# **Chapter 8: Aviation**

This page is a section of FM 7-100.1 Opposing Forces Operations.

Aviation operations are an integral part of all OPFOR operations. Most fixed-wing assets belong to the Air Force, while most of the rotary-wing aircraft belong to the Army. The Air Force is the largest, best equipped, and best trained in the geographic region. The capabilities of the OPFORâ® sxed- and rotary-wing aircraft far exceed those of its neighbors, allowing for regional air superiority. However, the Air Force is not strong enough to defeat the air force of a modern power from outside this region. Realizing this limitation, the OPFOR will modify its use of aviation assets to ensure effective use against high-payoff targets. The air doctrine of the OPFOR represents a blend of principles growing out of past experience and doctrine adapted from foreign advisors.

### **Organization**

The Stateâl aviation organizations are structured similar to the ground components. As with the ground forces, the administrative force structure is a system in peacetime that mans, trains, and equips units to deploy for war. In wartime, the Air Forceâl peacetime air armies may be utilized in whole or may be parceled to provide units to a theater- or operational-level command. The Armyâl aviation units are structured similarly to other Army units, with brigades and battalions being the primary size of deployable units. This structure provides timely and effective use of assets at all levels of combat from the strategic campaign to the tactical ground maneuver plan.

#### Air Force

The OPFOR has a variety of Air Force assets at national and theater levels in the administrative force structure. It has organized these assets so that each of these levels of command can have its own aviation forces to fulfill mission requirements. The subordinate Air Force organizations are grouped on a functional, mission-related basis, into divisions, regiments, and squadrons. For example, a bomber division is composed primarily of bomber regiments, and a fighter regiment is composed mainly of fighter squadrons. Rotary-wing assets of the Air Force are organized along the same lines as those of army aviation, with brigades and battalions. The Air Force also has some mixed aviation units with a combination of fixed- and rotary-wing assets; these follow the normal Air Force organization pattern, with mixed aviation regiments and squadrons, although rotary-wing subordinates would be battalions and companies. Various fixed- and/or rotary-wing assets of the Air Force may be task organized as part of an operational-level command in wartime.

#### **National-Level Air Force**

The State has subordinated air armies directly to the Supreme High Command (SHC) for strategic missions. Aircraft include bombers, interceptors, fighters, electronic warfare (EW) platforms, transport aircraft, and tankers. Some bombers can deliver long-range, air-launched cruise missiles (ALCMs) with high accuracy and a standoff range of 3,000 km or more. Tankers provide a capability for air-to-air refueling of bombers. A national-level air army has the mission of inflicting losses on vital targets and conducting aerial reconnaissance in support of the strategic campaign. The SHC can also allocate these air armies to support a specific theater- or operational-level command.

The size and composition of an air army can vary greatly. However, most air armies have one or more units each for  $\hat{a}$ 

· Fighter aviation.

- · Bomber aviation.
- Reconnaissance aviation.
- Mixed aviation (fixed- and rotary-wing).
- · Heliborne jamming.

In addition, some air armies may have one or more units forâ 🛭 🖺

- · Ground-attack aviation.
- Airborne jamming aviation.
- Transport helicopters.
- Air ambulance.

Generally, units with the term aviation in their titles are either fixed-wing units or mixed aviation units with a mixture of fixed-and rotary-wing aircraft. During wartime, some aviation divisions and regiments may be task organized into aviation tactical groups.

#### **Theater-Level Air Force**

Theater air armies are subordinate to the theater headquarters (if created) and play a key role in all types of combat, from participating in theater-level campaigns to supporting low-level tactical units of the ground forces. In the former role, they complement national-level aviation, and in the latter, army aviation.

High-performance fighters, interceptors, and some light bombers com- prise the air army of the theater. At theater level, the Air Force also controls a substantial number of fixed- and rotary-wing EW aircraft, as well as medium- and heavy-lift helicopters. Thus, a theater air army can have the same types of units as found in air armies at the national level.

The size and composition of the theater air army vary greatly depending on the theaterâ $\mathbb{N}$   $\mathbb{N}$  s needs. Those aviation assets retained to provide fire support at the theater level are part of the theaterâ $\mathbb{N}$   $\mathbb{N}$  is tegrated fires command (IFC). Theater headquarters may also use these assets to support high-priority operational-level actions.

