MCKINZIE: Good afternoon. So our panel is titled the Humanitarian Impact of Nuclear Weapons: What Happens if the Bomb is Used?

Our conference today was very thoughtfully constructed and in this second panel, we will be going further into darkness before we start examining steps, ways that we as individuals can act to reduce these nuclear threats, ways that our decision makers in our society can be advised to act. Speaking on the second panel will be Setsuko Thurlow, Ira Helfand and Alan Robock. It’s my honor and privilege to introduce these three panelists to you and to moderate this session.

As a researcher in nuclear arms control, I have spent time reasoning about nuclear deterrence. I have used and created my own computer models to look at the stability of nuclear forces, to understand their dynamics for opposing sides. One question that I've spent time exploring with gifted colleagues like Bruce Blair is, “Can nuclear deterrence be made more stable with fewer nuclear weapons off of high alert?”

But humanitarian impacts is a different perspective. It’s a challenge to this whole way of thinking about making deterrence more stable. The humanitarian impacts perspective is a challenge to the very way that the nuclear weapons issue is framed. And more and more off late I've come to see the really stark truth of the humanitarian impacts perspective on nuclear weapons and so I'm very privileged to moderate this panel.

The humanitarian impacts perspective has three core messages and I've boiled this down, but three core messages. One, nuclear war will be much worse than can be imagined. Two, nuclear war can really happen, we saw those scenarios put forth to us in Panel 1. And three, which is sort of a conclusion of the first two, nuclear weapons do not make us more secure, nuclear weapons are the primary threat to our security.

The structure of deterrence has no solid foundation. Humanitarian impacts perspective drives from a growing understanding of the catastrophic impact of nuclear weapons detonations on individuals, society, the economy and the environment. I work for the NRDC, we're an environmental organization, much of what my colleagues work on is climate change, clean air, clean water, endangered species. But NRDC has long viewed nuclear war as an environmental issue. It really informs the perspective of my organization. The humanitarian impacts perspective addresses the certainty about the inability of health care providers to cope with the use of nuclear weapons.
One of our panelists Ira Helfand, is a healthcare provider himself. But I would say what inspires me about the humanitarian impacts movement is that it draws from the strength and dedication of over a 150 nations. A group that's involved within the non-proliferation treaty, the NPT treaty, to really make this an issue at the forefront at the United Nations. So with those words, I'm now very humbled to introduce our three panelists, who speak with wisdom and authority on the humanitarian impacts of nuclear weapons.

First, I would like to introduce Setsuko Thurlow. As a 13-year-old school girl in 1945, Setsuko Thurlow found herself in close proximity to the hyper center of the atomic attack in Hiroshima. A survivor of one of the most pivotal events in modern history, Setsuko displayed great courage and leadership sharing her experiences in order to educate people on the consequences of an indiscriminate massive attack of nuclear weapons on populations and to advocate for nuclear disarmament. Educated in Japan, the U.S. and Canada, Setsuko served as a social worker in education and health services in the metropolitan Toronto area, her disarmament education efforts have taken her to many nations around the world.

Our other two panelists are Ira Helfand, co-president of International Physicians for the Prevention of Nuclear War, IPPNW; and Dr. Alan Robock, distinguished professor of climate science in the department of environmental science at Rutgers Universities. Dr. Ira Helfand and Dr. Alan Robock's biographies are in your materials for the conference. These are very distinguished colleagues who will present together with a combined PowerPoint after Setsuko.

So with that, I would like to turn the podium over to Setsuko. Thank you.

THURLOW: I am to share my personal and collective memories of the bombing of Hiroshima and Nagasaki. On that fateful day August 6, 1945, as a 13-year-old, Grade eight student and a member of the student mobilization program. I was at the army headquarters, 1.8 km from the ground zero. About 30 of us students were assigned to work as decoding assistants of top secret messages.

At 8:15 am, Major Yuni gave us a pep talk at the assembly and suddenly I saw in the window the blinding bluish white flash and I remember having the sensation of floating in the air. As I regained consciousness in the silence and darkness, I found myself pinned by the collapsed building, I could not move, I knew, I faced death. I began to hear my classmates' faint cries, "Mother, help me," "God, help me". Then suddenly I felt hands touching my left shoulder and heard the man say, "Don't give up, keep moving, keep pushing, keep kicking, I'm trying to free you."

