

# THE PLOUGHSHARES MONITOR

VOLUME 45 | ISSUE 2

SUMMER 2024



## The growing case for space governance

New technology is leading to more threats and vulnerabilities

**EXPLOSIVE WEAPONS**  
Strengthening civilian  
protections

**EMERGING TECH**  
Ukraine's battle-  
tested tech

**HUMAN RIGHTS**  
Security threats from  
airspace

**ARMS TRADE**  
Q&A with Carina  
Solmirano

*"and they shall beat their swords into ploughshares,  
and spears into pruning hooks; nation shall not lift  
up sword against nation; neither shall they learn war  
any more." Isaiah 2:4*

The Ploughshares Monitor  
Volume 45 | Issue 2

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## From the Director's Desk

# Strengthening the protection of civilians: Reflections from the Oslo Conference on EWIPA

Written by Cesar Jaramillo



In the heart of Oslo, on April 22-23, 2024, the international community gathered to reaffirm its commitment to protecting civilians from the devastating impacts of explosive weapons in populated areas (EWIPA). Events started with the Global Protection Forum on April 22, co-hosted by the International Network on Explosive Weapons (INEW) and the Norwegian Red Cross. The forum was followed by the first conference to review the implementation and universalization of the Political Declaration on Strengthening the Protection of Civilians from the Use of Explosive Weapons in Populated Areas, hosted by the government of Norway on April 23.

The urgency of concerns over the use of EWIPA was underscored by dire situations in Gaza and Ukraine, among other conflict zones, where civilians continue to bear the brunt of explosive violence. The Oslo events also served to showcase the passion and determination of experts, activists, and policymakers dedicated to safeguarding civilian lives in armed conflict.

### The humanitarian cost of EWIPA

The horrific suffering that civilians endure in ongoing armed conflicts is highlighted when considering the use of EWIPA. Explosive weapons in populated areas are the leading cause of civilian casualties in armed conflicts, and civilians ac-

count for the majority of those killed and injured by these weapons.

In Ukraine, since the Russian invasion began on February 24, 2022, there have been 21,717 civilian casualties from explosive violence, with 9,511 killed and 12,206 injured. The recent surge in civilian casualties in Gaza further illustrates the grim consequences of explosive violence. The Israel Defense Forces' Operation Swords of Iron, begun in response to the Hamas-led attack on October 7, has resulted in more than 35,000 Palestinian casualties, including more than 30,000 killed as of May 2024.

Behind these figures are lives shattered, families torn apart, and communities devastated.

The harrowing statistics presented at the Oslo conference raised a critical question: Why is the international community not responding adequately to the use of EWIPA? Despite the development of robust new standards to safeguard noncombatants, state and nonstate actors continue to ignore norms for the protection of civilians in armed conflict. The disturbing number of civilian casualties as a result of airstrikes in Gaza, for instance, demands a closer examination of military tactics and targeting policies.

### Insights from the Protection Forum

The Protection Forum brought together a diverse



Radhya Al-Mutawakel (Mwatana for Human rights), Younis Al Khatib (Palestine Red Crescent Society), Iryna Nikolaiva (PAX), and Cesar Jaramillo participate in a panel at the Global Protection Forum. *INew*

group of stakeholders, including representatives from humanitarian organizations, civil society, academia, and affected communities. It was designed to facilitate an open and interactive dialogue on how to address the challenges posed by EWIPA and to develop effective strategies for protecting civilians.

A key takeaway was the urgent need to hold accountable those who violate international humanitarian law (IHL) and to ensure that military operations adhere to established norms of international law. This includes principles such as distinction (distinguishing between civilians and combatants), proportionality (prohibiting military attacks that cause excessive harm to civilians in relation to the military advantage gained), and precautions in attack (taking constant care to spare civilians and civilian infrastructure), which are fundamental to protecting civilian lives during armed conflict.

One of the most poignant moments came when Younis Al Khatib, President of the Palestinian Red Crescent Society, stated, “In Gaza, you are better off dead than alive.” This powerful statement underscored the dire conditions faced by civilians in conflict zones and the urgent need for international intervention to prevent further suffering.

The forum highlighted the need for improved data collection and sharing to better understand

the impact of EWIPA on civilian populations. Participants emphasized the importance of collaborative efforts to document and disseminate information on the use of explosive weapons in populated areas, and to advocate for stronger international standards and accountability mechanisms.

Several panels at the forum focused on the legal and humanitarian implications of EWIPA and the necessity of adhering to IHL principles. Experts called for more robust enforcement of existing laws and the development of new legal frameworks to address specific challenges posed by explosive weapons in urban environments.

### The Oslo conference: A step forward

At the conference, representatives of states that have endorsed the Declaration, as well as participants from various sectors, came together to share insights, propose solutions, and reaffirm their commitment to protecting civilians. The conference also welcomed new endorsers Jordan, North Macedonia, and Montenegro; the number of supporting states is now 86. This growth highlights the increasing global recognition of the importance of the EWIPA Declaration’s principles.

However, the reality that some of the states directly involved in armed conflicts, such as Russia and Israel, are not signatories to the political



declaration underscores the challenges in achieving universal adherence and effective implementation of the Declaration's principles.

The conference produced several recommendations to enhance the Declaration's impact. They include designating national focal points to spearhead implementation efforts, regularly sharing national progress updates, and fostering stronger military and civilian cooperation to uphold the Declaration's commitments. There was also a push to organize thematic and regional meetings to improve the understanding of, and compliance with, the Declaration's provisions.

### Building on previous efforts

Advocacy campaigns, policy development, and field research have all supported a growing international consensus on the need to address the humanitarian impact of EWIPA. Significant progress has been made in documenting the effects of explosive weapons, raising awareness among policymakers and the public, and developing new legal and policy frameworks to enhance civilian protection. The Political Declaration on Strengthening the Protection of Civilians from the Use of Explosive Weapons in Populated Areas represents a significant step forward.

However, the true test lies in its implementation and universalization. At the Oslo conference, participants reiterated the importance of translating commitments into concrete actions, such as enhancing data collection and sharing, increasing support for affected communities, and promoting compliance with IHL. The Declaration calls for states to take concrete steps to protect civilians—avoiding the use of explosive weapons with wide-area effects in populated areas, providing assistance to victims, and ensuring accountability for violations of international law.

### A call to action

The crises in Gaza and Ukraine starkly highlight the urgent humanitarian need to protect civilians from EWIPA. Beyond the immediate necessity to save lives, there is a binding legal obligation un-

### Statements on Israel

On February 29, Project Ploughshares published a statement: *Setting the record straight on Canada's arms exports to Israel*. In it, Ploughshares disproved claims by the Canadian government that Canada only exported "non-lethal" weapons to Israel and that "no export permits [had] been issued for Canadian arms transfers to Israel since October 7, 2023." We issued a call "for Canada to end the supply of military goods to Israel," as required by Canadian and international law.

On March 21, Ploughshares published another statement: *Canada closer to compliance with export control obligations after decision on arms transfers to Israel, but must go further*. It noted progress that the government had made in meeting its own legal obligations but pointed out actions that still needed to be taken.