# **Operational-Level Air Force**

At the operational level, an operational-strategic command (OSC) is a joint command. Therefore, the SHC may include Air Force units in the formation of the OSC. These units are sized and equipped according to the mission assigned to the OSC. Those Air Force assets allocated to an OSC in a constituent or dedicated relationship for fire support become part of the OSCâN NEC.

# **Army Aviation**

The OPFOR has a variety of attack, transport, multipurpose, and special- purpose helicopters that belong to the ground forces (Army) rather than the Air Force. Hence the term army aviation. In addition to these helicopters, army aviation also owns a limited number of small fixed-wing aircraft to support transport and reconnaissance missions. Army aviation units may remain under centralized control at theater level or may be task organized within an OSC, division tactical group (DGT), or brigade tactical group (BTG).

# **Theater-Level Army Aviation**

The theater headquartersâl larmy aviation assets are critical in theater campaigns. Army aviation provides reconnaissance, lift for heliborne landings, and direct air support (DAS) for ground forces. The OPFOR generally uses helicopters for reconnaissance only within the protection of the ground forcesâl lair defense umbrella. Helicopters perform such tasks as route or NBC reconnaissance. In the DAS role, it is common for army aviation to supplement theaterâl la fixed-wing ground-attack aircraft. All attack helicopter units and perhaps some other army aviation assets retained at theater level would be part of the theater IFC.

The type and number of army aviation brigades or battalions subordinate to the theater headquarters or theater IFC varies according to the theaterâl seeds and the importance of that theater in the OPFORâl strategic campaign. Army aviation assets at theater-level can include one or more units of each of the following:

- Attack helicopters.
- Medium-lift helicopters.
- Heavy-lift helicopters.
- Reconnaissance, jamming, and command and control (C2) helicopters.
- Drones.
- Light and medium transport airplanes, replacing some lift helicopters in mixed aviation units.

Other than these standing army aviation organizations, the OPFOR may also form some taskorganized army aviation tactical groups or detachments with a mix of different aircraft types.

### **Operational-Level Army Aviation**

As discussed in Chapter 2, the OSC is a standing headquarters. When the OSC is formed for combat operations, an army aviation brigade or battalion may be task organized under this command to provide agility, versatility, and increased firepower. The type, size, and quantity of the units vary depending on the mission of the OSC. In some cases, the OPFOR may include a limited number of army aviation assets in the formation of a DTG or BTG.

#### **Command and Control**

The commander of the theater air army (Air Force asset) is subordinate to the theater commander. If the majority of the air armyâ assets retained at theater level are allocated to the theater IFC, the air army commander may also become subordinate to the IFC commander. The air army command post (CP) is normally within 10 to 15 km of the theaterâ as a snain CP or IFC CP to ensure a close relationship. This relationship ensures that there is no danger of the air army conducting separate, divergent operations as opposed to subordinating the air effort to the needs of the ground operation.

The senior commander of the army aviation component is also directly subordinate to the theater commander or the theater IFC commander. The army aviation CP is located within 30 km of the theater main CP or IFC CP to allow for rapid coordination from theater to the executing unit. The staff of the aviation unit works closely with the theater staff to plan and coordinate the employment of the theaterâl army aviation assets.

The command structure at the OSC level is similar to that at theater level. The OSC may have an air army, division, or regiment as the largest Air Force organization. Depending on the type of aviation assets involved, the commander of this unit is subordinate to the OSC commander or to the OSC IFC commander.

The command structure for army aviation units in an OSC depends on the types of aviation units assigned and whether or not they perform or support fire support missions. Thus, the commander of the army aviation unit may be directly subordinate to the commander of the OSC or to the OSC IFC commander.

#### **Centralized Control**

The OPFOR has a limited number of aviation units compared to the size of the ground force. For this reason, it believes that maintaining centralized control over its aviation assets is essential to the effective employment of both fixed-wing and rotary-wing aircraft. However, centralization is a relative term, depending on what levels of command are involved.

