however, that military commanders must understand and internalize the proper role of their military legal advisers, instructing that "JAGs provide advice; commanders make decisions." General Dunlap concluded by warning conferees about the development of the phenomenon of "lawfare," which he described as the use of legal principles such as those applicable to the law of armed conflict to mischaracterize and undermine a State's actions. The General emphasized the importance of recognizing the practice of "lawfare," and encouraged the US and its coalition partners to meet lawfare activity head-on by actively and publicly providing their own legal analysis and justification for their actions.

Commander (CMDR) Dale Stephens of the Royal Australian Navy and liaison officer to the International Law Department, US Naval War College, echoed General Dunlap's comments concerning the importance of harmonizing ROE among coalition partners, and briefly summarized the process through which such ROE might be developed. CMDR Stephens warned against a purely formalistic approach to the development of coalition ROE, however, emphasizing that a more realistic approach is necessary. Among considerations pertinent to the development of coalition ROE, CMDR Stephens mentioned the importance of exercising "calibrated discretion on key operational law concepts," the value of the socializing experience achieved by participation in international coalition operations, and the need to globalize the training of military officers. Commander Stephens also identified a number of challenges to the effective development of common coalition ROE, including difficulties associated with translating the principles of the law of armed conflict into a State's domestic law and the pressing need to reinforce a commonality of language between international military lawyers and internal

government agencies. He capped his presentation with a quote from renowned author and Professor Louis Henkin, who once stated, "Almost all nations observe almost all principles of international law and almost all of their obligations almost all of the time."

Professor Charles Garraway, the 2004–2005 Charles H. Stockton Professor of International Law, US Naval War College, observed that in order for a multi-national coalition to work, the principles underlying the reason for coming together in the first place must be internally and externally consistent. Professor Garraway wisely commented that "[i]f there is no coalescing, there is no coalition." Professor Garraway instructed that the distinctiveness of each coalition partner need not be sacrificed in order achieve the goals of a successful coalition. Rather, he noted, the secret is to work around those distinctions. Professor Garraway also voiced concern about the apparent uncertainty regarding the US position on which principles of the law of armed conflict codified in Additional Protocol I are considered by the United States to reflect customary international law. Professor Garraway noted that the only existing US viewpoint, articulated in 1987 by Michael J. Matheson in *The United States Position on the Relation of Customary International Law to the 1977 Protocols Additional to the 1949 Geneva Conventions*, is no longer considered authoritative. Professor Garraway concluded his presentation by questioning whether the principles of human rights law, codified, for example, in the International Covenant of Civil and Political Rights, coexist with or are replaced by law of armed conflict principles during times of armed conflict. He asserted that the language of the various human rights conventions made it clear that the two legal regimes were intended to co-exist, despite the former being considered *lex generalis* and the latter *lex specialis*. Professor Garraway again noted a lack of clarity in the US stance on this matter and called for the United States to articulate its position more clearly.

Leslie Green, Professor Emeritus, University of Alberta, Canada, and former Charles H. Stockton Professor of International Law, picked up where Professor Garraway left off. He opined that the law of armed conflict prevails in situations of armed conflict where its principles deviate from those embraced by human rights law. Professor Green agreed with previous commentators, however, in calling for the development of common ROE and a mutual understanding of detainee operations. Professor Green also commented that it was time for a new treaty to replace the current NATO treaty. In his view, NATO has become an international organization that has transcended its original mandate. Professor Green argued that a new treaty would reflect more accurately NATO's current goals and aspirations and would be more representative of its current membership.

Conference Panel V—Future Navies

The penultimate conference panel generally considered the shape, methods, and means of future navies. RADM Robert Cox, Associate Director, Assessment Division, Office of the Chief of Naval Operations, tracked the progression of operational concepts in the ongoing transformation of the US Navy. In short, the Navy has evolved from the 1950s task group with specific missions, to the platform centric motif of the 1970s sporting multi-mission battle groups, to today's network centric force focused on defeating anti-access capabilities. According to RADM Cox, the future Navy must be joint, distributed, netted, persistent, surge-based, and surge-ready at home. Planning now occurs in minutes and hours rather than in days. Naval forces must be fully netted with required kinetic and non-kinetic capability, employable when directed by the Combatant Commander. In this context, sea basing does not consist only of technology. Sound doctrine is required to support the best use of forces in an effects-based environment. A move from a platform centric to a network centric environment has spawned legal challenges concerning employment of unmanned aerial vehicles, civilian mariners, frequency spectrum management, and the maritime commons while the United States strives to maintain a global naval presence through doctrinal and technological transformation.

Rear Admiral Raydon Gates of the Royal Australian Navy spoke of a future navy from the perspective of an operator in a mid-sized sea service. The trend for the future is projection of naval power at home and offshore, wherever Australia's interests are at stake. Australia's participation in coalition operations may reflect its national interests in the endeavor rather than common interests with other participants. Different national objectives reflect different national priorities, and military commanders must manage and harmonize these varied interests. Joint application of power is another trend. According to Admiral Gates, national military forces must not only operate jointly, but must work with other instruments of national power to assure a concerted defense effort. There will be a maritime element to future security undertakings, particularly in the littoral environment and primarily involving ROE development and targeting principles. Technological developments in weapons systems also will breed legal issues related, in particular, to the employment of missiles with artificial intelligence and development of corresponding ROE. Australian forces also will be required to balance the implementation of network centric warfare with existing technology and fiscal considerations. The Royal Australian Navy of the future will be smaller with no corresponding decrease in operational tempo, while its operating budget likely will not increase. On the other hand, future ships will feature more automation and be staffed with fewer

sailors. Greater use of contractors to support naval forces also will raise questions about whether to characterize contractor employees as combatants and appropriate methods of command and discipline.