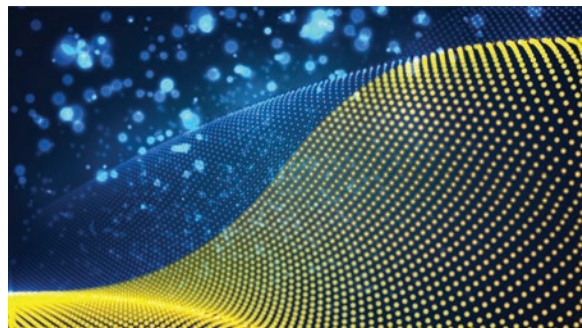
der IHL to ensure the safety and protection of noncombatants.

The Oslo conference served as a crucial reminder of the significant work that remains. It called on the international community to intensify efforts, transform commitments into concrete actions, and prioritize the protection of civilians in armed conflict. Only through sustained, cooperative endeavours can the devastating effects of explosive weapons be mitigated.

At the same time, the grim reality is that civilians in conflict zones around the world are suffering intensely as a result of EWIPA. The ongoing devastation demands immediate and decisive action. Achieving a future free from the horrors of EWIPA requires relentless effort and unwavering commitment. The suffering of civilians must drive the resolve to ensure that the promises made in Oslo lead to tangible, life-saving improvements to better protect civilians in armed conflict. □

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# Ukraine's battle-tested tech



Written by Branka Marijan

The Russian invasion of Ukraine has played out as a game of technological cat-and-mouse, as Ukraine and Russia develop systems and countermeasures that in turn lead to further innovation. Ukraine has become a testing ground for military technology, particularly artificial intelligence (AI). While both countries are engaged in this game, the activities of Ukraine are better documented.

In attempts to defend and regain its territory, Ukraine has experimented with everything from cost-effective drones to advanced applications of machine learning and computer vision. Its rapid escalation of warfare technology has drawn the keen interest of allied countries that are motivated by a desire to support Ukraine and international corporations eager to take advantage of a lucrative opportunity to market their technologies as ‘battle-tested’.

Ukraine, too, sees possible economic benefits. As reported in “How tech giants turned Ukraine into an AI war lab” in *TIME* magazine, Mykhailo Fedorov, Ukraine’s Minister of Digital Transformation, has stated that “our big mission is to make Ukraine the world’s tech R&D lab.”

The allure of battle-tested technology cannot be overstated. In the defence sector, proven effectiveness in actual combat conditions significantly enhances a technology’s marketability. This is especially true for AI systems that may have been developed for civilian applications or military software that has not been tested in an actual

war. However, the deployment of these advanced technologies on battlefields in Ukraine also raises profound questions about the wider uses of AI in warfare and the role some private companies are playing in shaping global norms on the use of emerging technologies.

## Field experiments

Ukraine is actively participating in experimentation with new technologies such as drones and is keen to expand its domestic defence sector. However, Ukraine cannot afford to support this sector on its own. For example, according to *The Kyiv Independent*, only 58 of an estimated 200 domestic drone companies have contracts with the Ukrainian government.

Instead, Ukraine has turned to allies, including Canada, for financial support. So far, Denmark has contributed \$28.5 million and Canada \$2.1 million to support Ukraine’s drone manufacturers.

Some Ukrainian drone companies are also considering a move outside Ukraine. Such movement could expand the global impact of Ukraine’s military innovation.

Know-how and practical battle experience are significant advantages when deploying new technologies. In “Techcraft on display in Ukraine,” published on the War on the Rocks website, the authors argue that a tech-savvy local population offers clients “techcraft” or “the field-ex-

## What keeps you up at night?

On May 9, CBC News posted an article by Murray Brewster: “Drones and AI are rewriting the rulebook on naval warfare — with uncertain consequences.” It described how Ukrainian maritime forces are using drones against the Russian Black Sea fleet, how the U.S. Fifth Fleet is experimenting with military drones, and how Canada is slowly and cautiously adopting such technology.

A videoclip of expert source Ploughshares Senior Researcher Branka Marijan was included in the article; in it Branka explains her concerns about the use of drone technology in armed conflict. Following is an edited transcript of those comments:

One thing we really have to be cognizant of is that the broader geopolitical issues are accelerating the use of this technology and are pushing technology out there. So, as the U.S.-China competition ramps up, there might be a willingness to deploy technologies. And that is a real concern.

Sometimes I get the question, What keeps you up at night? I think a lot of people think the Terminator or killer robots. But it's actually the deployment of technology that's not ready for these contexts. I've said this many times, but conflict zones are very complex environments. They change. If we deploy technologies that are not ready, we really risk escalating the conflicts in place and other times prolonging them.



pedient use of technology in war.” This feature has played a pivotal role in deploying and testing new technologies. The article describes, for example, how Ukrainian soldiers and volunteers have adapted readily available off-the-shelf quadcopters or even printed components on 3D printers.

### Palantir’s role

The real-time battlefield testing of new technologies is being carried out with the support of foreign tech companies. Among the most notable is Palantir, the American-based software company that is a major supplier to the U.S. military and allied countries. Palantir has provided the Ukrainian military with software to track Russian troops and, according to *The Washington Post*, has a team of engineers in Ukraine that is constantly experimenting with new tools.

By all accounts, Palantir’s software has given Ukraine a distinct advantage. As *TIME* reports, Palantir enjoys a special status with major Western militaries. Thus, its software can integrate data from commercial satellites with classified data from allied states.

But Palantir is also widely criticized by human rights organizations such as Amnesty International for creating an intricate web of surveillance tools that governments are using to track asylum seekers and even to arrest individuals.

And it’s hard to gauge with any accuracy the effectiveness and impact of some of this new tech

with so much fanfare generated by eager customers and avaricious manufacturers. Examining the use of Palantir tools in predictive policing by the Los Angeles Police Department, sociologist Sarah Brayne noted in an article in *The Intercept* that police officers found a gap between promise and practice. Nevertheless, Palantir went ahead with an expansion into healthcare.

In Ukraine, Palantir could also operationalize CEO Alex Karp’s vision of building AI weapons for the United States and its allies. As Karp admitted in the *TIME* article, “There are things that we can do on the battlefield that we could not do in a domestic context.” Palantir and other players view the war in Ukraine as an opportunity to display the utility of their tools to prospective Western customers, particularly against a larger state like Russia. Western European states are particular clients that Palantir and other U.S. companies would like to acquire. Supporting Ukraine has also done wonders for their sometimes-tarnished images.

Clearview AI has perhaps benefitted the most. Ukrainian officials have found its facial recognition technology useful to identify war dead and Russian soldiers. Before the current conflict in Ukraine, Clearview AI had come under scrutiny in several countries. Then Canadian privacy commissioner Daniel Therrien found the company had broken Canada’s privacy laws, noting that, by scraping images from social media to create a database, the company had essentially carried

out illegal mass surveillance. But in Ukraine, Clearview's CEO Hoan Ton-That found a more permissive and welcoming environment and a chance to recast the company's image and ultimate usefulness to security and defence agencies.

