

TRANSCRIPT

PANEL TWO

INTERNATIONAL LAW APPLICABLE TO POTENTIAL USES OF NUCLEAR WEAPONS
IN UKRAINE AND BEYOND

Moderator: John Burroughs¹

Speakers: Major Kenneth Daniel Jones;² Prof. David Koplow;³ Prof. Charles Moxley;⁴ Colonel Theodore T. Richard⁵

This is a transcript of Panel Two of the 2023 conference “Nuclear Weapons and International Law: The Renewed Imperative in Light of the Ukraine War.” The speakers’ remarks have been edited for readability and clarity by the Georgetown Journal of International Law Digital Committee staff as well as by the speakers themselves.

JOHN BURROUGHS:

Welcome back everybody. My name is John Burroughs. I’m Senior Analyst at the New York City-based Lawyers Committee on Nuclear Policy. We have an excellent line-up of speakers for this panel on international law applicable to potential uses of nuclear weapons in Ukraine and beyond. You can read their bios, which are in the course materials, but I’ll introduce them briefly now.

Major Kenneth Daniel Jones is Judge Advocate, Office of the Judge Advocate General, U.S. Army. His previous postings included National Security Law Attorney at U.S. Strategic Command. He is the co-author of a recent article, [Lawful Uses of Nuclear Weapons](#) [co-authored with Lieutenant Colonel Jay Jackson and published on The Lieber Institute West Point website].

Professor David Koplow of the Georgetown University Law Center. He has also held several positions in government including Special Counsel for Arms Control to the General Counsel of the Department of Defense. He has published five books and numerous law review articles regarding treaty negotiation, verification, and implementation.

Charles Moxley, who we’ve been hearing from as the principal organizer of this conference this morning already. He is a professor at Fordham Law School, a practicing arbitrator, and a one-time litigator. His latest publication in the field is the forthcoming book, *Nuclear Weapons and International Law: Existential Risks of Nuclear War and Deterrence Through A Legal Lens*, scheduled for release in April of next year.

¹ Senior Analyst, Lawyers Committee on Nuclear Policy

² Judge Advocate, Office of the Judge Advocate General, U.S. Army

³ Professor, Georgetown University Law Center; Former Special Counsel for Arms Control to the General Counsel of the U.S. Department of Defense

⁴ Professor (Adj.), Fordham Law School; Principal, Moxley ADR LLC

⁵ United States Air Force Judge Advocate, Staff Judge Advocate at Space Operations Command

Finally, Colonel Theodore Richard, United States Air Force Judge Advocate, Staff Judge Advocate at Space Operations Command. He is author of the highly-informative article, [“Nuclear Weapons Targeting: Evolution of Law and U.S. Policy”](#) [in the 2016 issue of *Military Law Review*].

We’re first going to hear some remarks from Colonel Richard for a few minutes. Then we will go to a discussion format in which I will pose questions and we’ll hear what the panelists have to say about them. You are welcome to put questions in the Q&A box but I am not at all sure that we will get to them. Colonel Richard?

Introductory Remarks

COLONEL THEODORE T. RICHARD:

Thank you very much. I hope everyone can hear me. Let me just start off by pointing out that any views I’m expressing today are my own and they don’t reflect the official guidance or position of the Department of Defense, the Department of the Air Force, or the U.S. Government.

That being said, when Professor Biller contacted me to participate, I told him that I would participate and I thought it would be interesting if I did research on how Russia views international law regarding nuclear weapons, or just international law in general, to see if international law really could be a meaningful constraint on Russian behavior. The results of that are just a [short blog-length article](#) that will be published in all likelihood later today on Duke University’s LawFire website [“Can International Law Constrain Russian Behavior” published Nov. 8, 2023], so you can look for that there later today hopefully, or at least tomorrow.

But the results of my research were unfortunately negative. Russia, for those of you who’ve been paying attention in the news, openly mocks the West’s conception of a rules-based international order and rhetorically presents itself as the guardian of international law. The rules-based international order in one way or another has been an integral part of U.S. national security strategies for every administration going back at least twenty years in the United States. The big difference with Russia and their view of international law – it’s very different from that found in the West – they treat international law in a very instrumentalist way and they’ve done so back into the czarist era.

So, what I mean by that is, Russia – it has laws, it has legal formulas on the books, but it doesn’t see the government, the state itself, as being restrained by law. And it sees the law as basically a functional tool of the government to make sure that government interests are followed. So, the state can override formal rules based on its interests. In the Soviet era, this was in the advance of socialism, and more recently under Putin, it’s articulated as the need to defend traditional values and morality.

The other two prominent features of – not necessarily Russia’s international law take, but just its international relations overall – has to do with its arbitrary treatment of facts and paranoia. And so by that I mean it makes wide use of denial and deception to mask its behavior. So Russia doesn’t deny, for example, that formal international law rules exist. When it breaks

them, it generally just denies that it broke them or denies the underlying facts. So, it's not denying the existence of law in many cases, it just denies the conduct is what everybody has observed. And then the paranoia means that Russia just presumes that everybody else is cheating on these international agreements, and then cheats as well on them. It's a sort of anticipatory countermeasure or reprisal view, most famously with the biological weapons treaty, but it happens in other places, which is why verification mechanisms are so important in dealing with Russia.

When it comes to nuclear weapons, when Russia went to the International Court of Justice back in the 1990s as part of the [ICJ Advisory Opinion](#) case, Russia's statements were unequivocal about how nuclear weapons were legal, lawful, and international law did not prohibit their use during the conflict. So you have Russia's treatment of international law, and then you have its specific declaration that international law is not a prohibiting factor on their use. And then also, because we're talking about the Ukraine conflict here, it's probably important to highlight their declared nuclear doctrine about how important nuclear weapons are to protect sovereignty and territorial integrity of the state.

So from that aspect, I think from an international law standpoint, the most important – and I understand it's a precursory step to the nuclear use – but from an international law standpoint, I think it's critically important for the West to stand by and keep focusing on trying to establish or reestablish a rules-based international order. And it's important to call out the Russian deviations from international law, especially to reinforce the prohibition against the use of force to annex territory from a sovereign nation. That's basically what we would call a *jus cogens*, or a non-abridgable norm of international law.

So, again, there's more nuance to my research and the results of it, and you can see that. And this is not to say that the U.S. should ignore international law. I think that the U.S. has a very, very long tradition of unilateral adherence to international law. But I also think in the context of these weapons, which are incredibly destructive, as we've seen from the prior panelists today, I think it's just important to understand where international law can fit in and to keep that in mind, in context, and to understand that it's not going to be a meaningful constraint on Russian behavior. So that's just kind of what I wanted to point out as part of this. I think it's informative to how we, to where lawyers can fit in on this process. And so with that, I'll turn this back over to Professor Burroughs to go ahead with the questions and the discussion panel.