# **Fixed-Wing**

The OPFOR establishes relatively centralized control over its fixed-wing assets. Centralization takes advantage of the mobility and maneuverability of aircraft to concentrate them at the decisive point and time from dispersed bases. Centralized control simplifies the coordination with ground forces and allows for the integration of aircraft being used in different, but complimentary roles (for example, reconnaissance, fighter, and ground attack). It also allows a rapid reallocation of air support resources to accomplish the more important missions that suddenly arise during an operation. Aviation units not originally assigned for ground support may sometimes take part in delivering air attacks against ground targets. To execute their missions, the OPFOR uses centralized planning to allocate air support resources to the ground commander by flights or aircraft sorties with the appropriate ammunitions.

### **Rotary-Wing**

The OPFOR can use less centralized procedures for the allocation of its helicopter assets, especially the combat helicopter in the DAS role. However, if the number of assets in theater allows and the mission dictates, it may decentralize control over an aviation unit. It can do this in two ways. The first is a constituent subordination of an aviation unit, or the higher headquarters can establish a dedicated or supporting relationship for a specified period of time.

### **Airspace Operations Subsection**

The chief of airspace operations (CAO) at theater, OSC, and tactical group levels is the primary person in the staff responsible for the coordination of all airspace users. He, along with his staff, make up the airspace operations subsection (AOS). They work directly for the operations officer in the planning of future operations and the execution of current operations. At theater level, this AOS generally consists of  $\hat{a}$ 

- An air controller team (Air Force).
- An intelligence team.
- · A communications team.
- Liaison teams from subordinate units requiring airspace deconfliction.

At OSC level and below, the AOS is sized according to needs, but performs the same functions. Some functions of this staff are toâ $\mbox{$\mathbb{N}$}$ 

- Recommend the employment of air assets.
- Deconflict airspace for all users.
- Plan the effective suppression of enemy air defense.
- Transmit air support requests.
- Maintain communications with aircraft in the area of responsibility.
- Provide the commander with all air reconnaissance information.

The AOS at every level is manned and equipped to provide 24-hour operations. Additionally, the AOS provides representation to the IFC CP and to the forward CP when the latter is operational.

# Planning and Preparation

The theater air army and ground forces have an integrated C2Â structure. This ensures close and continuous coordination in joint operations. The CAO evaluates the situation based on the theater commanderâ Substitution Substitution Substitution and recommends the proper employment of air assets. The same process is being performed simultaneously at the OSC-level AOS.

In addition to the air missions planned at theater level, the theater staff allocates assets to integrate into the subordinate ground commanderâ Islan. To achieve a coordinated operation plan, the theater air army sends personnel and communications equipment to ground force units at battalion level and above. These personnel forward requests for air assets through the chain of command to the theater staff. The theater CAO then screens the requests and identifies the

missions that can be supported by army aviation and those that must be supported with Air Force assets. The allocations are then sent to the theater commander for approval.

At OSC level, the commander consults his CAO and develops detailed targeting plans for the current fight through the next 48 hours. He also makes rough estimates for 5 subsequent days. Requests are formulated for mission type, not for specific type of aircraft. For example, the OSC does not identify helicopters in its request for DAS. These requests are forwarded to the theater CAO and continually revised until 48 hours prior to execution. Once approved, these become part of the published theater aviation support plan (ASP). There can also be an ASP at OSC level, particularly when the OSC is not subordinate to a theater headquarters.

Then, the theater or OSC AOS issues the ASP to the executing aviation units. These orders cover targets, numbers of sorties, air approach corridors, communications codes, and mission timing. Air Force representatives at subordinate levels then confirm, for their respective commanders, the allocation of air resources. Normally, the commander holds a percentage of his air power in reserve to meet the unforeseen demands.

Once the allocation is received by the OSC, the OSC commander may assign specific air support to a subordinate unit or maintain control at his level. The OSC AOS then continues to coordinate the effort until the end of the mission.

### Mission Request Types

The OPFOR recognizes the criticality of providing support to the ground forces. Available air support is assigned missions according to the following categories of requests: preplanned, on-call, and immediate.

### **Preplanned**

A preplanned mission is a mission planned well in advance of its execution, usually 24 hours prior to launch. Such missions are normally planned against static or non-moving targets with known locations.

