UK Project on Nuclear Issues 2020 Annual Conference

Tuesday 9 June 2020: Emerging Technology and Nuclear Proliferation

1300 – 1315  Opening Remarks
Speaker:  
Tom Plant, UK PONI Director and Director of Proliferation and Nuclear Policy, RUSI

1315 – 1420  Panel One: AI Cyber and Space
Chair:  
Alexandra Stickings, Research Fellow, Space Policy and Security, RUSI
Speakers:  
Jonathan Roberts, Graduate Systems Engineer, Lockheed Martin
*Human vs. Machine: The role of AI in Nuclear Weapons Systems*
Contributors: Adam Tunbridge, Paul Neale, Jennifer Insley and Rebecca Desmond, Lockheed Martin

Charlotte Levy, Graduate Safety Engineer, Babcock
*The Global AI Race and Strategic Balance: Which Race Are We Running*

Marina Favaro, Policy Analyst, BASIC
*Cyber- and space-based capabilities and their impact on strategic stability*

Jaewoo Shin, Analyst, Open Nuclear Network One Earth Future
*Implications of Real-Time Open Source Intelligence for Crisis Dynamics*

1420 – 1430  Break

1430 – 1510  Panel One: Q&A

1510 – 1540  Break

1540 - 1700  Panel Two: Hypersonics and technological threats to deterrence
Chair:  
Tom Plant, UK PONI Director and Director of Proliferation and Nuclear Policy, RUSI
Speakers:  
Alice Spilman, Researcher, BASIC, and PhD Candidate, University of Birmingham
*The Erosion of Traditional Nuclear Deterrence: How technological advancements threaten the managed system of deterrence*

Julia Balm, MA Candidate, King’s College London,
*Russian Hypersonic Boost Glide Vehicles: ’Boosting’ Putin’s National Security Strategy*

Aaron Kennedy, Graduate Engineer, Lockheed Martin
*Hypersonic Missile Defence: Stopping the Unstoppable*
Contributors: Jonathan Balakumar, Jacob Allen, Mark Hutchings and Daniel Cook, Lockheed Martin

1700 – 1800  Keynote speech and Q&A
Speaker  
TBC
Wednesday 10 June 2020: Challenges and solutions for sustaining nuclear expertise in the next generation

1300 – 1445

**Panel three: Challenges and solutions for sustaining nuclear expertise in the next generation**

**Chair:** Cristina Varriale, Research Fellow, RUSI

**Speakers:**
- Geoffrey Chapman, PhD candidate, Centre Science and Security Studies, King’s College London
  *Back to the Future: Past lessons on sustaining skills*
- Lorne Dryer, final year A-level student and incoming Politics and International Relations undergraduate
  *Setting the perception, how do policy and media affect the UK nuclear skills pipeline?*
- Emily Enright, MA Candidate International Conflict Studies, King’s College London
  *Addressing the ‘leaky pipeline’: taking the temperature of the UK’s early-career nuclear policy cohort*
- Matt Korda, Research Associate, Federation of American Scientists
  *How do we get young people to care about nukes?*

1445 – 1545

**Break**

1545 – 1700

**Panel 4: UK PONI alumni panel: making your way in the nuclear field**

**Chair:** Professor Malcolm Chalmers, Deputy-Director General, RUSI

**Speakers:**
- Fiona Barton, Engineering Manager – Core & CRDMs, Rolls Royce Submarines
- Dr Matthew Harries, Senior Research Fellow, RUSI
- Dr Heather Williams, Defence Studies Department and Centre for Science and Security Studies (CSSS), King’s College London

1700 - 1800

**Keynote speech and Q&A**

**Speaker:** TBC
Thursday 11 June 2020: UK nuclear weapons and Euro-Atlantic Security

1300 – 1445  **Panel 5: Nuclear weapons, nuclear power, and UK national strategy**

Chair: TBC

Speakers:
- **Artūr Hoñich**, Dual MA Candidate, Sciences Po Paris and King’s College London
  *Deployment of the W76-2: Strengthening Deterrence or Lowering the Threshold?*
- **Ramesh Balakrishnan**, MA Candidate, Carleton University, Ottawa
  *Euro-Atlantic Security and the UK’s Nuclear Strategy in 2040: the Case for a Robust UK Missile Defence System*
- **Lyndon Burford**, Postdoctoral Research Associate, Centre for Science and Security Studies, King’s College London
  *Nuclear deterrence - the ghost pillar of the NPT*
- **Thomas P. Davis**, Director Davis & Musgrove Ltd and PhD Researcher, University of Oxford
  *Playing the 'China card': national security implications of the UK Hualong One nuclear power station*

*Note: Unfortunately, this panel (which was originally mixed-gender) is now a single-gender panel due to participant withdrawals for unrelated reasons. We would not normally run a single-gender panel, but in this case we felt it would be more unfair to our emerging speakers to remove it from the programme than it would be to proceed in reduced form. For more information on how UK PONI has sought to ensure diversity and inclusion in our conference planning, please see our conference pack.*

1445 – 1515  **Break**

1515 – 1715  **Yes... or No, Minister: A Disarmament and Security Policy Exercise**

Exercise lead: **Dr Beyza Unal**, Senior Research Fellow, International Security Policy, Chatham House

1715 – 1730  **Break**

1730 – 1740  **Observations on proceedings, Tom Plant, UK PONI Director**

1740 - 1830  **Keynote speech, Q&A, and closing remarks**