How Do the Requirements of International Law, Especially the Law of Armed Conflict, Apply to the Use of Nuclear Weapons?

JOHN BURROUGHS:

Ok, well thank you, Colonel Richard. There's a lot that you've said that is food for thought in discussion. So, in the course of the question and answer session, if any of the other panelists want to make reference to what Colonel Richard has said, feel free to do so. But I think, given constraints of time, we should move directly into the main subject of this panel, which is: "How do the requirements of international law, especially the law of armed conflict, apply to the

use of nuclear weapons?” So, I’m going to start out with one set of questions, and then I’ll have a second and possibly a third set of questions later in the discussion. So here’s the first set of questions:

The United States government accepts that the requirements of distinction and proportionality apply to use of nuclear weapons. What are the range of effects that must be taken into account in assessing compliance? Blast? Fire? Radiation? Escalation? Nuclear winter? Electromagnetic pulse? If the effects are uncontrollable or cannot be assessed, what are the implications for lawfulness of use? What is the level of assurance required for a lawyer to assess that a nuclear use would comply with the requirement of distinction and other law of armed conflict requirements?

Then as to proportionality, it is considered as in [Protocol I](#) (sort of the main modern law of war treaty), as falling under the umbrella of distinction. Is there a limit to the amount of collateral damage and injury that can be inflicted under the requirement of proportionality? I will note that in Protocol I such damage and injury is referred to as, quote, “incidental.” Finally, what is the nature of the military advantage taken into account in determining proportionality? Is it “concrete and direct,” as stated in Protocol I? Can effects on enemy morale, will, or overall economy be considered?

And, finally, if you wish to address this question, there’s another basic principle that is sort of a companion to distinction and proportionality, and that is necessity. So, does the requirement of necessity impose significant limitations?

Well, we’ve already heard from Colonel Richard. But nonetheless, since he wrote a major article on the very questions that I’m raising, I think we will start with you.

COLONEL THEODORE T. RICHARD:

Well, thank you. And there’s a lot to unpack with those questions, so I will try to keep my remarks fairly brief to give other panelists a chance to also speak on these topics. But I’ll just go kind of in the order of your questions.

In general, I think as lawyers dealing with the law of armed conflict, your job is to account for any reasonably foreseeable, tangible, and measurable effects. So, escalation, which was on your list of one of the things to look at, escalation, to me, is not a tangible or measurable effect, but it’s definitely something that commanders, lawyers, leaders, the policymakers, try to account for and deliver. I would just say that because it’s not something that’s tangible, it’s not something that would be part of the law of war calculation, but it is definitely something that I think everybody discusses and looks at in general as we’re dealing with this.

The uncontrollability of the effects is complicated. I would say that in all the literature on nuclear weapons and the law of war, the discussion usually goes back to the fact that when we look at uncontrollable, we look at the biological weapon example of something that’s agreed on as being uncontrollable or unassessable because they affect everybody the same and it gets out of hand. Whereas a nuclear blast – at least a singular blast – those effects are mostly anticipated and known, and those effects are reasonably foreseeable. So that does not make nuclear weapons

TRANSCRIPT

illegal by themselves. Now the widespread use, the large-scale nuclear exchange, it's going to have other effects, but part of that also has to do with the adversary's use of nuclear weapons against you, and so, that becomes a lot less measurable from a standpoint.

And I'd also point out that the 1968 U.S. declaration at the United Nations General Assembly recognized that the law of war and these principles don't really offer significant protection in the event of the catastrophic nuclear war, which is why in a lot of, in fact all the U.S. treaties on this, point out that nuclear war needs to be avoided, it cannot be won, it should not be fought. And so, we understand that those are the risks, but again, I don't think that the law provides a meaningful constraint on the use of force here.

And then you talked about the level of assurance under the principle of distinction. I would point out that "distinction" and "proportionality" both derive from the original rules for military necessity. Distinction is a mutual obligation. I know Professor Koplow has a lot of experience; he's recently written a widely-read article on space and what he calls [reverse distinction](#) ["Reverse Distinction: A U.S. Violation of the Law of Armed Conflict in Space" in volume 13 of the *Harvard Law School National Security Journal*]. But it is a mutual obligation distinction on the defender setting themselves off from the civilians. It derives from the Civil War concept when General Hood complained to General Sherman about hitting houses during the shelling of Atlanta and Sherman pointed out to Hood that his forces were just too close to the houses. That's where the principle of distinction, if you will, originates, at least in the modern mind.

For the attacking force, the enemy combatants and the military objectives need to be the object of the attack. We cannot attack the civilian population *per se*. And that's been the U.S. position since 1968. After 1968, the civilian targets on the targets lists have been declassified. They were removed. We no longer targeted civilian populations *per se* after that 1968 declaration.

And I can go on, but my instincts are to let other panelists talk, and to the extent we want to get back to the remaining questions we can do that. I just don't want to monopolize the time here. So I'll turn it over to another panelist if they want to either answer other questions or comment on anything I just said.

JOHN BURROUGHS:

Alright. Well, Major Jones, I'll turn to you next and I'll note that what Colonel Richard did *not* get to – and I understand this, there's a lot to deal with here – proportionality and nature of military advantage.

MAJOR KENNETH DANIEL JONES:

Absolutely. Thank you, John Burroughs. And just before I start, I'll give the standard disclaimer that my views are my own. They're not the views of the Department of Defense, the U.S. Army, or the Judge Advocate Generals' Corp.

So, looking at this, I think what would be helpful is a little bit of a structure for how a military attorney would fit in and evaluate this within the process. And, for that, taking a look at the targeting process as it exists in policy, and specifically the Air Force Manual and Army Manual. They break out the process into several steps, starting with guidance, and then, from that guidance, you look for targets. And I also would note that we need to break out distinction and proportionality into two separate bins. That's how Additional Protocol I treats them in Articles 48 and 57, and also how the DOD *Law of War Manual* treats them.