#### On-Call

An on-call mission is one in which the target may be predesignated, but the timing of the attack remains at the discretion of the ground force commander. These missions are normally planned to support maneuver forces not yet in contact with the enemy, but expected to make contact once the aircraft are available. The on-call mission is planned the same as preplanned missions, with the exception of the attackâl bisming. A âl bisming. A âl bisming availability,âl busually no longer than 4 to 5 hours, is established. The mission can be launched at any time during that window. On-call missions are planned with secondary targets in the event the window of availability expires before the primary target becomes available for attack.

#### **Immediate**

The OPFOR designates a limited number of aircraft to respond only to requests from ground commanders for unplanned immediate air support. A request for immediate air support is forwarded through AOS channels. As with preplanned support, the AOS at each command level participates directly in the evaluation of each air support request.

#### **Levels of Combat Readiness**

The OPFOR recognizes three levels of combat readiness for aircraft and crews. (See Figure 8-1.) Aircraft in categories one and two respond to on-call missions.

Figure 8-1. Levels of Combat Readiness

Category	Crew and Aircraft	Duration of Readiness	Time Before Takeoff
One	Aircraft are fully serviced and armed. Combat crews are briefed on their mission and are in the aircraft ready to start engines. Ground personnel are assisting the combat crews.	1-2 hours	3-5 minutes
Two	Aircraft are fully serviced and armed. Combat crews are briefed and are on standby in the vicinity of the aircraft, ready to take off within a specified short period of time after receiving a mission order.	2-4 hours	15 minutes
Three	Aircraft are refueled and serviced. Cannons are loaded. External systems (bombs, rockets, missiles, fuel tanks, etc.) are not loaded. Combat crews are designated, but not on standby; they have not been briefed on the air and ground situation, but will be before takeoff.	2-4 days	1-2 hours

### **Capabilities**

The priority for organizational strength and equipment modernization depends on the importance of a unit within the overall strategic plan. Modernization, in particular, depends greatly on the economic capability of the State to acquire the latest-generation fixed-wing aircraft and helicopters. As an example, the OPFOR helicopter combat units range from armed lift aircraft employed as gunships to state-of-the-art attack helicopters. The OPFOR continues to modernize units with aircraft having  $\hat{\mathbb{N}}$ 

- Improved avionics.
- Improved electronic countermeasures (ECM) and electronic counter-countermeasures (ECCM) equipment.
- Increased payload.
- Longer combat radius.
- Increased night capability.

The OPFOR will continue to modify the employment of its aviation units as the modernization continues. On the lowest level, for example, gunship units are employed almost exclusively during daytime, while modernized attack helicopter battalions can be effectively employed at night.

# **Direct Air Support**

Aviation continues to improve nighttime and poor-weather air reconnaissance and ordnance delivery in support of ground maneuver formations. With the heavy emphasis on night combat, the OPFOR recognizes limitations in its ability to maintain continuity of air support at night and in poor weather.

The OPFOR is making efforts to correct these shortcomings. The all-weather fighters and bombers are capable assets to support ground forces even for night missions. They have the range and payload to attack deep targets. Many modern fixed-wing aircraft and combat helicopters have electronic and infrared instruments that enable pilots to conduct sorties at night and in poor weather at low altitudes. The pilots can search for, detect, and destroy targets.

#### Counterair

The Air Force has the most lethal air intercept aircraft in the region. However, it would be challenged by air forces of a first-class power and would modify its operations when required. The deployment of a wide array of mobile and semi-mobile ground air defense systems has freed some aircraft from air defense missions for ground support roles. (See Chapter 9 for more details on air defense support.)

#### Reconnaissance

Aerial reconnaissance includes visual observation, imagery, and signals reconnaissance. Imagery reconnaissance encompasses all types of optical cameras utilizing conventional fixed-frame and strip photography, infrared photography, and television systems; it also includes side-looking airborne radar (SLAR) and synthetic-aperture radar (SAR) capabilities. Airborne signals reconnaissance includes communications and noncommunications emitter intercept and direction finding.

#### **Electronic Warfare**

The OPFOR continues to improve its capabilities to conduct EW, including sophisticated jamming equipment. It might deploy equipment on its aircraft to  $\hat{a}$ 

- Jam multiple enemy radars.
- · Jam only when the target radar reaches a certain intensity.
- Select the correct jamming signal for the specific target radar.