See the leg through that opening, go towards it and get out as quickly as possible. As I crawled out, the ruins were on fire, more so, my classmates in the same room were burnt alive. A soldier ordered me and two other girls, surviving girls to escape to the nearby hills. Outside I looked around, although it was morning, it was as dark as twilight because of the dust and smoke rising in the air.

I saw strings of ghostly figures slowly shuffling from the center of the city toward the nearby hills, they did not look like human beings, their hair stood straight up and they were naked and tattered, bleeding, burned, blackened and swollen, part of their bodies were missing, flesh and skin hanging from their bones, some with their eyeballs hanging in their hands and
some with their stomachs burst open with their intestine hanging out. We students joined the ghostly procession, carefully stepping over the dead and dying, there was a deadly silence, broken only by the moans of injured and their plea for water. The foul stench of the burnt skin filled the air.

We managed to escape to the foot of the hill where there was an army training ground about the size of two football fields, it was covered with the dead and injured, who were desperately begging, often in faint whispers, "Water, water, please give me water." But we had no containers to carry water, we went to the nearby stream to wash off the blood and dirt from our bodies, then we tore off our blouses soaked them with water and hurried back to hold them to the mouths of the injured who desperately sucked in the moisture.

We did not see any doctors or nurses all day. When darkness fell, we sat on the hillside and all night watched the entire city burn, numbed by the massive and grotesque scale of death and suffering we had to witness. My father had left town early that morning, my mother was rescued from under the collapsed home, my sister and her four year old son were burned beyond recognition while on their way to the doctor's office, an aunt and two cousins were found as skeletons, my sister-in-law is still missing. We rejoiced in the survival of my uncle and aunt but about 10 days later they both died covered with purple spots all over their bodies and their internal organs seemed to have been liquefied.

My own age group of over 8,000 Grade seven and Grade eight students from all the high schools in the city were engaged in the task of clearing fire lanes in the center of the city, many of them were killed instantly by the heat of 4,000 degree Celsius, many were simply carbonized and vaporized. Radiation, the unique characteristic of atomic bombing affected people in mysterious and random ways, with some dying instantly and others weeks, months and years later by the delayed effects and radiation is still killing survivors today.

Thus, my beloved city of Hiroshima suddenly became desolate, with heaps of ash and rubble, skeletons and blackened corpses. Out of a population of 360,000, most of them non-combatant; women, children and elderly became victims of the indiscriminate massacre of atomic bomb.

By the end of 1945, about 140,000 had perished, as off now, at least 260,000 have died in Hiroshima alone, from the effects of the blast, heat and radiation. As I used a number for the dead, it pains me deeply, the Hiroshima dead numbers trivializes their precious lives and negates their human dignity.

In the aftermath of several years, we survivors had to endure many hardships including the physical devastation of near starvation, homelessness, lack of medical care, rapidly spreading social discrimination, total lack of service and support from the federal government and a collapse of the ultra-nationalistic social system and a sudden introduction to democratic way of life.

We also suffered from psycho-social control by the allied forces following Japan's surrender. The occupation authorities established the atomic bomb commission in Hiroshima and Nagasaki, whose sole purpose was to study the effects of radiation of the bomb on human bodies and not to provide
treatment to the injured. Needless to say, survivors felt they were treated like guinea pigs, not once, but twice.

First as the targets of the atomic bombing and then as the subject of medical research. The occupation authorities also censored media coverage of survivors suffering and confiscated their diaries, correspondence, literary writings, films, photographs, even medical records, et cetera, 33,000 items in all. And they were shipped back to the Washington area, to this area.

The triumphant scientific and technological achievement in making the atomic bomb could freely be written about but the human suffering inflicted by the atomic bomb was not to be heard by the world. Following the massive trauma survivors had to repress themselves in silence and isolation and were thus deprived of the normal process of healing.

With the return of full sovereignty to Japan in 1952, a flood of political, scientific, medical, and historical information became available for the first time, enabling scholars, researchers and journalists to see survivors' experiences in historical perspective and global context. They became aware that the main motive of atomic bombing was political rather than military, they rejected the American myth that the use of the bomb was necessary to end the war quickly, to avoid the costly invasion of Japan and to save lives.

Their research uncovered many uncomfortable truths, for example, Operation Olympic was not scheduled until November 1st, almost three months after the actual bombing. President Truman and his advisors knew that Japan's military had practically ceased to function, they also knew that the Japanese government had already made diplomatic overture for a negotiated surrender. And that the lack of clarification regarding the status of the emperor in the unconditional surrender was the main stumbling block for the Japanese.