So, the first step in this targeting process would be looking for centers of gravity of the adversary. And the Department of Defense defines this [in [Joint Publication 3-0](#)] as “a source that provides moral/physical strength, freedom of action, or the will to act.” So, essentially, at the strategic level, this is looking for things that are key to the adversary's ability to fight, win, and wage warfare. For example, in the Russia-Ukraine conflict, some things that just might come to mind... Russia's long-range artillery that they've used to harass the people, maybe it's the Black Sea Fleet, although maybe it hasn't been as involved, or the ability to move troops to and from Ukraine. All of these things are somewhat important to Russia's ability to wage war there. If one of these targets is identified as meeting that commander's guidance, it would then be looked at for the first of the two principles of law of war that come up in the military targeting analysis, which would be “necessity,” which Colonel Richard briefly mentioned. And then, more importantly, “distinction,” which he also mentioned. And that evaluation would occur at this time. It would be weapons-agnostic at that point. Because the question isn't about the weapon. It's about what is it we're trying to accomplish and how does it fit within the greater scheme of war and the military necessity of trying to end the conflict as quickly as possible. So, I will note that this military necessity isn't imperative necessity, it's not absolute necessity. It's a lower level, it's a military necessity. Imperative necessity does exist in the law of armed conflict, but it's only in a very limited place.

And then “discrimination” or “distinction.” You know, this is the discussion about civilian targets being taken off after 1968. The questions are: “Is it a military object by its nature, location, purpose, or use? and “Does it make an effective contribution to military action by neutralizing this target?” And it's gotta be more than a mere hypothetical; it's gotta be concrete and direct. So, looking at that target, is this something that if we remove it from the battlefield – and there may be centers of gravity that are not lawful military targets. There may be things that would be very important, but it's civilian, such as overall economic activity or civilian morale, two things that you mentioned in the question that are not lawful targets.

And then, after the target passes this distinction test, and military necessity test, then it's placed into a target list and can be weaponized. And so, at this point, we get to what is considered for effects and what must be taken into account. And that's in the proportionality standard. And things like time, weather, civilian population, potential health hazards of the proposed target, the accuracy and effects of the weapon, all need to be considered at this point. So, with a conventional weapon, you have blast, fragmentation, and thermal effects. With a nuclear weapon, we heard some of the effects this morning. The primary effects are blast,

TRANSCRIPT

thermal, and radiation. And there are secondary effects as well. These get difficult to weigh for a few reasons. So, EMP effects you brought up. One, as discussed this morning is, at least from what was discussed, there is maybe not as much known. We know it can occur in one instance, but in the other instance there was no indication that it occurred. Also making this more difficult is that the effects have to be foreseeable and not remote, and they have to be more than mere inconvenience. And so, you know, as the world has changed – “What was a cellphone 25 years ago?” – as a means of convenience, maybe, has become more important. And then next, “Is it affected or is it not affected?” Those are all things, if it is affected, is the primary effect going to be more than mere inconvenience? Is the power grid going to go down? And if the power grid is going to go down, what about backup generators? These all become open questions that you heard about this morning, that make that a very difficult thing to weigh and evaluate.

Weighing whether the incidental damage is excessive under this proportionality framework with a proposed weapon is difficult also because they’re unlike subjects. One is something military commanders may be able to understand quite well: “Hey, if I take this asset off the battlefield, what happens?” But the other is more difficult because it becomes more subjective. “What’s incidental harm? What’s the suffering, and can it be numbers of people, or is it something else besides that?” But the advantage gained should relate back to that initial analysis of what it is and how important is it to intervene and the military necessity that it was given in the center of gravity analysis. Ultimately, this isn’t a lawyer’s call, it’s a commander’s call under the law of armed conflict based on good faith and the information available at the time, based on a reasonable military commander standard with the advice of counsel. And, so, military attorneys would be giving advice on that. And then in the case of nuclear weapons, as the 2022 Nuclear Posture Review states, the ultimate question would be whether the President concludes employment is necessary.

You brought up nuclear winter and escalation. I think these are important to address just because the law of armed conflict, as far as what results from a weapon use, is different from the aggregate effects of war. The aggregate effects of war are outlawed in the U.N. Charter with the *jus ad bellum* framework of whether or not to go to war. Whether, the total war in Ukraine – “Was it lawful, or it wasn’t?” and “Is President Putin going to pay the price for that?” That’s a U.N. Charter-level question. When we talk about what is attributable to a single strike, whether it be nuclear, whether it be conventional, we’ve got to look at that weapon’s effect, because ultimately the law of armed conflict applies to individuals and individual decisions. So, for instance, this soldier at Concord who fired the shot had to be responsible for verifying the target. “Was it a lawful target?” And verifying that the effects of that shot were direct, were not excessive to the military advantage gained. To add to that soldier’s decision-making and hold him responsible for the response and subsequent escalation in the total effects of the war would be an unworkable standard.

So, *if* it is something – escalation, nuclear winter, or things that... especially nuclear winter – further research is done and attributable. The question is, “Who is it attributable to” and “Is it attributable under the law of armed conflict?” Obviously that would change if you could

relate it back to a single weapon's use. But I do note that nuclear weapons have been tested over 2,000 times. One thousand of those, apparently, I learned this morning, by the U.S., with measurements done. So, that's something that seems to require aggregate effects outside the simple law of armed conflict.

JOHN BURROUGHS:

Ok, well thank you. We'll now go to Professor Moxley.

PROF. CHARLES MOXLEY:

Thank you. Thank you, John. Thank you, Colonel Richard, Major Jones. I'd like to start off, first of all, with a resounding note of agreement with Colonel Richard's point as to verification being necessary. I mean, I think that's obvious to all of us, that, particularly with reference to contemporary Russia, and we've heard it goes back to czarist times, there are issues as to whether there were not times during the Cold War when there was a level of cooperation, and there are issues whether the U.S. has taken actions which have raised questions – serious questions – about the U.S.'s compliance in some instances. But insofar as Russia and Russian policy and Russia's recent actions, there's no doubt we need verification. There's also, I mean I would join in the understanding that comes from Dr. Smith's comments and then Colonel Richard's comments on the security environment we're in. Does that, though, mean that international law is irrelevant and we should drop it? I take it, Colonel Richard, you told us, no, we have to keep working at it.

And I would add the comment that, if even only 10% of what we've heard as to effects – and I'm afraid that it's basically all true — there is a survival issue. And putting aside particular leaders, I don't know, maybe putting aside Vladimir Putin as the head of Russia now, but I just put the question out there, “Is there not the potential that we may find a time when there's a broader interest?” And I think that's what we're working for. I think Professor Biller has mentioned, “Let's get a dialogue going because nuclear weapons are front and center again, so we need discussions like this.” And I would posit that, at some point, in other nuclear weapons countries, there will be an understanding in some sense of survival because these risks are huge.

Moving on, John, I have the email you sent to panel members as to the particular questions, and I'm just going to try to hit them one by one and where I can remember, I'm going to try to build in a response to comments that Colonel Richard, you made, and Major Jones, you made.

Range of Effects that Must Be Considered

The first question you raised, John, is: What are the range of effects that must be taken into account in assessing the compliance of a nuclear weapons use with international law? I think this is one of the areas where opponents and defenders, critics and defenders of our current nuclear policies, see things differently.

