2d Lt James Marvin

CTC 8

The first thing that comes to mind when comparing Nuclear Deterrence and Cyber Deterrence is attribution. Nuclear brings us back to the cold war days where we had national strategy for proportional response to a soviet strike. There was even a list of cities that were proportionally equivalent to other cities in Russia1. But nuclear deterrence is not as straightforward in the age of terrorism. In an editorial for the MIT Technology Review, Graham Allison former assistant secretary of defense for policy and plans during the Clinton administration details a scary time in American history. One month after the attacks on the World Trade Center, CIA intelligence indicated that the terrorist group al-Qaeda possessed a 10-kiloton nuclear bomb and they had smuggled it into New York city2. Fortunately, the reports were inaccurate, but it raised an important question. How do you retaliate when a nonstate actor uses nuclear weapons? How do you launch a counterstrike on an enemy with an undefined location? The solution, albeit not a complete one, ended up being nuclear nonproliferation2. The United States disabled its tactical nuclear weapons and aided other nuclear powers in the same process. Over the past two decades thousands of weapons have been moved offline and consolidated in secure areas with the hope of preventing them from getting into the wrong hands. In the first televised debate of the 2004 election both candidates agreed that the greatest threat to national security were weapons of mass destruction falling into the hands of terrorist groups. On a smaller scale cyber deterrence faces a similar dilemma today. We may have a best guess of who attacked our network, but it is difficult to say with the certainty lawmakers and commanders are used to when delivering retaliatory effects. Nonproliferation is not an option because we cannot stop the sale of computing technology because it is used for a host of legitimate purposes unlike weapons grade plutonium. It is imperative that the US work to increase it technical prowess in the realm of attribution in order to meet the security needs of the future.

Kahn, H. *On thermonuclear war*. Princeton University Press, i960.

Allison, G. (2008). Nuclear deterrence in the age of nuclear terrorism. *Technology Review*, *111*(6), 68-73.