From the U.S. perspective, it was extremely important to demonstrate American military might, before the Soviet entered into war with Japan, thus the U.S. positioned itself as the dominant power in East Asia in the post war period. With this understanding of the historical perspective, the survivors saw themselves as pawns in the opening game of the cold war rather than as sacrifices on the altar of peace. On the Cenotaph, in the Peace Park in Hiroshima, is the inscription which reads, "Rest in peace, the era will not be repeated." What era and whose era, we're purposely left ambiguous.

Although some wanted to point accusing fingers at America, others saw the issue on the higher philosophical plane as a universal need for nothing less than a culture transformation, away from our obsession with violence and war. We survivors of Hiroshima and Nagasaki became convinced that no human being should ever have to repeat our experience of inhumanity, illegality, immorality and cruelty of the atomic bomb. And that our mission was to warn the world about the danger of ultimate evil, we believe that humanity and nuclear weapons cannot co-exist.

And it is our moral imperative to abolish nuclear weapon in order to secure a safe, clean and just world for future generations. With this conviction, we have been speaking out around the world for the past several decades for the total abolition of nuclear weapons.
In the summer of 1954, I arrived at a college not far from Washington D.C., on a scholarship to study social work. At the first interview, I gave my frank opinion about U.S. hydrogen bomb tests at the Bikini Atoll in the Marshall Islands in the South Pacific which caused the islanders severe public health problems and environmental damage. In addition, the bomb test caused radiation induced illness to every member of the crew of a nearby Japanese fishing boat and a death of one member.

As a result of my remark, I began to receive unsigned hate letters. This was my introduction to the United States. This hostile reaction forced me to do some soul searching, it was a temptation to quit and remain silent but I came out of this traumatic experience with a stronger resolve to work for peace and disarmament. I was deeply disturbed by the way many Americans uncritically and blindly followed the governments lying -- justifying the atomic bombing. It was a chilling reminder for me of the wartime behavior of Japanese, unthinkingly swallowing government propaganda and brain washing.

During this lonely time, I was able to come across the writing of some scholars with profound analysis of the issue. One of them was American professor Richard Fog who said, quote, "The bombing of Hiroshima and Nagasaki were viewed as contributing to the ending of the popular and just war, therefore they have never been appraised in the necessary ways of atrocities, they have never been understood as they certainly would have been understood had Hiroshima and Nagasaki been located in an allied country.”

Somehow we got to create that awareness so that Hiroshima is understood to have been on the same level of depravity and in many ways far more dangerous to our species and civilization than what's known. The failure to see Hiroshima and Nagasaki as atrocities, the regarding of the two 1945 bombs as good bombs that contributed to winning and ending the just war helped the American conscience to accept the subsequent development of nuclear weapons.

That's linking the justification of Hiroshima and Nagasaki to the disastrous nuclear arms race and cold war. Survivors of Hiroshima and Nagasaki as well as victims of nuclear weapon testing are dying with a hope of abolition in our lifetime unfulfilled. For us the last 72 years seem like a never ending struggle to advocate for nuclear disarmament but we have never lost our conviction that only by eliminating nuclear weapons will human survival be possible.

And now the birth of nuclear ban treaty movement inspired by the humanitarian initiatives, it's like opening the door of hope for a new chapter of our struggle and for the world community. It has galvanized people, energy and commitment. The humanitarian initiative has reframed how we think and talk about nuclear weapons and refocused our attention from military doctrines of deterrence to the real impact of nuclear weapons on all living beings and the environment.

The ban treaty movement joined by 130 nations last month at the United Nations as well as the hundreds of NGOs is to establish a clear, new, international standard to declare in no uncertain terms that nuclear weapons are illegitimate, immoral, and illegal. The prohibition of nuclear weapons, the only weapon of mass destruction not already banned is a vital first step in the ultimate door of nuclear weapons.

One more, we Hibakusha have waited more than seven decades for this time to arrive, we are euphoric and elated with this significant progress.
But this is only the first step on the road to nuclear disarmament. Threat of nuclear war continues even as we speak, coming from the most powerful in this very city. The ban treaty offers an alternative future, not just a future without nuclear weapons, but a future without war. Thank you.