



Dr. Chris C. Demchak, Grace M. Hopper Professor of Cyber Security and Director, Center for Cyber Conflict Studies (C3S), U.S. Naval War College

With degrees in engineering, economics, and comparative complex organization theory/political science, Dr. Chris C. Demchak is the RDML Grace M. Hopper Professor of Cyber Security and Director, Center for Cyber Conflict Studies (C3S), Strategic and Operational Research Department, U.S. Naval War College. Her research and many publications address global cyberspace as a globally shared, complex, insecure ‘substrate’ penetrating throughout the critical organizations of digitized societies, creating ‘cybered conflict’, and resulting in a rising ‘Cyber Westphalia’ of sovereign competitive complex socio-technical-economic systems (STESs). Demchak takes a systemic approach in focusing on emergent structures, comparative institutional evolution, adversary/defensive use of systemic cybered tools, virtual worlds/gaming for operationalized organizational learning, and designing systemic resilience against normal or adversary imposed surprises that disrupt or disable largescale systems. A former user of the LISP programming language- as well as a former military officer, she has taught international security studies and management, comparative organization theory, enterprise information systems, and cybersecurity for international/ national security issues. Recent works include *Designing Resilience* (2010 co-edit); *Wars of Disruption and Resilience* (2011); and a manuscript in production tentatively entitled *Cyber Westphalia: Redrawing International Economics, Conflict, and Global Structures*.

Dr. Demchak has not testified before the Commission previously.