### Need for regulation

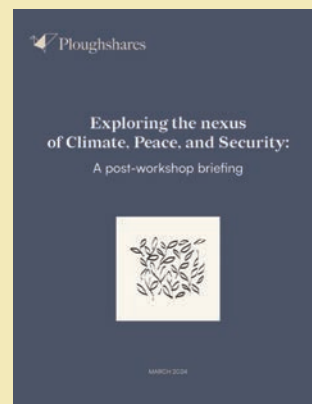
It is understandable that a Ukraine at war welcomes support from tech companies. Looking to the future, it also recognizes the economic and strategic value of becoming a key player in military technology. Still, precedents being set now could have far-reaching consequences. Ukrainian military commander Yaroslav Honcha noted in *Nature* article "Lethal AI weapons are here: How can we control them?" that Ukraine "already conducts fully robotic operations, without human intervention." Such uses are outpacing international efforts to require human control over weapon systems.

The fog of war has blurred our view of the actual effectiveness of new AI tools in combat. Companies are keen to claim that their tools are exceeding expectations, but the reality might be different. Ukrainian commanders could be motivated by the need to rally their troops, offer hope to the population and gain more support from allies.

The applicability of tools in different contexts is also being questioned. A state fighting an irregular force in densely populated urban areas might find that some tools that are useful in Ukraine produce significant civilian casualties. Even in Ukraine, the deployment of new AI-enabled weapon systems could have unpredictable results. Outsiders don't yet know how such risk is being addressed or whether Ukraine might become desperate enough to deploy tools that take the lives of some of its own citizens. Or if foreign companies are being held accountable for developing various tools or collecting data on Ukrainian citizens.

There is also no guarantee that individuals and companies now supporting Ukraine will not at some future date provide technology to states that oppress their populations. Or that the tools will not be diverted to nonstate armed groups.

### Building a new program



On March 19, Ploughshares published a report: *Exploring the nexus of Climate, Peace, and Security: A post-workshop briefing*.

The workshop was held in Waterloo on November 23, 2023, bringing together Ploughshares staff and "invited experts from academia, the military, and civil society" who provided "advice and guidance" on how Ploughshares could/should develop its new research program.

The workshop was broken into the following parts:

- Session 1: What role is there for multilateral institutions in addressing the climate, peace, and security nexus?
- Session 2: Understanding the Canadian context: Who leads on climate, peace, and security?
- Keynote with Seth Klein
- Session 3: Desecuritizing the nexus: Promoting peace through climate action
- Defining research priorities.

States embroiled in conflicts with minority communities within their borders could see value in some of the systems currently being tested in Ukraine.

Before these technologies become uncontrollable, the international community must seize the opportunity to engage in a serious and constructive dialogue about the future of warfare.

The experiences of Ukraine offer invaluable lessons, not only about the potential of military technology but about the ethical and legal challenges it presents. All the world's nations need to learn these lessons. □

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# Aiming to build confidence through transparency



A conversation with Carina Solmirano

By Kelsey Gallagher

**P**olitical scientist Carina Solmirano is the Project Lead of the ATT Monitor. The ATT Monitor is an independent project of Control Arms, a coalition of more than 300 civil society partner organizations, including Project Ploughshares. Ploughshares Researcher Kelsey Gallagher has been on the ATT Monitor's editorial advisory committee since 2021.

**Kelsey Gallagher:** Carina, could you please begin with a description of the ATT Monitor and its objectives?

**Carina Solmirano:** The ATT Monitor was born to act as a watchdog or monitoring mechanism for the Arms Trade Treaty (ATT), as the Treaty itself doesn't have any enforcement mechanisms. We have, over time, developed a specific area of monitoring, which is related to transparency—what and how states comply with their reporting obligations. We also seek to understand why states do or do not comply.

Our main aim is to be a resource for ATT States Parties. We want to provide them with unbiased analysis of the information that they submit. We also encourage states to improve transparency and to comply, or comply more fully, with the treaty.

We have also done many case studies—for example, work on South Sudan on diversion—or responded to issues related to Treaty universalization. But our primary focus is on reporting and transparency under the ATT.

**KG:** Why focus on transparency?

**CS:** Transparency is a crucial element in the global arms trade because it's the key confidence-building mechanism. Instruments such as the UN Report on Military Expenditures (UNMILEX) and the UN Register of Conventional Arms (UNROCA) were developed with this aim in mind.

The Monitor, as a civil society project, was also intended to promote accountability. While transparency is understood in the international arena as a relation between countries, it is also important within countries—for citizens, for the congress, for taxpayers. All these relationships are as valid as ever and even more relevant in the context of some of today's ongoing conflicts.

This idea of confidence-building makes me think about my region (I'm from Argentina). A few years ago, many countries in South America began importing major conventional weapons—very modern systems—as part of the modernization of their armed forces. Other countries in the region became alarmed; there was a lot of talk of an ongoing arms race.

And then came the call for greater transparency, which helped these countries come together and convene an instrument very similar to the UNMILEX instrument but done in the context

of the Union of South American Nations. It acted as a conflict-prevention mechanism and, of course, as a confidence-building mechanism.

I think that greater transparency contributes to stability and the certainty that existing arms transfers are not leading to potential conflict and are not being misunderstood as provoking a new arms race.

Certainly, in South America and maybe also in parts of Africa, calling for greater transparency helps in preventing illicit trafficking and the diversion of weapons—to unauthorized users and for unauthorized uses. Regions that are under arms embargoes or undergoing an internal economic or political crisis or even civil war fundamentally benefit from transparency. If the trade is transparent, there should not be illicit trafficking. There should not be weapons diverted to these unauthorized users or uses.

**KG:** UNROCA, which was established in 1991, was itself founded as a confidence-building mechanism. In some ways, states were ceding some level of their sovereignty, of their monopoly on information related to their arms transfers, to learn what other states were doing.

But let's get back to ATT reporting. Solid data from official reports on the types of weapons transferred legitimately offers insights into illicit retransfer, diversion, pilfering of arms.

**CS:** Exactly. We have seen examples of diverted weapons to areas like Sudan or the Democratic Republic of the Congo. Our friends at Conflict Armament Research study diverted weapons; when they try to trace them back, they might find that the transfer was not reported. And you wonder,

was it not reported because it was diverted from the outset? Avoiding such suspicion from civil society or other governments shows the value of transparency.

**KG:** So, we were talking about UNROCA. I think it would be fair to describe it as a precursor to reporting under the Arms Trade Treaty. The ways in which states report their conventional arms transfers are somewhat similar. What do you think, Carina?



Political scientist Carina Solmirano is the Project Lead of the ATT Monitor.

**CS:** It's important to highlight that UNROCA is a voluntary mechanism. States are politically but not legally bound to report. Under Article 13 of the ATT, States Parties must report. The initial report on their national control systems must contain a lot of information about how the country implements the treaty domestically. Then they must submit annual reports, which are very similar to those going to UNROCA, by May 31—also the deadline for UNROCA.

Annual reports must indicate all their arms imports and exports, reported as either authorized or actual transfers.

They are expected to contain other information as well, but the treaty's text on reporting is flexible. Nil reports are possible; states also have the option of withholding certain information, either for national security reasons or because of commercial sensitivity issues.

