

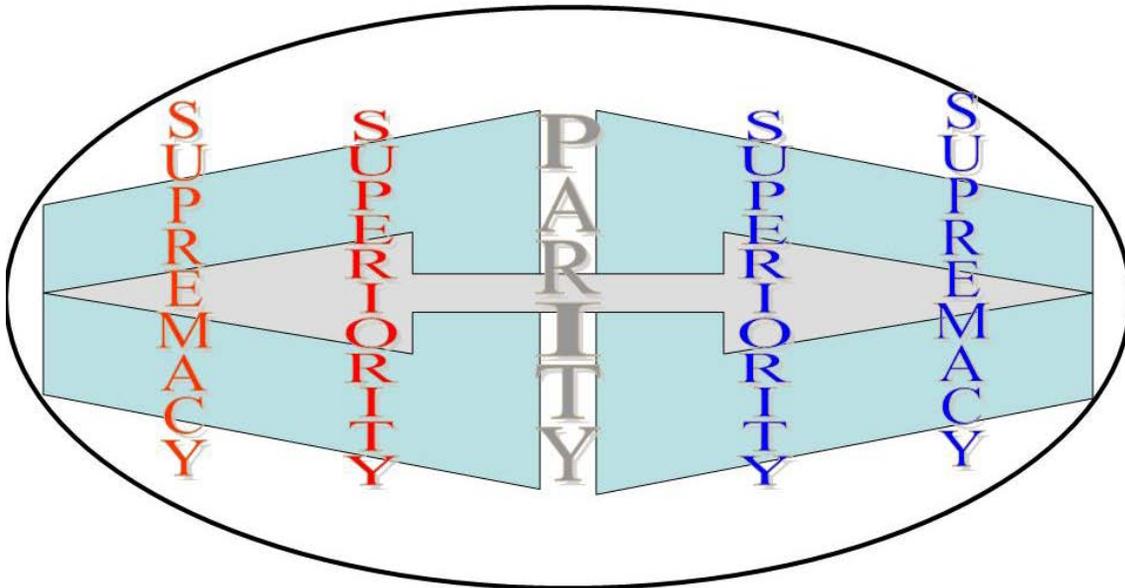


ANNEX 3-01 COUNTERAIR OPERATIONS

COUNTERAIR OPERATIONS

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The Air Force defines counterair as a mission that integrates offensive and defensive operations to attain and maintain a desired degree of control of the air and protection by neutralizing or destroying enemy aircraft and missiles, including cruise and ballistic missiles, both before and after launch. Counterair operations are conducted across all domains and determine the level or degree of control of the air. **Control of the air describes a level of influence in the air domain relative to that of an adversary, and is typically categorized as parity, superiority, or supremacy.** The degree of control lies within a spectrum that can be enjoyed by any combatant. This can range from a parity (or neutral) situation, where neither adversary can claim control over the other, to air superiority, to air supremacy over an entire operational area. (The figure titled **Control of the Air** illustrates their relationship.) Control of the air often requires at least air superiority to enable the successful execution of joint operations such as strategic attack, interdiction, and close air support.



Control of the Air

Normally, counterair operations are classified as offensive or defensive. However, airpower's inherent flexibility allows missions and aircraft to shift from defensive to offensive (or vice versa) to adapt to changing conditions in the operational environment.

Counterair operations can be conducted across the tactical, operational, and strategic levels of war by any component or element of the joint force. Operations may be conducted over and in enemy, friendly, and international airspace, land, and waters; as well as space and cyberspace. They range from seeking out and destroying the enemy's aircraft (manned and unmanned) and missiles (air-to-air, surface-to-air, cruise, and ballistic), through taking measures to minimize the effectiveness of those systems, to countering efforts to contest control of the air through other domains such as cyberspace. The joint force commander's (JFC's) objectives and desired effects determine when, where, and how these operations are conducted to gain the desired degree of control of the air.

- ✦ **Air parity.** Air parity is described as a condition in which no force has control of the air. This represents a situation in which both friendly and adversary land, maritime, and air operations may encounter significant interference by the opposing force. Parity is not a "standoff," nor does it mean aerial maneuver or ballistic missile operations have halted. On the contrary, parity may be typified by fleeting, intensely contested battles at critical points during an operation with maximum effort exerted between combatants in their attempt to achieve some level of favorable control.

- ✦ **Air superiority.** Joint doctrine defines air superiority as, "**that degree of dominance in the air battle by one force that permits the conduct of its operations at a given time and place without prohibitive interference from air and missile threats**" (JP 3-01). For conceptual clarity, Air Force doctrine further defines air superiority as "that degree of *control of the air* by one force that permits the conduct of its operations at a given time and place without prohibitive interference from air and missile threats, including cruise and ballistic missiles." Air superiority may be localized in space (horizontally and vertically) and in time, or it may be broad and enduring.