The OPFOR can jam the enemy air defense networkâ sajor surveillance and acquisition radars. It also uses advanced deception jamming techniques. All these capabilities allow OPFOR aviation to provide increased support that combines accuracy in ordnance delivery, greater flexibility in employment, increased survivability, and increased responsiveness to combined arms commanders.

#### **Unmanned Aerial Vehicle**

The OPFOR is currently acquiring unmanned aerial vehicles (UAVs). As technology allows, it will develop doctrine for employing UAVs in the reconnaissance, attack, deception, and resupply roles.

#### **Missions**

Based on the capabilities outlined in the preceding section, the OPFOR conducts a wide variety of missions with its aviation assets. This section describes the typical missions assigned to aviation units.

#### Counterair

If engaged in a regional operations, the Air Force attempts to establish and maintain the desired degree of air dominance. Air superiority is established through a combination of offensive and defensive actions. Preplanned attacks while the enemyâ aircraft are on the ground would be an example of offensive air defense missions, while flying intercept missions to engage enemy aircraft firing on air or ground troops is an example of a defensive mission. When the State is attacked by a major power, the Air Force will attempt to defend strategic centers and conduct precision attacks early to inflict politically significant damage on invaders. An invasion of the State may dictate an â adutâ effort to control access to the region or harass the early-entry forces before they build up sufficient air and air defense capabilities to dominate the airspace. Alternatively, the OPFOR could save its Air Force assets for a surge effort at a critical point later in the conflict. However, it will not delay use of its air forces until such a surge unless it has means to ensure the survivability of its aircraft on the ground. Survivability means may include underground shelters. The OPFOR also will attempt to conduct missions from more dispersed locations or from a safe haven such as neighboring country.

#### Reconnaissance

Aerial reconnaissance is a principal method of gathering target intelligence. The theater and OSC staffs each prepare a reconnaissance plan, which details tasks for Air Force and/or army aviation assets. Theater aviationâ 🛭 reconnaissance forces gather tactical and operational

intelligence up to a 300-km radius. They may also be tasked to collect strategic intelligence to support national-level requirements.

Aircrews on any mission should immediately report observed enemy activity or conspicuous inactivity. Specialized reconnaissance aviation regiments have the primary responsibility for aerial reconnaissance. These regiments have specially-equipped reconnaissance aircraft. Aviation assets also can have airborne signals reconnaissance collectors.

The processing of data from an air reconnaissance mission can take 2 to 8 hours. To shorten this time, the aircraft transmit perishable target intelligence by radio to ground CPs. OPFOR planners are also modernizing their techniques to shorten the process.

#### Counterreconnaissance

The OPFOR knows the significance of having reconnaissance forces on the battlefield to ensure mission success. For this reason, it heavily emphasizes the destruction of the enemy reconnaissance teams and dedicates numerous assets to accomplish this mission. The OPFOR includes either armed or lift helicopters in the counterreconnaissance plan to search for, locate, and report enemy reconnaissance teams. Depending on the plan, the OPFOR may use the armed helicopters, infantry, artillery, or other methods to destroy these teams.

### **Direct Air Support**

DAS is a mission to disrupt or destroy enemy forces in proximity to friendly forces. This mission can be accomplished using fixed-wing assets and fire support helicopters. Because these assets are centrally controlled, the missions are formulated at various staff levels and allocated based on assets available and significance of the mission. DAS missions are part of the fire support plan.

#### Interdiction

Air interdiction is planned and executed to destroy targets that are not in proximity to friendly troops. These missions are planned at the theater or OSC level to support the ground commanderâ severall plan. Interdiction missions can be conducted in advance of ground maneuver to set the conditions, or simultaneously to force the enemy to fight on different fronts.

# Helicopters as a Maneuver Force

As an exception to the rule, the OPFOR might employ a highly-trained unit equipped with modern attack helicopters as a maneuver force in the ground commanderâ scheme of maneuver. In this role, the attack helicopter unit can be used as the fixing, assault, or exploitation force in the offense or as the disruption or counterattack force in the defense. In either offense or defense, it could be a deception force or reserve. Such employment is among the most complex missions conducted by aviation units and requires detailed planning, rehearsals, and execution.