States must report on transfers of the eight categories of conventional arms—seven major conventional weapons categories plus small arms and light weapons. They can include their financial value or the number of transfers. They must identify each importer and exporter; they also have the option to describe the end use or the end

user, as well as details about the model, the calibre, the brand. The ATT Monitor normally encourages states to provide the most information possible.

**KG:** And States Parties can report either publicly or privately.

**CS:** Exactly. Yes, a report can be publicly available to everyone, or it can be kept private and distributed only among States Parties. The Monitor always advocates for States Parties to report publicly to achieve the highest standards of transparency under the Treaty.

**KG:** How compliant are ATT States Parties with their reporting obligations?

**CS:** As you know, the reporting aspect of the treaty is one of the most difficult ones. Compliance has been shifting—more than shifting, declining. About 60 of the 113 States Parties comply annually, although not always on time.

States had to start reporting with their 2015 transfers. So, we can now see trends. We have learned a lot about why states comply and why they don't. The states that regularly comply seem to do so for several reasons. Many States Parties—for example, the European Union, Australia, Canada—had already developed transparency systems before they joined the ATT.

**KG:** And here we're talking about some national arms control systems that include an element of proactive transparency.

**CS:** Not only those systems, but good recordkeeping systems—on everything!—and large, stable bureaucracies. Not all regions of the world have them.

But for those who perhaps do not have systems so developed historically, especially many countries in the Global South, there is still prestige in becoming part of an international regime, in being an international citizen. And so complying with these obligations, as regularly as they can, is important to these States Parties. It might also be the case that they don't have anything to hide and are willing to report.

### On the question of university investments in arms manufacturers

In May, Kelsey was featured in more than 20 syndicated CBC radio interviews about university investments in arms manufacturers. Across North America, campaigns were popping up on many university campuses to protest the treatment by the Israeli military of Palestinian civilians in Gaza. Sarah Penton interviewed Kelsey for *Radio West*, which aired on CBC Kelowna on May 15. As she noted in her introduction, "Some students are calling on universities to divest from companies with ties to Israel, including arms manufacturers."

Kelsey responded to questions on what was meant by divestment and how easily it could be done. He also discussed the type of companies and products especially targeted by student protesters. Lockheed Martin produces an aircraft, the F-35 Joint Strike Fighter, which has been used in the ongoing bombardment of Gaza. Kelsey noted that "Lockheed has been mentioned by a number of student groups because of its connection to alleged violations of international humanitarian law by the Israeli military."

Kelsey's final thought: "I do think university investments should align with the professed values espoused by these schools. It's hard to square how investments in arms production fits in here, especially looking at the very real humanitarian crisis occurring right now in Gaza."



Another reason that states comply is because both the ATT Secretariat and civil society, including organizations like yours and the ATT Monitor, remind states that not complying is not an option.

Many countries understand that there is a benefit in reporting because in our interconnected world, the information is already out there. If a state doesn't publish information on their arms transfers, someone else will.

But we have learned a lot about big problems with capacity that produce lower rates of compliance, especially in certain regions. I have spoken with many of my colleagues in Latin America and Africa, and it is a tremendous job for some of these countries. Maybe the only transfer that a state had one year was the import of 100 rifles. And the state must go through this bureaucratic process to report that? Of course, I always say, yes, do it! But I understand capacity constraints and limited resources.

There can also be a lack of awareness of what the ATT requires. There's a huge rotation of government officials. Whatever institutional memory a state has built can be lost when an official is transferred to a different department.

Coordinating national information is another problem. I was talking with some of my colleagues here in South America and they don't always talk to each other. The police collect certain information; the Ministry of Defence collects certain other information; Customs maybe collects other information. And they don't talk to each other. So, when the ATT National Point of Contact goes to them for information that must be reported to the ATT, some have it, some don't.

Another problem relates to the lack of political will. Certain countries—especially large exporters or countries that have a history of more transfers—seem not to realize how important it is to report and be transparent.

**KG:** During ATT meetings, you and I are often chasing down states that are not reporting—quite literally, sometimes—or could be reporting more fully. Some states are upfront: they don't have the capacity. But then there are states—some in the

Global North, some larger exporters, and some with a history of transparent reporting—that suddenly join the bloc of countries that are no longer reporting. What happened? What drives such a change?

**CS:** I do believe it is lack of political will. No one is chasing after these states. Remember: the ATT doesn't have an enforcement mechanism; it doesn't penalize anyone. We are the watchdogs.

**KG:** Yes, civil society.

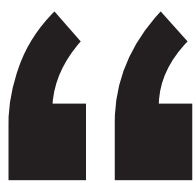
**CS:** Over the last eight years we've collected a huge amount of data. And we've seen practices emerging from the Global South that indicate that when countries want to report, they do it. The reports of some countries show a level of transparency that is unbelievably positive. If there is political will—and some capacities are in place—it is possible to comply.

**KG:** I'd note that, every year, we see states that report before the deadline!

Some are certainly in the developing world. Positive reporting practice is not monopolized by those states with high capacity.

We touched on some of this, but what would full transparency look like? Do you think that our understanding of global arms flows would change substantially with full transparency?

**CS:** Full transparency would give us a more complete picture. And it would tell us where to look for gaps and potentially worrying transfers. The full disclosure of all relevant information related to arms transfers would include the types of weapons, the quantities or the number of weapons, identities of exporters and importers, and



Full transparency would give us a more complete picture. And it would tell us where to look for gaps and potentially worrying transfers. The full disclosure of all relevant information related to arms transfers would include the types of weapons, the quantities or the number of weapons, identities of exporters and importers, and disaggregated disclosure. End users and end uses would also be identified, as would financial arrangements.



## Providing clarification on arms exports to Israel

On March 18, the Canadian House of Commons passed a motion that called on the government to "cease the further authorization and transfer of arms exports to Israel to ensure compliance with Canada's arms export regime."

On March 20, Ploughshares Researcher Kelsey Gallagher appeared on the CBC Radio program *As It Happens* to talk about the motion and some apparent contradictions with government information.

The government claimed that it was sending Israel only non-lethal military exports. Kelsey noted that there is no regulatory distinction between lethal and non-lethal military goods. His opinion was that the government used "lethal" to refer to full systems, while "non-lethal" referred to parts and components. "So, full systems would be things like tanks or combat aircraft and so forth, with non-lethal goods being parts or components that comprise those full systems."

Kelsey described the lack of transparency in government reports on arms exports to Israel. He compared these reports with the transparent reporting of military aid to Ukraine. He thought that the difference could relate to the controversy around exporting arms to Israel, which has openly violated human rights in Gaza. While he made it clear that nobody was questioning Israel's right to self-defence, he stuck to his point that Canadian officials must "comply with binding obligations" not to export arms when there is "a substantial risk that they could be used in serious violations of human rights."

Various media also quoted Kelsey in articles written about the motion and arms exports to Israel. One major article in which he appeared was "MP weighs future in Liberal Party amid fallout of House of Commons motion that Israel says will weaken its self-defence," by Marieke Walsh and Steven Chase, published by *The Globe and Mail* on March 19. Alex Cosh of *The Maple* quoted Kelsey in two articles: "Trudeau government will not revoke existing permits for Israel military exports" on March 21 and "Stat Can data raises more concerns about 'non-lethal' Israel exports" on March 28.



disaggregated disclosure. End users and end uses would also be identified, as would financial arrangements.

