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The New Era of Counterforce

KEIR LIEBER, Georgetown University

Nuclear deterrence rests on the survivability of nuclear arsenals. For much of the nuclear age, counterforce disarming attacks those aimed at eliminating nuclear forces were nearly impossible because of the ability of potential victims to hide and protect their weapons. However, technological developments are eroding this foundation of nuclear deterrence. Advances rooted in the computer revolution have made nuclear forces around the world far more vulnerable than before. Specifically, two key approaches that countries have relied on to ensure arsenal survivability since the dawn of the nuclear age—hardening and concealment—have been undercut by leaps in weapons accuracy and a revolution in remote sensing. Various models, methods, and evidence demonstrate the emergence of new possibilities for counterforce disarming strikes. In short, the task of securing nuclear arsenals against attack is a far greater challenge than it was in the past. The new era of counterforce challenges the basis for confidence in contemporary deterrence stability, raises critical issues for national and international security policy, and sheds light on one of the enduring theoretical puzzles of the nuclear era: why international security competition has endured in the shadow of the nuclear revolution.