# **Combat Support and Combat Service Support Missions**

Lift helicopters can support the ground commander in numerous combat support (CS) and combat service support (CSS) roles. For example, they canâ $\mathbb{N}$ 

- Transport ground units conducting heliborne assaults.
- Rapidly move forces on the battlefield.
- Insert reconnaissance teams.
- Conduct emergency resupply missions to isolated units.

The aircraft can also be equipped as a gunship, minelayer, electronic jammer, or C2 platform.

The OPFOR has a variety of medium- and heavy-lift helicopters that can provide transport

capability throughout the battlefield. These aircraft are lightly armed and are used to move troops, equipment, and supplies in the relatively safe areas. Periodically, these aircraft are tasked to assist in CS and CSS missions such as large heliborne assaults, combat search and rescue, and forward arming and refueling point (FARP) emplacement.

### **Principles of Employment**

The OPFORâl see of aviation assets is guided by key employment principles. Because the State has purchased aircraft (both fixed- and rotary-wing) with a wide array of capabilities, some units are equipped with the latest technology, while other units make do with older systems. This requires the OPFOR to modify its operations based on the capabilities of the unitâl aircraft, but within these employment principles.

### **Purpose**

Every mission must be focused toward a clearly defined, decisive, and attainable task. It must directly contribute to the higher commanderâ limbor is simmediate plan. As an example, a lift helicopter unit is given a mission to insert a reconnaissance team. All planning efforts should be aimed at accomplishing this goal. Actions that do not contribute to achieving this mission must be avoided.

#### Coordination

The coordination of aviation with artillery, air defense, and maneuver units is one of the most difficult tasks of modern combat, particularly in the absence of air superiority. CAOs are assigned at various levels of command to ensure a coordinate effort among the airspace users. Liaison teams from aviation units also assist in this effort. The aviation commanders and staffs develop detailed plans, working closely with the other members of the combined arms team, not only to ensure the most effective use of all systems employed, but also to prevent fratricide.

#### **Concentration of Effects**

The OPFOR does not distribute resources evenly throughout the theater. A commander identifies goals to be achieved with his aviation assets and organizes them accordingly. As an example, commanders can use fixed-wing aviation to concentrate on opening a few corridors through enemy air defenses to attack specific targets. The OPFOR makes every effort to maintain air superiority over these corridors when it cannot do so over the entire theater.

# **Economy**

If the OPFOR hopes to achieve the principles of concentration and purpose, it cannot use air assets to perform missions that can be adequately executed by other means. The OPFOR must carefully assess the risks and payoff of using the limited assets of aviation for each mission. For example, the OPFOR may employ its artillery fires instead of ground-attack aircraft for targets within artillery range. Additionally, the OPFOR can minimize the risk of all missions through thorough planning and the use of artillery fires to suppress enemy air defense.

#### Reconnaissance

Aerial reconnaissance is an important source of information for the OPFOR commander. It can provide timely and accurate information that can have a significant impact on the outcome of an operation. For this reason, every aviation mission has an implied task to conduct reconnaissance along the route of flight and report any activity or inactivity that may affect the ground commanderâl san. However, the execution of this implied mission does not alter the specified mission plan, in keeping with the principle of purpose.

### Surprise

To maximize the effects that aviation can bring to the operation, surprise is an essential element of all aviation missions. Means of achieving surprise includeâ 🛚 🖺

- Choosing unexpected or concealed axes.
- Attacking at unlikely times.
- Attacking in unanticipated strength.
- Using new weapons or tactics.
- · Limiting or eliminating radio and radar emissions.
- Making decoy raids.
- Using camouflage, concealment, cover, and deception (C3D) on airfields.

### Responsiveness

The OPFOR aviation assets provide the most agile, flexible, and reactive firepower to the ground commander. Plans to employ aviation assets must capitalize on these traits and provide the commander the responsiveness to be employed in a timely manner across the entire area of responsibility (AOR). An example to illustrate this principle is the attack helicopters used as the reserve force in the operation plan. In addition to attack helicopters, commanders can use lift aircraft with infantry soldiers. By using helicopters to move ground forces, the OPFOR can use a smaller force to cover larger AORs.