A former colleague at the Stockholm International Peace Research Institute created a definition of what I think would be full transparency; it includes:

1. public availability of information,
2. reliability—we are sure the information is correct,
3. comprehensiveness—we have the full picture,
4. comparability, and
5. disaggregation.

Let's talk about comparability. We used to conduct discrepancy analysis, looking into the reported exports of one state and then the reported imports of the recipient to see if the information matched. Sometimes the match didn't happen, because one group reported authorized exports

and the other group reported actual transfers, or something similar. But in some cases, an importer didn't report anything at all. And we'd ask why.

There are other barriers to full transparency. We don't know, for instance, whether arms transfers that are part of secret military agreements are reported. I would guess not. Also, we don't know if transfers under military aid programs are fully reported. In the case of Ukraine, some countries indicated last year that some transfers were part of aid packages to Ukraine. But this war is a very public conflict. What has happened with military aid programs to, for instance, Central America or parts of Africa? Are they reported?

**KG:** That lack of information is a known unknown—we know that there's an unknown; we just don't know where it is. I think you raise a good point about Ukraine. Most donor countries were proactive and transparent with their transfers to Ukraine, some getting really granular. If they did strike some transfers from the public re-

cord, some reported this clearly. But is this level of transparency repeated in other contexts? We don't know.

Military aid to Ukraine has not been particularly controversial in the West, because Ukraine was invaded. Other situations might be much more controversial and exporters might be less transparent.

**CS:** Totally. I was thinking about transfers to Africa. Are arms transfers in aid of counterinsurgency and counter-terrorism operations fully reported? Much is not known.

**KG:** The purpose of the ATT is to:

1. contribute to peace, security, and stability;
2. reduce human suffering;
3. encourage further transparency and cooperation in the international arms trade.

But how does transparency help to achieve the first two objectives?

**CS:** Transparency promotes peace and stability, especially if weapons transfers are being conducted responsibly. Disclosing information on arms transfers transparently can also tell the world how much closer you are to contributing to the objective of peace and security. The same is true in regard to reducing human suffering. □

*Kelsey Gallagher is a Researcher at Project Ploughshares. He can be reached at [kgallagher@ploughshares.ca](mailto:kgallagher@ploughshares.ca).*

## How civil society works: A recent example

On April 24, Ploughshares Senior Researcher **Jessica West** moderated a panel discussion, "Nuclear disarmament and human security," conducted by the North American and Arctic Defence and Security Network (NAADSN). Jessica is an NAADSN Fellow. Panelists were NAADSN Research Fellow Julie Clark, a PhD candidate in Global Governance at the Balsillie School of International Affairs; Peggy Mason, former Canadian Ambassador for Disarmament; and NAADSN Fellow Ernie Regehr, co-founder and first Executive Director of Project Ploughshares.

The discussion illustrates the power that arises from the interweaving of people, skills, and expertise that takes place within civil society. The result is an outsized impact on national and global affairs.



Both Julie and Peggy have collaborated with Project Ploughshares in the past. Julie was featured in the final online workshop on "Canada and the Abolition of Nuclear Weapons," a series put together by Ploughshares in 2022 and now available on our YouTube channel. Peggy is a longtime Ploughshares ally. Earlier this year, she participated in an online Ploughshares panel, "Prospects for Peace in the Ukraine War, Two Years On."

Many more links could be made, but we'll close with one mentioned by Jessica in her opening remarks. In March, The Simons Foundation Canada published *Military Footprints in the Arctic* by Ernie, with research contributed by Ploughshares Researcher Kelsey Gallagher. The Foundation is a staunch supporter of Project Ploughshares.

A video of the panel can be found on YouTube at NAADSN Emerging Ideas Series - Nuclear Disarmament and Human Security.

## The Emerging Ideas Series

*Nuclear Disarmament and Human Security*

Wednesday, 24 April 2024, 12:00PM ET via Zoom

Featuring:

Julie Clark, Ms. Peggy Mason, and Mr. Ernie Regehr

Moderated by: Dr. Jessica West



# A modern-day Phileas Fogg



A conversation with Jessica West

By Wendy Stocker

**B**etween the end of January and the end of April, Jessica participated in five major events on three continents. (Check out the sidebars for more detail.) What does this flurry of activity tell us about the nature of Jessica's work and its significance in today's security environment? Let's find out.

**Wendy Stocker:** Jessica, why all this travel? How does it advance your work and Ploughshares's mission?

**Jessica West:** Our research/policy staff travel quite a bit. Engagement with new audiences expands the reach of our research and ideas, while also providing new perspectives that help to advance our own thinking. And when it comes to impact on governance processes (as at the United Nations), being there is key to both the credibility and uptake of our input. It also helps us to bring transparency and accountability to global discussions, which are too often lacking.

**WS:** I can see that travel can be valuable, but it's so expensive!

**JW:** Yes, indeed. Cost imposes a hard limit on this kind of engagement; I've turned down at least one invitation for every event that I have attended this year. Fortunately, most of our travel is funded by generous host organizations that appreciate the credibility and value that someone from Ploughshares brings to discussions. When we do draw on our own resources for travel, we

prioritize direct engagement in governance processes, such as at the UN.

**WS:** What do you personally value most about your professional travel?

**JW:** My favourite part is the opportunity to reconnect with colleagues, develop new personal and institutional relationships, meet people who inspire me, and expand my thinking. Introducing our work to new audiences and engaging with other perspectives is the best way to energize my work.

**WS:** Let's talk about the specific trips you have made so far this year. In late January, you travelled to Wilton Park in southeastern England to attend a by-invitation-only gathering of experts who explored possible future threats to and from space.

**JW:** Wilton Park is the leading organization of the government of the United Kingdom for convening international policy dialogue that is intended to shape British foreign policy. The confidential discussions I participated in included gov-

## A highlight from the panel in Tokyo

At one point, the panel's moderator asked Jessica how governments should deal with the involvement of commercial space actors in armed conflicts between states. She provided a detailed answer. Some key points:

- National governments that license commercial activities need to know what they are licensing and must be clear about what is required, expected, and not allowed.
- National legislation should include forward thinking on possible uses and applications of technology.
- States should avoid pursuing dual-purpose uses of commercial capabilities and not celebrate the possibility that commercial logistics capabilities could be repurposed for counterspace uses. Such a pursuit is bad for industry because it conflates very legitimate activities with weapons use. But it's also bad for security because it adds to the perception of threat.
- States should not engage in intentional misperceptions of threats, which can boomerang.
- A lot of the legwork is going to happen at the national level and amongst small groups of states. Leaders, including Japan, should engage smaller states not currently active in this sphere.
- Discuss globally; act locally.



Use the QR code to watch a video of the panel.



ernment, military, commercial, and civil society experts from around the world. We hashed out where we see the greatest threats and what we can do to mitigate or change those threats.