TRANSCRIPT

My assertion is that *all* foreseeable non-speculative potential effects of a potential use of a weapon have to be considered in conducting the legal analysis. I'm looking at this from the U.S.' own perspective as to the requirements of the law of war and of the seriousness with which the U.S. states that law. There's the Department of Defense [Law of War Manual](#). For those of you who haven't looked at it, just Google it. It's over 1,200 pages, and there are also dozens of military manuals from the individual services. The U.S. gives advice to commanders in advance, to JAG officers and the military folks, on what uses of a nuclear weapon, if it came to that, would, in its view, be lawful.

So, my understanding is that all foreseeable non-speculative risks of a potential nuclear weapons use must be considered in the legal analysis—and that they include not only blast and fire, but also radioactive fallout and potential nuclear winter and EMP effects.

I would also say, for reasons I will get to, if there is time, that even potential nuclear responses by targets of a nuclear strike and potential escalation by targets must be considered in the legal analysis as to the lawfulness of the initial strike. I would acknowledge that this latter point is a little more speculative in terms of the legal theory.

But I take it as being not speculative that we have to consider all foreseeable non-speculative potential effects of a potential nuclear strike in considering the potential lawfulness of such a strike. I will give as support for this conclusion, for openers, the Joint Chiefs of Staff. They have issued a manual called [Joint Risk Analysis](#), telling us that you have to consider each potential risk when you're considering targeting.

There was also an insightful article [Uncertainty in the Law of Targeting: Towards a Cognitive Framework] in the [Harvard National Security Journal](#) by [Major Michael Schauss] and Professor Michael Schmitt, who is a major thought leader within the military and teaches at the U.S. Naval War College, and Major Michael Schauss, where they talk about doing risk analysis under *LOAC* concerning a military operation that's being considered, and what you have to consider in making the analysis. They conclude we have to do an assessment for each type of harm that we can identify. You have to really look at all foreseeable risks—and it's inadequate to say we're not going to consider certain foreseeable risks or don't have the information to quantify them and hence will ignore them.

Use of Weapons Whose Effects Cannot Be Controlled

The second question the moderator posed for us is, “If the effects of a nuclear weapons use are uncontrollable or cannot be assessed, what's the significance of that situation as concerns the lawfulness of such a weapons use?” I submit that, under *statements of the law of armed conflict* by the U.S. military in many military manuals, the following principle is clear, to the point of being unquestionable: that, in applying such legal requirements as the rules of distinction, proportionality, and necessity, and I'd include the legal prerequisites for lawful belligerent reprisals, if foreseeable non-speculative effects of the weapons use under consideration are not going to be controllable, if we're going to use a nuclear weapon and we

can't control the radioactive fallout or potential electromagnetic pulse or nuclear winter effects, it's unlawful under these rules to use the weapon.

As a couple of examples: the [*Air Force Manual on International Law*](#) describes indiscriminate weapons as those, "that are incapable of being controlled, through design or function," such that they "cannot, with any degree of certainty, be directed at military objectives."

The [*Naval Commander's Handbook*](#) defines the rule of distinction as prohibiting the use of a weapon that "cannot be directed at a specific military objective," but then goes on to tell us that, under the rule of distinction, we also have to consider, and we have a prohibition of using, weapons whose *effects* "cannot be limited as required by the law of armed conflict."

The [*Naval Commander Handbook*](#) gives chemical and biological as examples of "attacks that employ a method or means of combat, the effects of which cannot be limited as required by the law of armed conflict."

If I am interpreting these statements of the requirements of law of armed conflict correctly that it's unlawful to use weapons whose effects are uncontrollable, doesn't that answer our overall question? Is the uncontrollability of the effects of nuclear weapons really or reasonably in dispute? My sense is that it's indisputable that the effects of nuclear weapons are uncontrollable.

Legal Limits on Collateral Effects

The moderator's third question to the members of this panel is whether there is a limit on the amount of collateral damage and injury that can be lawful under the rule of proportionality. We all know that the rule of proportionality requires that the collateral effects of the use of a weapon can't be disproportionate to the specific and intended military benefit. Here, there's a legitimate legal issue that has been argued in the literature and before the ICJ.

Specifically, does the rule of proportionality only involve a balance of such considerations, so that a really important military target could justify an extreme level of impact on civilians—or is there an objective limit? The [*ICRC*](#), the International Committee of the Red Cross, and other statements in the literature say that yes, there's an objective limit on the permissible extent of collateral effects— that, if the use of the weapon in question would involve huge levels of collateral effects, you can't use the weapon, although others argue that it's merely a matter of proportionality between military benefit and collateral effects. My view is there's an objective limit, but I recognize there's disagreement on this issue.

Relevant Nature of Military Advantage under Proportionality Analysis

The next question the moderator asked us to address was, "What's the nature of the military advantage that needs to be considered in conducting the proportionality analysis?" I think that was already covered, and I agree with one of the statements that was made that you need to balance the potential concrete and direct military benefits against the potential collateral

effects. You're kind of weighing foreseeable collateral effects against foreseeable specific military benefits.

Rule of Necessity and the Conventional Weapons Alternative

The next question the moderator gave us was, "Does the rule of necessity impose significant limitations on what levels of force may lawfully be used under LOAC?" My understanding is that it does. I don't know that this is controversial, except in one regard.

The rule of necessity basically says, among other things, that we shouldn't use a level of weaponry or destructiveness beyond that which is necessary to address the military target at issue. That has a built-in leeway, depending on our capabilities. I think this was alluded to in the first panel in one of the slides Dr. Robock presented. If we go back to the Cold War or before, our bombs, if we had had to drop them, might have hit as much as a mile from the target. But now we are capable of great accuracy, with a high likelihood that we'll hit the desired target. This greatly reduces the firepower that you need. It means we can use much lower levels of firepower for any particular target because we can expect to hit it with great accuracy.

This means that, with multiple conventional weapons delivered with high accuracy—putting aside hard and deeply buried targets, which are a different discussion—we can use conventional weapons for a large number of types of targets for which we might have considered nuclear weapons in the past. I don't think this is controversial. This is the conventional weapons alternative. To the extent that we can address targets with conventional weapons, our use of nuclear weapons against such targets would be unlawful under the rule of necessity.

Sometimes it's said to be part of the rule of necessity that it includes a qualifier to the effect that we only have to use the lower level of force or type of weapon if doing so enables us to address the target with a minimum expense of time, life, and physical resources. This suggests that, if it's really going to be advantageous in such respects, we can use the nuclear weapon, even if a conventional weapon could have addressed the target in question. I understand that argument. I don't think there's deep support in the law for such a qualification on the rule of necessity. To my understanding, the U.S. did not assert such a qualification on the rule of necessity in its arguments to the ICJ in the Nuclear Weapons Advisory case.