- ✦ **Air supremacy.** Joint doctrine defines air supremacy as "**that degree of air superiority wherein the opposing force is incapable of effective interference within the operational area using air and missile threats**" (JP 3-01). For conceptual clarity, Air Force doctrine further defines air supremacy as "that degree of *control of the air* by one force that permits the conduct of its operations at a given time and place without effective interference from air and missile threats, including cruise and ballistic missiles." Air supremacy may be localized in space (horizontally and vertically) and in time, or it may be broad and enduring. This is normally the highest level of control of the air that air forces can pursue.

Control of the air hinges on the idea of preventing *prohibitive or effective* interference to joint forces in the air domain from enemy forces, which would prevent joint forces from creating their desired effects. Air supremacy prevents *effective* interference, which does not mean that *no* interference exists, but that any attempted interference can be easily countered or should be so negligible as to have little or no effect on operations. While air supremacy is most desirable, it may not be operationally feasible. Air superiority, even local or mission-specific, may provide sufficient freedom of action to create desired effects. Therefore, commanders should determine the minimum level of

control of the air required to accomplish their mission and assign an appropriate level of effort to achieve it.

So What Is...Parity, Superiority, or Supremacy? It Depends...



In modern warfare, parity is often not recognized at the moment it exists. It is more easily identified when viewed in a historical context as the point in time just prior to when momentum swung to favor one combat force over another. During the 1973 Arab-Israeli War, in the Sinai desert Egyptian surface-to-air missile (SAM) batteries were employed so effectively that the Israeli Air Force—an otherwise extremely effective force—could not accomplish its mission with traditional tactics of air interdiction or suppression of enemy air defenses, even though the Egyptian air force was similarly unable to interfere with Israeli maneuver.



Both air and ground force maneuvering essentially came to a halt for a 48 hour period. The stalemate—the period of air parity—was not broken until the Israelis changed tactics by using direct infantry attacks on the Egyptian SAM system, an example of integrating capabilities of the full joint force into counterair operations. Those attacks swung the momentum back to the Israeli side by allowing their Air Force to regain control of the air domain, and eventually assert air superiority across the entire front.



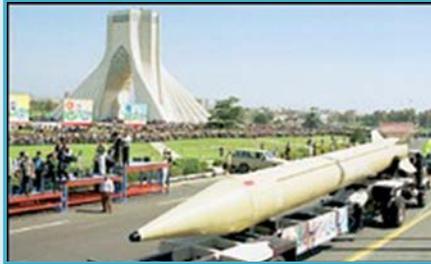
By war's end, the Israeli Air Force was virtually unchallenged in the sky, and had therefore established air supremacy.

—Various Sources

The continuing proliferation of weapons of mass destruction (WMD) increases the importance of control of the air. Several nations have advanced air-to-surface and surface-to-surface missiles capable of delivering WMD. In addition, the electronic warfare capabilities of some potential adversaries have advanced to near parity with, or in some cases exceeded, those of the United States, which may enable aircraft capable

of delivering WMD to penetrate friendly air defenses. Mobile missiles, cruise missiles, and unmanned aircraft systems (UAS) pose a significant threat to friendly forces and populations, and the ability to locate and destroy these systems prior to launch remains a challenge for effective counterair operations. These threats may have larger implications—for example, the survival of diplomatic relationships, political alliances, and even civilian populations may hinge upon successful countering of a missile threat.

Iran parades “anti-US missiles”



Iran showed off its range of ballistic missiles at an annual military parade today, with the rockets draped in banners vowing to "crush America" and... "We will crush America under our feet"...

"The Shahab-3 missiles, with different ranges, enable us to destroy the most distant targets," said an official commentary accompanying the parade, which was carried live on state television.

"These missiles enable us to destroy the enemy with missile strikes," the commentary said, without giving any specific details on the range of the missiles.

—By permission, Alireza Nirumandrad, *Persian Journal*, 21 Sep 04

Offensive Counterair

The objective of offensive counterair (OCA) is to destroy, disrupt, or degrade enemy air capabilities by engaging them as close to their source as possible, ideally before they are launched against friendly forces. Otherwise, OCA operations seek out and destroy these targets as close to their launch locations as possible. These operations may range throughout enemy, friendly, and international airspace and waters and are generally conducted at the initiative of friendly forces. OCA targets may include but are not limited to: enemy air defense systems, theater missile systems, airfields, airfield support infrastructure, C2 nodes, multi-domain launch platforms, and launch platform supporting infrastructure. OCA operations enable friendly use of contested airspace and reduce the threat of airborne attacks against friendly forces.

Defensive Counterair

The objective of defensive counterair (DCA) is to protect friendly forces and vital interests from enemy airborne attacks and is synonymous with air defense. DCA consists of active and passive air defense operations including all defensive measures designed to destroy attacking enemy airborne threats or to nullify or reduce the effectiveness of such threats should they escape destruction. The basic active defense

criteria to detect, identify, intercept, and destroy remain the same for any airborne threat. DCA forces generally react to the initiative of the enemy and are subject to the weapons control procedures of the [area air defense commander](#) (AADC).