**WS:** According to a description of the event on the Wilton Park website, “strategic competition [in outer space] is intensifying.” What is the nature of this strategic competition?

**JW:** It's both industry- and state-based. Commercial actors nurture and expand state-based capabilities, objectives, and power. There is nothing inherently bad about such competition. But when it comes to peace and arms control efforts, this military/industry integration means that identifying and differentiating harmful from benign activities is more difficult; civilian uses and users of space are increasingly entangled in the effects of warfighting or other coercive activities.

**WS:** How will technology shape future space threats? Was this discussed?

**JW:** Yes. New technology is opening up vast new possibilities for human activities in outer space: satellite servicing, the removal and mitigation of space debris, faster communications from space,

deep space exploration, and even a long-term human presence. But each possibility also introduces new threats or new vulnerabilities.

The discussion at Wilton Park focused on the cumulative effects that emerging technologies will have on strategic competition involving the Moon. My own personal concerns include the impacts that artificial intelligence and quantum encryption (and dis-encryption) will have on the robustness of existing security measures in outer space and on the speed of threat detection, responses, and crisis escalation, as well as the safety, security, and sustainability implications of nuclear power in space.

**WS:** I understand that threats were also a subject for discussion at the end of February, when you attended what was billed as “a two-day open-ended intersessional informal consultative meeting ... at United Nations Headquarters in New York.” This meeting related to the work of the Group of Governmental Experts on Further Practical Measures for the Prevention of an Arms Race in Outer Space (PAROS).

Tell us a little about the GGE and the role that Ploughshares played at this informal meeting.

**JW:** The GGE is a closed process with 25 state



participants, including the five permanent members of the UN Security Council and 20 based on geographic representation. This intersessional meeting was a chance for non-participants to be briefed by the Chair and other GGE members on discussions so far and to communicate our priorities. Both my colleague Victoria Samson from Secure World Foundation and I presented civil society statements (the only ones). I had earlier provided a working paper on avenues for transparency and confidence-building measures.

**WS:** Did industry take part in this session?

**JW:** Industry had an opportunity to be in the room with civil society and academics, but the structure of UN discussions is not often best suited for such participation. Those few businesses that send representatives have staff who are familiar with and already engaged in global space governance processes. Civil society can help to bridge the gap between the space industry and governance bodies.

**WS:** Notes that you posted on the event indicate a heightened concern about the possible use of nuclear weapons in space. Why such a concern now?

**JW:** The meeting took place just a week after a leak of U.S. intelligence raised concerns that Russia might be developing a nuclear-powered anti-satellite capability in space. We have since learned that the United States believes that the device would be capable of detonating a nuclear explosion in orbit. But this assessment is not based on public information.

The Outer Space Treaty, which governs human activities in space, bans such capabilities and actions. This ban stems from firsthand experience

with the wide devastation that nuclear detonations inflict on satellites and the long-lasting radiation that contaminates the space environment. The perceived threat of such action necessitates a rallying of the international community to reinforce and recommit to this prohibition. This is what we saw unfold at the GGE meeting.

**WS:** You covered all the sessions of the UN Open-Ended Working Group on reducing space threats. Will you follow similar upcoming UN discussions?

**JW:** Not one but TWO Open-Ended Working Groups will begin discussions in 2025. One will continue the work on norms of responsible behaviour, while the other will focus on a prohibition of weapons and the use of force in outer space, building on this year's GGE discussions.

It's expensive to participate in these events, but I hope I can continue my engagement in the process on norms, offering expertise and promoting transparency and accountability in the discussions. The OEWG that is focused on weapons and the use of force is sponsored by Russia; civil society organizations do not seem to be included in the description of "inclusive" participation, so I may have to settle for glimpses online.

**WS:** After the New York event, you raced home to collect your 12-year-old son, Ben, and then headed for Tokyo, Japan to participate in a panel at the 9<sup>th</sup> National Space Policy Secretariat Symposium on Ensuring the Safe and Sustainable Use of Outer Space. The panel's title was "Understanding impacts of emerging commercial capabilities for space security and future trends."

Before we discuss the panel, tell us why Ben wanted to go with you to Tokyo.

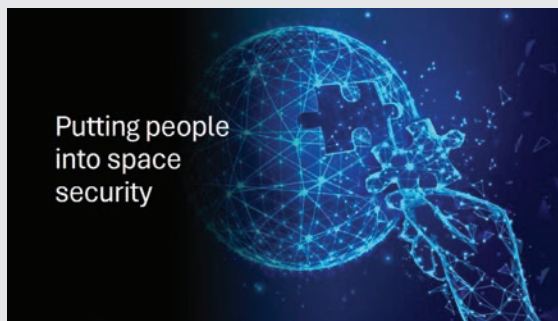
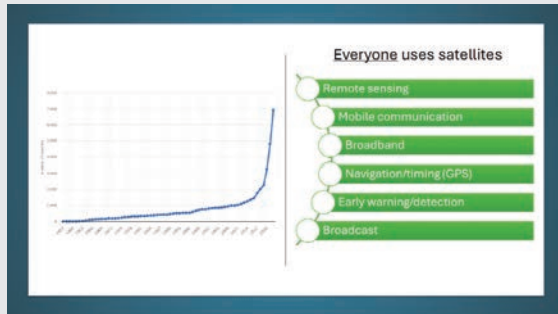


Senior Researcher Jessica West and her 12-year-old son Ben pictured in Tokyo in March.

## Core ideas from the Space Day 2024 keynote address

On April 30, Jessica gave the keynote address at Western University's Space Day 2024.

Some key ideas:



**JW:** Ben has a longstanding fascination with Japan and Japanese culture; years ago he made me promise to bring him with me if I ever had the chance to visit, so I did.

Ben also has a keen interest in outer space and followed the symposium discussions closely. However, his favourite activity was a visit to the military base where Japan's Space Operations Group is located; while symposium participants engaged in an information exchange and dialogue, he got a tour. Watching him have such mind-opening ex-

periences was priceless.

**WS:** What a great opportunity for both of you!

To return to the symposium: why the focus on commercial capabilities in outer space? How does it relate to your interests in governance and security?

**JW:** Like other countries – including the United States and Canada – Japan relies heavily on commercial capabilities for its national space activities. My panel focused on the trajectory and governance implications of this trend in the context of security and arms control. Key concerns include the blurring of military and non-military capabilities, so that commercial activities raise geopolitical tensions among states and civilian assets in space become the targets of military responses. This is why the development of norms of behaviour as well as transparency and communication practices are so important. Japan is at the forefront of these efforts.

**WS:** Next, on April 3, you were in Cambridge, Massachusetts, a member of the panel “AI for Peace and Security in Space” at the Massachusetts Institute of Technology’s day-long conference, SpaceTech 2024: AI, Machine Learning, and Autonomy in Space.

**JW:** SpaceTech 2024 was a student-led event that attracted mostly students and faculty, with some invited participants – like me. My panel included long-time colleague Brian Weeden (then with Secure World Foundation, now the Aerospace Corporation) and Kaitlyn Johnson from the U.S. Space Force. My panel was organized by newly minted PhD Thomas Robert Gates, who combines work in space engineering and AI algorithms with space policy. He is familiar with Project Ploughshares.