JOHN BURROUGHS:

Thank you, Charlie. Let's stop there. Let's move on to Professor Koplow. I want to make just one comment. The requirement of proportionality is crucial, not only with respect to nuclear operations, but with respect to military operations. We have seen in U.S. military operations, in conflict in Iraq and also in counterinsurgency operations, that there are almost sort of like algorithms for what is too much in the way of civilian casualties when you're attacking a specific target or even an individual. These are sort of macabre calculations, but they are being carried out, and we're now seeing them in the case of Israeli military operations in Gaza, where the claim is being made that quite a large number of civilian casualties are justified if there's a worthwhile

Hamas military target. So these are very disturbing sorts of calculations, at least to me, when we're talking about tens or hundreds of civilian casualties. If you're talking about nuclear weapons, you're getting into tens of thousands or hundreds of thousands or even millions of collateral casualties. So I think it's important to underline that there are limits to what the law of armed conflict permits. They're just inherent in the very nature of the idea of subjecting war to law. For instance, *Protocol I* includes the Martens Clause, which refers to principles of humanity and dictates of the public conscience. In its [July 8, 1996] Advisory Opinion, the ICJ, the International Court of Justice, referred to elementary considerations of humanity.

My basic message is proportionality cannot be allowed to sort of swallow the whole idea of limiting warfare. With that, I turn it over to Professor Koplow.

PROF. DAVID KOPLOW:

Well, thank you, John. I'm now remembering that when you started this panel, you set before us an array of questions that was so rich and so complicated and so lengthy that you in effect identified the syllabus for a semester course in the law of armed conflict. And we've only got an hour and a half to address it. Then you said that you had a second round of questions and possibly a third round of questions, and I just don't know how many rabbit holes the five of us are going to be allowed to tumble down. So let me start coming at it in a slightly different way by identifying what I think of as some of the cross-cutting principles or observations.

The first point is that nuclear weapons are fundamentally weapons. They are unusual weapons of extraordinary power and a wide array of different types of effects. So you have to think about them carefully. But they are weapons, and therefore all the law of weapons applies to them. And the task then is just how does it apply? How do we go about the case-by-case steps? But the beginning point is these are weapons, and therefore presumptively all weapons law applies.

The second point, along with that, is that the law of armed conflict, the *jus in bello*, is just insufficient. It's underdeveloped. It is an area of international law that has not benefited from sufficient elaboration. There are treaties, some of which are over 100 years old, some of which are over 50 years old, some of which have been joined by some countries and not by others. Those treaties have, for the most part, passed into customary international law and therefore are binding even on countries such as the U.S. that have not joined all of them. But the fact is, there's just not enough density of law to give us sufficient guidance on this. That's a common failure of international law in general. It's a particular failure and a particularly costly failure in this area, in part because, blessedly, we don't have much state practice dealing with nuclear weapons use. Therefore we don't have the texture of sufficient legal infrastructure to be able to address many of these points. Therefore, it's appropriate that we are scratching our heads in trying to figure out how should the generally well-accepted principles apply to the particular instances that we're dealing with.

The next point that I wanted to make concerns the extent of the coverage of the law of armed conflict. By design, this law applies whether we are the victims of aggression or whether

TRANSCRIPT

we are the aggressors. The rules apply whether we are acting in offense or in defense, and the law applies whether our adversary follows the rules or not. The adherence to the rule of law, the *jus in bello*, is about us and our postures, our attitudes, our character, independent of whether the adversary is following them as well. So that sets the context.

The one point that I'd like to pursue in more detail is the point that you were addressing about proportionality. I agree this is an impossibly difficult problem in the ordinary context, and it is made even more difficult in the context of the mass casualties that nuclear weapons might be expected to cause. From my perspective, in principle, the proportionality calculation is something that just cannot be done. I think there is no moral way in which human beings can assess the value of this human life compared to the value of the next human life. I think in any other context, it would be immediately apparent that one could not say in a meaningful, moral way, that it is or is not worth it to kill X number of people in order to save Y number of people. In order to make that calculation reasonable, you have to be able to make a judgment about the value of a human life compared to the value of another human life. And in every moral and religious code, I think that's something that just cannot be done, that human beings are not empowered, not capable of making that kind of assessment. Nonetheless, we do it. We have to do it. We do it all the time in armed conflict. Every use of military force involves a proportionality calculation. It requires us to be able to say it is or is not worth it to kill three civilians in order to kill six terrorists. It is or is not worth it to blow up this bridge in order to stop the enemy from advancing, even if it kills X civilians. I find this deeply troubling, that we morally cannot make that decision, and yet we are required to do so, and we do so. I think the same thing applies to nuclear weapons, as to all other weapons because, as I said in the beginning, nuclear weapons are fundamentally weapons. They're different weapons, harder to assess, but the legal standard is exactly the same. Leave it there for now.

JOHN BURROUGHS:

Okay, thank you David. Wise and simulating points. I wonder if Colonel Richard and Major Jones want, first of all, just to respond to any of the comments that have been made so far.

MAJOR KENNETH DANIEL JONES:

I can certainly respond. Thank you, Dr. Burroughs. I think Professor Moxley makes some great points there about the Additional Protocol I and the U.S. DOD [Law of War Manual](#) prohibiting indiscriminate weapons. However, it doesn't do so to the extent that he argues, and I would argue that if we take Professor Koplow's point that these are weapons and if we apply that rule to every weapon the same, we're going to end up with an unworkable calculus where every weapon is not subject to control in the manner he argues. An indiscriminate weapon, according to the ICRC's commentary on Additional Protocol I, they referenced the V2 rocket from World War II that the Germans, the early ones, couldn't be aimed. They kind of just went forward, and you didn't know where it was going; you couldn't have a target in mind. The same simple principle could be applied to a hand grenade. It's a small blast, but any blast weapon is going to

have fragmentation, and it's not going to be entirely predictable where that goes. There are stories of hand grenades or small bombs going off, and someone right next to it is okay, but someone 15 feet away gets injured. I'm sure that someone with a great physics mind could calculate that out, but generally, the military handles this by drawing circles of possible effects, and those effects, if you're within this ring, you're likely to be harmed or possibly harmed. Not to get into whether or not that's good or bad, but rather just that, food for thought here, if we were to say that same inherently discriminant weapon standard applies because there's potential harm that goes beyond just the target, we would eviscerate this proportionality analysis altogether. I think the [UK manual](#) [*Joint Service Publication 383 Manual of The Law of Armed Conflict*] says it well, that the incidental damage that occurs must “be controlled by the principle of proportionality.” All the weapons that we've provided to Ukraine are going to have this possibility of incidental harm, and I think, as Professor Koplow says, it's a moral quandary. One, that must occur to make a decision as to what is worth more in a specific instance. The same thing applies to a nuclear weapon. Now, the blast is so much bigger; the circle is going to be that much bigger; the incidental harm is that much bigger. But at the end of the day, the target itself is still discriminated against; it still comes off a target list and can be evaluated by whether or not it's going to be hit. I realize that may not seem like a satisfactory answer, but I do believe that is where the law of armed conflict is, even if maybe it's not where some think it should be.