Captain Jane Dalton, Assistant Judge Advocate General (Civil Law) and Commanding Officer, Naval Civil Law Support Activity, identified several aspects of future navies that require timely consideration by military lawyers. For example, employment of civilian mariners aboard naval ships in billets historically held by military members grows out of the Chief of Naval Operations' effort to move sailors from non-war fighting jobs to positions in direct support of fleet and combat operations. Likewise, the proposed Maritime Prepositioning Force cargo ship is a key part of the sea basing concept and will serve as a floating logistics center. Use of this ship in an "assault echelon" with combat forces and aircraft aboard raises the question of whether civilian mariners lawfully may manage engineering, navigation, and deck functions. Under international law, a warship must be "manned by a crew which is under regular armed forces discipline." Yet this phrase is undefined and calls into question whether the civilian crew must be subject to the same system of discipline as the military members. Whether civilian mariners could be considered unlawful combatants depends upon whether they take a direct or active part in hostilities. Would manning a weapons system or navigating a ship constitute direct activity? The Navy has developed a legislative proposal that includes Navy Reserve affiliation as a requirement for detailing civilian mariners to a warship. Unmanned airborne and undersea vehicles are already engaged in combat operations. Should they be treated like their manned counterparts? Is an unmanned undersea vehicle a "vessel" under international rules to prevent collisions at sea and are they required to comply with the innocent and transit passages regimes under the UN Convention on the Law of the Sea? Captain Dalton also noted unanswered questions related to hospital ships, which, while protected by law from capture or intentional attack, may not utilize encrypted communications. Changes in technology, domestic laws on privacy, and national communications policy, however, have prompted the Navy to insist that its two hospital ships deploy with secure communications systems in order to complete their humanitarian missions and comply with domestic law. Captain Dalton also observed that the Law of the Sea Convention supports Sea Power 21 and the Proliferation Security Initiative, and does not affect US intelligence-gathering activity. She would contend further that reference in the Convention to use of the high seas for other internationally lawful uses permits the United States to stage forward-deployed sea bases in the exclusive economic zones of coastal States. In any event, US sea basing will comport with the law, whether the operation involves humanitarian relief, UN sanctions enforcement, or international armed conflict.

Professor Doctor Wolff Heintschel von Heinegg of the University of Frankfurt-Oder and University of Augsburg, Germany, also a former Charles H. Stockton Professor of International Law at the US Naval War College, reviewed the current state of the law of naval warfare and its future challenges. Professor Heintschel von Heinegg noted first that current provisions regarding signal encryption and arming of hospital ships have been questioned and may be somewhat anachronistic. He noted further that deception rules and principles must be adjusted to reflect developments in the electronic environment. Similarly, according to Professor Heintschel von Heinegg, the concept of blockade remains settled, but must be distinguished from other methods of naval warfare, such as maritime interception, zones, and control of enemy commerce and operations under a UN Security Council resolution. Professor Heintschel von Heinegg asserted, as well, that maritime zones must be analyzed carefully to determine whether they are intended to be unlawful free fire zones or legal ruses of war. In short, a zone must have a legitimate purpose and must limit the area of naval warfare, protect neutral and innocent shipping, and subject neutral shipping and aviation to extensive control measures. In Professor Heintschel von Heinegg's view, future challenges to the law of naval warfare include excessive maritime claims to well-defined geographical areas, different interpretations of basic legal concepts, confusion about political aims and legal targets, and the impact of human rights law. Additionally, challenges regarding asymmetric actors are based on the increasing multitude of terrorists and non-State actors and other difficult questions have arisen as well from the indefatigable trend toward civilianizing positions within the armed forces. The technology gap in naval warfare also has raised the technological inferiority argument which has engendered a decreasing willingness to accept legal regulation of armed conflict. So, too, has the illusion of "clean warfare" been fostered by today's precision weaponry generated by advances in technology. According to Professor Heintschel von Heinegg, however, these various challenges to the law of naval warfare do not justify the various demands for new rules.

Conclusion

The foregoing, in a nutshell, was an overview of the 2005 International Law Department conference and a glimpse of the scintillating views, discussion, and opinions cloaked by the pages of this the 82d volume of the *International Law Studies* series. And if this conference and volume have taught us anything, it is that, as this world entered the Age of Aquarius, it changed in ways only the most forward thinkers could have imagined—speed-of-light communication available to the masses; transnational enemies who rely on this capability, as well as the ready

means to flit about the globe with relative ease; enemies who have waged with impunity a type of asymmetrical conflict that endures without regard for even the most basic tenets of international humanitarian law; the "lawfare" phenomenon that thrives on the Internet and other mass media and is used by our enemies daily to contest the legitimacy of well-intentioned acts or highlight isolated failings; prolific use of unmanned vehicles and precision weaponry; basing a fighting force at sea where coastal access is curtailed; and attempts to over-define ("codify" indirectly?) specific principles of customary international humanitarian law; and the growing practice of employing civilians in positions traditionally held by members of the military, to name a few. In the wake of these changes, those entrusted with the defense of their nations have struggled to adapt both technologically and operationally. It is perhaps for these reasons and in the face of other such challenges that Professor Kennedy recognized so poignantly that a firm and durable alliance has been struck between warriors and their lawyers.

In closing, then, it is our sincere desire that the following works of the preeminent authors who contributed so graciously to this volume will assist those seeking answers to today's hard questions and propagate thoughts and action that shape the future.