**WS:** What did you learn by attending SpaceTech 2024? What do you hope that your audience learned?

**JW:** My key takeaway is that the intersection of AI and space technology is falling between the cracks in space policy and governance discussions, and there is very little expertise on the topic.

The audience was mostly engineering, math,

## Jessica at UN Headquarters in New York

*Following are some edited extracts from the statement that Jessica presented at the UN at the end of February.*

The goal of avoiding weapons and the use of force in outer space remains a key aspiration of the international community and a guiding principle of PAROS. But achieving this aspiration is tied to a larger vision that has evolved to include the prevention of conflict and the secure use and sustainable benefits of space for all.

Our understanding of arms control has likewise evolved. A study of lessons learned from other domains conducted by Project Ploughshares indicates that arms control is not a discrete or singular agreement but a broader regime of security governance with interconnected parts that include:

- a. norms, rules, and principles
- b. restrictions and obligations
- c. tools for implementation, verification, and confidence
- d. means and mechanisms to facilitate ongoing communication and engagement.

The following points provide a basis for progress:

1. We must implement and build on what is already in place.  
Universal recognition of and adherence to existing agreements that govern activities in outer space must provide the foundation of any new initiatives. The core framework is the Outer Space Treaty.
2. We must think inclusively about PAROS.  
Recent consultations held by Project Ploughshares on inclusive and diverse approaches to peace and security in outer space emphasize the value of incorporating humanitarian and gender-sensitive understandings of harm. Environmental perspectives are also needed. All help to illuminate threats that might not be captured by the traditional concept of weaponization or use of force.
3. We must prioritize tools for effective implementation and mutual confidence.  
Efforts to define, verify, and monitor should be pursued together to answer the question “how do we know?” This ability to know is essential in the context of outer space, where dual-purpose technology and dual-uses of space systems can obscure the nature of capabilities, intentions, and harms.

*The complete Statement to the UN GGE on PAROS can be found on the Ploughshares website. Click on Research, then Reports.*



and science students. It is essential that they think about law, policy, governance, and ethics. Their applied research and future work will affect how these social mechanisms evolve, whether they realize it or not.

**WS:** Finally, on April 30, you were at Western University in London, Ontario, to present the keynote address, “Putting people into space: Making peace and security more inclusive,” at Space Day 2024: Space Security & Disarmament. Western is only about an hour’s drive from our offices. Have you collaborated with Western’s Institute for Earth & Space Exploration previously?

**JW:** I’ve had opportunities to engage with people from the Institute, but this was my first visit there. I’m applying to become an affiliate, so it won’t be my last!

**WS:** Why did you focus on inclusivity in your address?

**JW:** Usually, inclusivity refers to meeting the critical need for appropriate representation and engagement in policy and decision-making. For that to happen, a broad range of people must see themselves as stakeholders. My objective was to convince this university audience that they were just as much stakeholders as the diplomats and



military personnel. They deserved a place at tables relating to peace, security, and arms control in outer space. We ALL have a stake and so we all need to have a voice.

**WS:** What did you take away?

**JW:** The panel that followed my lecture had a phenomenal mix of people discussing cyber security, nuclear safety, space situational awareness and satellite tracking, as well as planetary defence. They knew that space security is tied to safety, sustainability, and science. No siloed discussions.

**WS:** A focus on space threats – both threats to space and from space – seems to link all these events. A reflection of the current zeitgeist?

**JW:** After decades of flying over the radar (!), outer space is now recognized as the linchpin to the resolution of almost every peace and security concern on Earth, from warfighting to climate change and sustainable development. It grounds technology developments such as artificial intelligence, quantum computing, and cyberspace.

The revival of fears that nuclear weapons could be placed in orbit for use against satellites

### Feminist Astropolitics

The Gender Security Project is “an initiative working at the intersection of gender, peace, and security through research, reportage, and documentation with a focus on the global south.” In early March, the project’s website published an interview: “Feminist Astropolitics with Jessica West.”

A key quote from Jessica:

The lack of diversity – both in terms of individuals and also state participation in outer space – has definitely shaped the trajectory of human activities in space. Despite the many benefits that people all around the world have realized through the development of space capabilities and systems, the dominant underpinnings remain power, prestige, and national security, all of which have been diligently linked to notions of masculinity by other scholars.



has catapulted the need to maintain peace, security, and sustainability in outer space all the way to the agenda of the UN Security Council.

Everyone is now interested in space. But the complexity of space governance means that nuanced expertise is essential. □

*Wendy Stocker edits The Ploughshares Monitor.*

### Space Café Geopolitics: “33 minutes with Dr. Jessica West”

On May 2, Jessica was interviewed by Torsten Kriening of SpaceWatch.Global. The topic: nuclear weapons in space. Why now? Because a United Nations Security Council resolution that would have affirmed the obligations of all states parties to fully comply with the Outer Space Treaty came to a vote and was then vetoed by Russia on April 24.

As Jessica explained, the UNSC resolution was inspired by American intelligence that suggested that Russia was developing a nuclear weapon (which Russia denied). That states responded to this intelligence by going right to the Security Council indicated worsening diplomatic relations between the United States and Russia and their respective supporters.

What did Jessica find most surprising? “This is the first time the Security Council has ever had a vote related to outer space.... It’s important to know what the Security Council does, which is respond to active threats or perceived threats...; it’s really a channel for responding to what states see as imminent threats to international peace and security. So, that really stands out.”

Jessica wanted to make her main point clear: “It is incumbent on us to reinforce the Outer Space Treaty, to come back to the diplomatic agreements we have, to bring the international community together to reinforce both the law and the norm [that opposes] the idea of any kind of nuclear weapon activity in outer space.”

The videotaped interview can be found on the SpaceWatch.Global website.



# Security threats from airspace call for greater human rights protection



Written by Saad Hammadi

**D**rone attacks in Gaza and Ukraine have killed thousands and injured many more. But drones are not used only in war; indeed, so widespread is their use in surveillance that we could say that drones threaten the human right to privacy of all of us.

Militaries often praise drones and guided bomb units (GBUs) for their more precise—and therefore more ethical—targeting capabilities, but recent conflicts show something different. Indeed, the widespread use of drones in airstrikes has led to indiscriminate casualties among civilian populations and initiated a new era of terror.

Low-cost drones—as cheap as \$400—are increasingly accessible to both state and nonstate actors. And so the question must be raised: Do existing humanitarian and human rights laws protect us from the damage that drones do?

## Human rights disregarded in conflict

Recent conflicts reveal a deliberate disregard for the protection of civilians. Widespread missile and drone attacks in Ukraine have produced significant civilian casualties; the UN Human Rights Monitoring Mission in Ukraine reported more than 10,000 killed and nearly 20,000 injured in the first two years of the current war. Israel's widespread employment of airstrikes on densely populated areas of Gaza following the October 7, 2023 Hamas-led attacks has caused devastating

destruction and many civilian deaths. Hundreds were killed in a single refugee camp in Jabalia.