JOHN BURROUGHS:

Okay, thank you. Colonel Richard.

COLONEL THEODORE T. RICHARD:

Yes, thanks. There's a lot to unpack, and I don't want to nitpick everything everybody has said, but I'll say that I appreciate everybody's comments; they're very thought-provoking. I'll go to Professor Moxley's statement about escalation first, and I tried to be clear in my comments that I am not saying escalation isn't something that should be accounted for. I think it very much should be accounted for. My point is that I think it's accounted for in the policymaking decision and in the commander's decision. If we move that into the legal realm, as a lawyer, it becomes something that is, to me, really grossly speculative and really outside the realm of what we can analyze based on the facts and the law. To the degree that I've ever advised on targeting, I want to be able to tell a commander when I'm explaining the law, when I am saying what the law requires based on tangible effects and try to resist people from bringing speculative effects that they think will justify the use of the weapon into the legal analysis. I keep the legal discussion to the actual targetable effects. That's important because sometimes people want to strike something that wouldn't meet the definition of a valid target simply because of the effect they think it would generate. This is the whole controversy, in my opinion, with effects-based targeting that I believe General Mattis, later Secretary of Defense, articulated as he was [critiquing effects-based targeting](#). As Secretary of Defense, he started trying to get people to get away from using mathematics as a way to do proportionality. Professor Koplow makes a terrific point on

TRANSCRIPT

proportionality and the morality involved with it. I think that also concerned General Mattis because as DOD made these mathematical equations, it almost took the moral decision out of the equation, and I think there was a lot of resistance to that, justifiably so. Proportionality is a very troubling decision; it's a very important decision. Ultimately, these risks and these secondary effects may not be measurable. Yes, as lawyers, we can point out that those concerns and issues exist, but it's very difficult for me to give concrete advice on something that is so speculative. But it is something that all the policymakers and the commanders are deeply aware of and they account for. In my opinion, the law, when effects are highly speculative, is not going to provide a meaningful constraint on that particular issue.

JOHN BURROUGHS:

Let me jump in with a question. Colonel, this is fascinating – the effort to move away from effects-based targeting. It's not something I am familiar with. Can you explain that a little more?

COLONEL THEODORE T. RICHARD:

There was a critique of effects-based targeting. If you do a Google search for “Mattis, effects-based operations” or “effects-based targeting” – I think it was from 2008 – [he published some criticisms](#) on effects-based targeting based on the speculative nature of it [“USJFCOM Commander’s Guidance for Effects-based Operations” in *Parameters*]. I think subsequently the proponents of effects-based targeting had to go and figure out ways to get this concept to be more meaningful. It’s still something I always approach with trepidation, because I am very conscious of General Mattis’s critique of it as something that over-promises and under-delivers. But when you look at the targeting standards, you need to be looking at the concrete and measurable and tangible effects of what you’re doing, and you have to take out those speculative effects, if you will, and you need to make sure when you’re doing your legal analysis, you’re focused on the tangible effects. Again, you can raise those speculative effects for general consideration. But if we want to make speculative effects something where we’re going to say, “Hey that makes it unlawful because this could potentially happen, and the risks are so bad,” the problem is then you open the door for people to say, “Well you could win the war by doing this – if we strike the orphanage, the enemy might realize how serious we are and surrender.” I am speaking in hypotheticals here. So that’s the issue.

To the extent that we need to strike a certain target or take a certain action because it will destroy enemy morale or it will end the war, to me, that is speculation and is not part of the legal targeting standard. You need to strike the target because it’s a significant military advantage, it meets the criteria of what a valid target is, and we know the measurable effects of destroying the target with a specific weapon. While there are speculative things that can happen when a target is hit with a particular weapon, and as a commander, as a policy maker, it is your decision authority, so you need to account for the potential risks. But on the legality, let’s look at the

measurable, tangible effects of what we can actually assess and make sure that we're not basing our legal decision on things that are speculative. Hopefully that answers that question.

The last comment that I will make on weapons – just a slight caution as we're talking about nuclear weapons, and again the 2016 paper you were kind enough to highlight reflected my struggle through the U.S. written statement and oral arguments in the ICJ's nuclear weapons case. They distinguished old law of war rules from new rules found in *Additional Protocol I*. *Additional Protocol I* is fascinating because it's a treaty that the U.S. is not a party to, and there are certain provisions of it that we recognize as customary international law, and there are certain provisions of it that we don't. It was rejected for ratification under President Reagan. But it's still very important. And in the U.S. position in the ICJ case, the position was, "Because when API was negotiated that it didn't apply to nuclear weapons, the U.S. position was that any new rules in API don't apply to nuclear weapons. So we go with the old rules." The problem was that the State Department didn't lay out at that time what was new and what was old and what was applicable law and what wasn't. So, that's what I have been trying to write on and struggled with through the years. So, yes, nuclear weapons, they have to be treated like weapons, but I would just caveat it by saying that there are certain treaty obligations that we have with conventional weapons that may or may not apply to nuclear weapons. We always have to be careful when it comes to these specific weapons because of the carve-out that is at least articulated by our State Department.

Prohibition of Reprisals Against Civilians and Civil Objects Set Out in Protocol I

JOHN BURROUGHS:

Thank you, and in fact we will move into questions relating to *Protocol I* in the next set of questions. And Charlie, if you have points you want to raise in response to what's been said, why don't you just include those in the next round. Is that OK? I am struck by what you said, Colonel Richard. You appeared to be saying that if you consider a wide range of effects, some of them speculative, that could be used to justify the attack as well as to criticize the attack. I think that's an important point. So, the second set of questions concerns, first of all, the prohibition of reprisals against civilians and civilian objects set out in *Protocol I*. As you just mentioned, the U.S. government maintains that that's a new rule that's not part of customary international law. The U.S. government also maintains that the prohibition of the infliction of widespread, severe, and long-lasting environmental damage set out in *Protocol I* similarly is a new rule not governing U.S. military operations at least with respect to nuclear weapons. Do you agree with the U.S. position regarding reprisals? Or was the prohibition binding customary law at the time *Protocol I* was negotiated or has become so since then as Professors Weiner and Sagan have argued? We will hear from Professor Weiner later today. Similarly, do you agree with the U.S. position regarding widespread, severe, long-lasting environmental damage in the case of nuclear weapons, and if you do agree, are there other ways that environmental considerations enter into assessment of lawfulness. So, Charlie, let's start out with you.

