Presentation (Outline) Peter Hayes, Executive Director, Nautilus Institute

On "Nuclear Scurity and Safety Challenges" at session 5
The 3rd Panel on Peace and Security of Northeast Asia (PSNA) Workshop
Moscow, June 1, 2018

This presentation will examine the relationship between non-state actor use of nuclear threat and attacks of various types, commonly termed nuclear "terrorism," with the risk of inadvertent nuclear war between nuclear-armed states. It will examine the Cold War concept of "catalytic" nuclear war; the capacities of modern non-state actors to engage in nuclear terrorism; the vulnerability of nuclear facilities to non-state attack; the potential triggering effect of a non-state nuclear threat or attack on the nuclear-conflict prone relationships swirling around North Korea; and post Cold War risks of nuclear war such as the role of social media storms in triggering nuclear early warning systems, fake media, false alerts, and losses of control that might arise from new technology such as quantum computing and artificial intelligence. Finally, it will pose some antidotes to these trends towards increased risk that non-state actors may trigger inter-state nuclear war including a standing nuclear early warning data transparency and fusion center, reduction of nuclear materials, vulnerable facilities, and warheads; and increased accountability of nuclear armed states and non-state actors by creation of a nuclear crimes tribunal, possibly by states party to the nuclear weapons prohibition treaty.