



## AIR FORCE DOCTRINE PUBLICATION (AFDP) 3-72 NUCLEAR OPERATIONS

## DETERRENCE

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"Deterrence prevents adversary action through the presentation of a credible threat of unacceptable counteraction and belief that the cost of the action outweighs the perceived benefits" (Joint Publication [JP] 3-0, *Joint Operations*). Deterrence is critical to US national security efforts. Even though both nuclear and conventional operations contribute to the effect, nuclear capabilities are the foundation that underpins all other elements of deterrence.

"The fundamental reasons why US nuclear capabilities and deterrence strategies are necessary for US, allied, and partner security are readily apparent. US nuclear capabilities make essential contributions to the deterrence of nuclear and non-nuclear aggression. The deterrence effects they provide are unique and essential to preventing adversary nuclear attacks, which is the highest priority of the United States.

US nuclear capabilities cannot prevent all conflict and should not be expected to do so. But they contribute uniquely to the deterrence of both nuclear and non-nuclear aggression. They are essential for these purposes and will be so for the foreseeable future. Non-nuclear forces also play essential deterrence roles, but do not provide comparable deterrence effects--as is reflected by past, periodic, and catastrophic failures of conventional deterrence to prevent Great Power war before the advent of nuclear deterrence. In addition, conventional forces alone are inadequate to assure many allies who rightly place enormous value on US extended nuclear deterrence for their security, which correspondingly is also key to non-proliferation."

-- 2018 Nuclear Posture Review

<u>Deterrence</u> should be based on capability, credibility, and communication to ensure greater effectiveness.

**Capability** consists of having the means to influence behavior. For effective deterrence, a range of flexible nuclear capabilities should be maintained to ensure that nuclear or non-nuclear aggression against the US, allies, and partners will fail to achieve its objectives and carry with it the credible risk of intolerable consequences for the adversary. Nuclear force capabilities should be diverse, flexible, adaptable, effective, responsive, and survivable.

**Credibility** consists of maintaining a level of believability that the proposed actions may actually be employed. Credibility depends on the appearance of the deterrent from the adversary's point of view. For effective deterrence, credibility hinges on having a convincing capability to execute a variety of nuclear and non-nuclear options and a willingness to employ these options.

**Communication** consists of transmitting the intended message to the desired audience. For effective deterrence, this messaging should articulate US resolve to employ capabilities that deny the benefits of adversary action and impose costs on them. Messaging opportunities include weapon system testing, nuclear exercises, alert posturing, and shows of force.

## **Global Thunder and Global Lightning**

Global Thunder and Global Lightning, annual command-level exercises sponsored by <u>US Strategic Command</u> (USSTRATCOM) in cooperation with Air Force Global Strike Command and the North American Aerospace Defense Command, are key demonstrations of the Air Force's ability to test and validate nuclear command and control and execution procedures. Exercise objectives typically include live communications and the participation of units assigned or attached to USSTRATCOM during wartime, including USSTRATCOM's airborne command post and external participation from national-level organizations and other combatant commands.

Nuclear forces can be used to deter conventional and other non-nuclear threats. Forces used in support of nuclear operations may be tied to more complex and dynamic situations, combining both conventional and nuclear operations which may require integration across multiple domains and environments. Today's Air Force recognizes that many adversaries are willing to employ nuclear operations under many different circumstances.

For additional discussion on effects, see "<u>Practical Design: The Coercion Continuum</u>" in AFDP 3-0, <u>Operations and Planning</u>.