TRANSCRIPT

PROF. CHARLES MOXLEY:

Thank you, John. I think I will first take you up on the earlier opportunity to come back on several of the points that were made just a moment ago.

JOHN BURROUGHS:

And Charlie, sorry to interrupt, but bear in mind that we have 20 minutes left.

Legal Standard as to Effects that Must Be Considered

PROF. CHARLES MOXLEY:

I will be quick. I agree with the notion that potential effects of nuclear weapons risks can be speculative, but the legal standard as to what potential effects must be considered is not speculative. The legal standard is that foreseeable non-speculative effects must be considered. That standard has been used in the literature, as I mentioned earlier.

It was used in the [Tallinn Manual 2.0](#) in a different context, but the manual concludes that we need to include non-speculative effects in the analysis. I don't think the radioactive fallout and potential nuclear winter and electromagnetic pulse effects of nuclear weapons uses are speculative. They're known, and according to Dr. Robock, they are known knowns. According to James Scouras, if I understood him correctly, they are more in the nature of known unknowns in the sense that he's not as confident in the quantification. But I take it that such effects are foreseeable and non-speculative—and hence have to be considered, but I understand that's an issue.

Very briefly, one other point in the [Joint Chiefs Manual on Joint Risk Analysis](#): they don't look at what they call Very Unlikely risks, which they define as risks below 20 percent. We will get to this in a later panel. But, with nuclear weapons, such lower levels of risk are of greater concern than with conventional weapons.

Legal Issues as to Targeting of Civilians in Reprisal

Real quickly, John, on your question as to whether it's lawful to target civilians in reprisal, I think it's a matter of debate. There's a lot of literature out there, certainly the ICRC has concluded that targeting civilians in reprisal is unlawful, others have said the same, as have I. The U.S., in the Obama administration with its [Nuclear Employment Strategy](#), said, "The United States will not intentionally target civilian populations or civilian objects.") But they didn't address reprisal. I think it is the [U.S. position at this point](#) that, legally, you can bomb civilians in reprisal. I have concern about whether that's a valid position.

JOHN BURROUGHS:

OK, thank you. David?

PROF. DAVID KOPLOW

Well let me start by saying that for me, part of the problem here, part of the reason this is so complicated, is that the criteria that we're using, whether it's foreseeability or how speculative something is, or what is feasible to undertake or controllable – these are not yes/no variables. Everything is a matter of degree. A weapon can be more or less controllable or can be used in circumstances where the full array of effects is more or less foreseeable. And I think all that has to be taken into account. I am remembering that scene in the movie *Oppenheimer*, where just before the first test detonation of the atomic explosive device, scientists commented that there is some danger here, some chance, that an atomic explosion will ignite the atmosphere, burn off all the oxygen, and kill everything on earth. The scientists said, “We have looked at that, we calculated it as well as we could, and we don't think that's going to happen. Therefore, it's OK to go ahead with this test.” Now that was a test, not a use of weapons. But it's a similar sort of thing, where the possible outcomes are so catastrophically bad, that even if there is a very remote chance of that happening, it has to be taken into account. For me, that's why we start with the idea that nuclear weapons are fundamentally weapons, and therefore the entire array of *jus in bello* applies. International law evolves over time through a combination of treaty and custom and state practice and *opinio juris* – it's hard to pin down. But to me it's easy to say that reprisals against civilians are prohibited.

On the other point, it's somewhat more complicated. Damage to the environment to me is something that has to be taken into account. But I would say it's part of the proportionality calculation. Significant harm to the environment could be justified if there is a very significant military advantage to be gained from doing so.

MAJOR KENNETH DANIEL JONES:

Reprisals come up talking at these events and any academic discussion on any sort of weapons. They seem to come up every time. Yet, if I was to go out in the hallways at the Pentagon and start asking people about reprisals, it would be a statistical anomaly of who even knew what a reprisal was. I don't know how much better it would be with DOD attorneys. I think that reprisals are something that's held at such a high level. Just a little bit of history: I picked up a book [*Nuclear Weapons and Contemporary International Law* by Nagendra Singh and Edward McWhinney], I happened to walk down a hall and see it in an office, on nuclear weapons in international law, and read the intro to it as I was just flipping through it the other day. It says that “relating to the use of [these] weapons ... appears to be primarily dependent on reprisals.” That was in 1959.

And so, it seems we've moved significantly over time on reprisals. I would not put reprisals in the category of U.S. policy. I think the U.S. policy has been pretty agnostic on whether or not we do this. It's more of something that exists in the law – it's permissible in the law, but our policy is to follow the law of armed conflict, and our policy is not to target civilians or civilian objects. That's in the [2022 Nuclear Posture Review](#). I think going through reprisal fits more as [America's Strategic Posture](#) report that came out a couple weeks ago from a congressional commission on strategic posture, which is very well worth the read. This maybe

TRANSCRIPT

fits in the calculated ambiguity of the United States. We haven't given a lot of indications here. My personal opinion is that reprisals are very unlikely and not something that could be pre-planned and not something that would even be likely to happen. At least in nuclear posture, maybe in a cyber context or something, there is little more of a place – for example, you're shutting off power or what not, but with nuclear weapons, if cities are attacked, would the United States respond in kind? I think the president is likely to say, "Make this stop," not "Let's go down this course of investigation and public statements and trying to negotiate our way out by doing some wrong act." But again, that's above the Department of Defense. This is something held at the national decision level.

Going back to Colonel Richard, prior to Additional Protocol I and the U.S. not ratifying it, what was the common rule? The ICRC and the main rules up to that point all basically said reprisal was a thing. The [ICRC continues to say](#) that "It's difficult to conclude with regards to Article 51 that there is yet crystallized customary rules specifically prohibiting reprisals against civilians during hostilities." The Tallinn Manual did not take a position on it reportedly because they couldn't come to one. Lastly because the nuclear weapon states claimed that Additional Protocol I didn't apply to nuclear weapons, it's difficult to conclude that that's now customary international law, but I also think it's clear that if we're not careful here, this becomes an asterisk that swallows the rule that the U.S. complies with international law and that we don't target civilians and civilian objects. The bottom line, if the rule of law wins and every country follows the rule of law, then there is no case for belligerent reprisal. Short of nuclear war happening, which is the first thing we hope never occurs, the second thing is that other countries comply with the law of armed conflict.