High-tech capabilities are not being deployed in ways that minimize civilian harm and safeguard human rights. Instead, they are being combined to increase lethality and the amount of force available for use. For example, unguided or “dumb” bombs guided by artificial intelligence software that triangulates data from satellite imagery and aerial footage can now target and strike buildings and other structures. It appears that Israel's invasion of Gaza was never intended to minimize civilian suffering: Israel's defence spokesperson Daniel Hagari stated on October 9, 2023, that “the emphasis is on damage and not on accuracy.”

After interviewing serving and former Israeli intelligence officials, the Israeli-Palestinian *+972 Magazine* and Hebrew-language news site Local Call reported that the Israeli military command approved the killing of from 20 to 100 civilians to target a single operative of Hamas. According to a source in the Israeli intelligence community, “these are not random rockets. Everything is intentional. We know exactly how much collateral damage there is in every home.”

Civilians in these conflict zones exist in a state of constant uncertainty and fear.

## Constant fear

But civilians in conflict zones are not the only ones living in fear.

## Jessica at MIT

Some key quotes (mildly edited) from Jessica when she appeared on the panel “AI for Peace and Security in Space”:

- Even though technologies interact wildly, our governance of technology is very siloed. This means that we have a huge opportunity to look at what is happening in other areas of governance and draw on it. A lot of AI governance initiatives focused on Earth can help to inform approaches in outer space.
- There are going to be changes in how we do space strategy from a military perspective in outer space and it's very much going to be shaped by artificial intelligence.
- I worry that we lose opportunities for de-escalation, for sober second thought, for communicating and for human interpretation on what's going on when there is more and more emphasis on doing things quickly.
- We're often faced with this security vs. security scenario, where we have international security objectives, which aren't always in harmony with national security objectives.
- The private sector has a role to play. Corporate governance is global governance, especially in domains like space, when the vast majority of objects are commercial.
- Standardization is a great way to do governance by stealth.
- Multistakeholder governance is the future of outer space.
- I have colleagues that work on cyber and Internet governance, and they look to space. And we look to them. So, I think we have a lot to learn from one another across domains.



Use the QR code to watch a video of the panel.



Governments around the world are making drones available to police for surveillance purposes. CBC has obtained a privacy impact assessment of the use of aerial technology by the Hamilton, Ontario police service. Permitted uses include collecting pictures and measurements for car crashes, identifying suspects, and helping with ground search and rescue. Also allowed are discretionary “other uses.” While non-lethal, such uses raise red flags about possible privacy violations.

There are also credible concerns about the use of drones in cracking down on peaceful protestors exercising their rights. The Hamilton police used drones to monitor protestors during Prime Minister Justin Trudeau’s visit to the city in January 2023. While drones might help police monitor and respond to violence, they have a chilling effect on protestors who are being watched and could be subsequently identified and intimidated.

Such use of drones on civilian populations is

not limited to Canada. This past February, the Haryana police in India used drones to dispense teargas grenades and disperse protestors. The use of large quantities of chemicals can constitute excessive use of force, in violation of the right to peaceful assembly. Drone Wars UK reported that, in February 2010, U.S. drones killed 29 people in North Waziristan, Pakistan, in an attempt to kill Sirajuddin Haqqani, a senior member of the Taliban. Targeted killings of top Iranian military commander Qasem Solaimani in Iraq in 2020 and Osama bin Laden in Pakistan in 2011 by American forces illustrate the use of drones in extrajudicial executions, in violation of the right to life and due judicial procedures.

## Freedom from fear

While mass civilian casualties from aerial bombardment stand out as a humanitarian concern, a less obvious but perhaps more insidious effect

of drones is the instilling of everyday fear. The Airspace Tribunal, a people's tribunal founded by artist Shona Illingworth and human rights lawyer Nick Grief, has been assembling testimony on all these fears from experts and witnesses in conflict zones and surveilled communities to determine whether a new human right to protect the freedom to live without fear from physical and psychological threat from above is needed to address the military and commercial exploitation of airspace and outer space.

Testimony indicates that drones in the sky cause civilians to suffer “anticipatory anxiety” as “they are reminded of previous strikes or are terrorised by the fear of death or injury through targeting errors.” Such anxiety reveals the harmful impacts unauthorized aerial devices could have on civilians in regions supposedly at peace. Even drones used in law enforcement are perceived to threaten individual privacy and safety. Such persistent fear can cause mental harm.

Illingworth and Grief argue that in situations of armed conflict, mental harm must be considered when applying the rule of proportionality, a key principle of the international humanitarian law that prohibits “excessive” incidental harms to civilian life and properties “in relation to the concrete and direct military advantage anticipated.” Of course, excessive civilian harms and concrete military advantage can be interpreted subjectively and so work should be done to tighten and make these definitions universal.

But civilians also need protection during peacetime. The increasing use of drones by non-military forces in peacetime creates an imminent physical and psychological threat to the right to life and privacy. The exercise of restraint and proportionate use of force are also stipulated in basic UN principles on use of force by law enforcement officials.

Freedom from fear is one of the highest aspirations of the Universal Declaration of Human Rights. The growing threat from above calls for this aspiration to be legally protected to truly enjoy freedom, justice, and peace for “all mem-

## Panel on artificial intelligence

On May 6, Dr. Branka Marijan appeared on a panel, “Interdisciplinary Dialogues on AI,” with Dr. Leah West from Carleton University and Dr. Nisarg Shah of the University of Toronto. The panel was a feature of the University of Toronto's Schwartz Reisman Institute for Technology and Society Graduate Workshop. The workshop took up the first day of the three-day *Absolutely Interdisciplinary*, an annual event that “fosters new ways of thinking about the challenges presented by AI and other powerful technologies to build a future that promotes human well-being—for everyone.”

During her presentation, Branka noted that civil society plays a crucial role in monitoring and tracking the applications of AI, especially in defence and security sectors. She warned that the opacity of these sectors presents a challenge to those who advocate for stricter controls on the use of these technologies. Still, she asserted, such advocacy is vital, particularly in a democratic nation like Canada.

A video of the panel will be available on YouTube.



bers of the human family” in line with inherent human dignity and universal human rights.

A step toward achieving these rights would be for the United Nations to develop an international framework on the use of drones to prevent human rights violations. As well, national governments should develop clear policies on the use of drones, establish safeguards, and institute penalties for violations.

With technology changing rapidly, now is the time to expand our understanding and protection of human rights. □

*Saad Hammadi is a human rights advocate and has a Master of Arts in Global Governance from the Balsillie School of International Affairs. He was selected as a Policy Researcher at Project Ploughshares for Winter 2024 through the BSIA Technology Governance Initiative. He can be followed on Twitter/X @saadhammadi.*

## A note of appreciation



I spent a wonderful five months at Project Ploughshares, working closely with Jessica [West] and acquiring knowledge about rapidly evolving outer space activities. Jessica and I worked on research related to space and human rights, which will be published later this year.

I'm delighted to have contributed to an advocacy initiative with Kelsey [Gallagher] to stop Canada's arms exports to Israel in the face of horrific war crimes being committed in Gaza.

I live with no uncertainty that the new and existing research and advocacy of Project Ploughshares will influence and shape global and national policies and priorities.



- Saad Hammadi, 2024 Research Fellow with Project Ploughshares

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