JOHN BURROUGHS

Alright, thank you. Colonel Richard.

COLONEL THEODORE T. RICHARD:

Thank you. I think a lot has been said on these two questions tonight, and I don't necessarily disagree with a lot of what was said. I will just clarify a couple notes. First, the U.S. position on reprisals. At least from the State Department in the written filings in the [Oil Platforms case in 1997](#), there is a footnote saying that reprisals is still a valid doctrine that the U.S. could have sought to justify their conduct in the Oil Platforms case. Of course, the U.S. didn't pursue the argument beyond the footnote. I think it was just one sentence long. The ICJ held against the U.S. in the Oil Platforms case. That being said, the ICJ is not like our domestic courts where their opinions are binding on us. I look at that, and this is what the State Department said is a valid doctrine at least as of 1997, so it's hard for me to argue that at least at that point we didn't treat it as a viable option to seek. And then I will also point out that the doctrine still exists in the *Law of War Manual*. It's in there. In the current administration's *Nuclear Posture Review*, they referred to the *Law of War Manual* as having an accurate description of the laws as regarding to the use of nuclear weapons, and so that to me, in my

opinion, implicitly says that the doctrine is still live and viable. Again, I agree with Major Jones that it's really not a very likely option and that the prerequisites to use it are cumbersome, and whether or not they are really viable from a policy standpoint is hard to say. And again, I think it's important to emphasize that the decision to undertake a reprisal is not at the military level. It's not at the DOD level – it's at the highest levels of government.

For the long-term environmental damage question, my understanding is that the United States has repeatedly declared that Additional Protocol I's articles on long-term environmental damage do not reflect customary international law. My understanding is that France has made similar declarations. It's hard for me to say that somehow, all of a sudden, these new Additional Protocol I rules have become customary international law when the U.S. has never treated them as such. That being said, there are separate provisions on works containing dangerous forces, and the U.S. points out that we would treat attacks on such works under a proportionality review. My personal opinion is to agree with Professor Koplow in that I think it's really more appropriate to treat environmental damage under proportionality as opposed to, somehow, a separate, specific rule. But I'm not sure that my personal opinion is reflective of what the U.S. understands as a legal obligation.

Concluding Remarks:

JOHN BURROUGHS:

OK, thank you. We have about 5 minutes left. That means that each of you could spend a minute giving concluding remarks if you wish to do so. So, who would like to do that?

Principle of Precaution

PROF. CHARLES MOXLEY:

I will keep it to a minute because everybody should have their minute. The last category you had identified for us to address, John, which we didn't get to, is the principle of precaution. There is a lot of literature to the effect that the principle of precaution imposes a broad obligation on states to train their personnel and restrain their practices, so as to comply with international law. I think we do a lot of this even at the design stage of weapons to try to make sure they're in compliance with international law. I think we need to do more, such as examining our policies concerning launch-on-warning and high alert levels and other areas to enhance our compliance with international law.

Foreseeable Non-Speculative Effects

As a summary, I would emphasize that such nuclear weapons effects as radioactive fallout and EMPs and potential nuclear winter must be major considerations in applying law of armed conflict to potential nuclear weapons uses. These are not incidental things that may or may not happen. They are known unknowns as to their extent, or if Dr. Robock is right, we really know what the numbers would be like in terms of these effects. I don't see how these effects of nuclear weapons are potentially lawful.

TRANSCRIPT

We didn't get into low-yield nuclear weapons, but, certainly as to strategic nuclear weapons, the effects of such weapons are uncontrollable, to my understanding—we know that; we know we cannot control them—which means that their use is precluded as a matter of law. I guess there is no more time for more so I will stop.

JOHN BURROUGHS:

Major Jones, did you want to say anything in conclusion?

MAJOR KENNETH DANIEL JONES:

I will close by saying that the circumstances when nuclear weapons will be lawful would be very slim. Hopefully, a time comes when we can move away from such reliance on nuclear weapons. But that doesn't seem to be the current environment. Countries seem to be moving more towards a reliance on them. Hopefully nuclear deterrence holds.

JOHN BURROUGHS:

Thank you and thank you for your participation. Colonel Richard?

COLONEL THEODORE T. RICHARD:

Thank you for the opportunity to participate. I would say in conclusion that I think that my overall point is, again, I go back to all our treaty statements and the declarations, especially the arms control treaties under the Reagan administration, which from what I recall said simply that a nuclear war cannot be won and should not be fought. That being said, the weapons exist and for deterrence to work we need to plan to use them. Our job is to figure out what is the advice that we as lawyers give and how do we make sure that what we're doing from a commander's standpoint, from a planning standpoint, is moral and ethical to the largest extent feasible. I would say that where I get worried is to the extent that people would use law as a way to eliminate the United States' deterrence option unilaterally. This becomes a concern to me, because I don't think law is a meaningful constraint on our adversaries. Just to bring this back full circle to where I started on – there is a tension there, and I think that the wise way to deal with these hard issues with nuclear weapons is less on the law side and more on the international security standpoint and to make sure we have dialogue, engagement, and that we try to work on tangible efforts to reduce these weapons because they're such horrible weapons.

JOHN BURROUGHS:

Thank you for participating. Professor Koplow.

PROF. DAVID KOPLOW:

I think I would close by emphasizing the special responsibility and the special capabilities of the United States in furthering the development of international law and international policy regarding nuclear weapons. The United States is, after all, the only country

to have used nuclear weapons in combat. The United States has done more test explosions of nuclear weapons than anybody else. The United States has invested the most in the sophisticated research and development of new nuclear weapons, and the United States has been the global leader in the articulation of international law and the rule of law. Therefore, it seems to me that we have a special responsibility for nudging forward the amorphous process of articulating additional legal standards to regulate nuclear weapons. One version of that would be nuclear arms control; pushing forward treaty negotiations to abolish nuclear weapons. But even short of that, or in parallel with that, further refinement of the law of armed conflict that would make clear what the rules are and would render panels of this sort unnecessary because the law would be so clear.

JOHN BURROUGHS:

Thank you, David. I appreciate all the panelists' effort to compress into an hour and a half what could easily be, as Professor Koplow said, a course. With that we will close this panel. Perhaps Charlie you want to say something about how things are going to unfold with the conference from here.

PROF. CHARLES MOXLEY:

Thanks, John. Thank you everybody. Our luncheon speaker momentarily will be Professor Oona Hathaway of the Yale Law School, who will talk with us about the contemporary status and viability of international law concerning the use of force—her view as to such matters in today's world.