### **Degree of Airspace Dominance**

The OPFOR uses standardized terms to define the degree of airspace dominance of its airspace. This allows planners to best employ assets in the theater to satisfy the requirements to support ground forces.

# **Air Supremacy**

# **Air Superiority**

Air superiority is defined as the condition when the conduct of operations is possible at a given time and place without prohibitive interference by the enemy. The most efficient method of attaining air superiority is to attack early warning and C2Â sites, ground-based air defense sites, and enemy aviation assets close to their source of maintenance and launch facilities.

# **Local Air Superiority**

Even though the OPFOR hopes to attain air superiority, it recognizes the potential for only local air superiority to exist. Purely geographic in nature, this condition is characterized by well-timed aviation missions to coincide with enemy aircraft downtime, returning sorties, aircraft rearming, or gaps in air defense coverage. This condition may also occur in areas across the theater where the OPFOR or the enemy may not have adequate assets available to ensure air superiority. In certain situations or against certain enemies, local air superiority for a specified period of time may be a more realistic goal.

# Air Parity

Air parity is defined as the functional equivalency between enemy and friendly air forces in strength and capability to attack and destroy targets. Under the condition of air parity, where neither side has gained superiority, some enemy capabilities affect friendly ground forces at times and places on the battlefield.

### **Strategic Context**

OPFOR aviation planners modify the employment of aviation assets (both fixed- and rotary-wing) according to the strategic goals of the State and the degree of airspace dominance attained by the OPFOR. This section examines some of these differences as the OPFOR fights in regional, transition, and adaptive operations.

### **Regional Operations**

The OPFOR relies heavily on its aviation assets when planning its strategic campaign against a regional enemy. It does not initiate hostilities unless air superiority can be attained prior to ground combat. Because the OPFOR has a superior aviation force, it is confident that it can attain air superiority quickly against any regional opponent.

In the initial days of any strategic campaign against a regional opponent, the OPFOR focuses the air campaign on attaining air superiority. Once that is established, aircraft apportionment is gradually shifted to ground attacks while maintaining air superiority. The ultimate goal of the OPFOR is to dedicate minimal aircraft to maintaining air superiority while dedicating maximum assets to ground attacks. Secondary missions include reconnaissance, transportation, logistics support, and insertion of troops.

Rotary-wing aircraft can fly missions with relative ease with few restrictions during day and night operations while the OPFOR maintains air superiority. The regional opponentâ $\mathbb{N}$  is smited air defense assets can be targeted early to improve the survivability of all aviation missions.

# **Transition Operations**

With the introduction of superior forces from an extraregional enemy, the OPFOR cannot rely on the continued dominance of the airspace. In response, it shifts its air operations to control the access of the enemy into the region and slow or alter the enemyâ be deployment progress by attacking ports, airfields, railheads, and other infrastructure. The OPFOR tries to maintain air superiority as long as possible without losing excessive aircraft to the extraregional forces. During this limited time of marginal airspace dominance, it can use its aviation forces to support the ground forcesâ be dransition to adaptive operations by performing security, support, and deception missions. The OPFOR transitions to maintaining local air superiority and even air parity to support the ground transition to adaptive operations.

Transition operations can also be a shift from adaptive operations to regional operations. In this case, the OPFOR uses its aviation assets to regain air superiority once the air dominance of the extraregional force has diminished. This process may be initiated by establishing and maintaining local air superiority in a given area, followed by establishing air superiority over the entire region.

# **Adaptive Operations**

During adaptive operations, the OPFOR has realized that the dominance of the airspace by the extraregional enemy has severely limited the employment of its aviation forces in the conventional manner. The OPFOR is not willing to lose its aviation assets and will find creative means to use its air power during limited windows of opportunity. The primary concern, though, is to preserve combat power in order to remain a dominant force within the region after the extraregional force has departed.

As the OPFOR transitions to adaptive operations, it relies more on helicopter operations and less on fixed-wing assets for ground attacks. This allows the OPFOR to keep the fixed-wing assets in sanctuaries, while helicopters use flight profiles minimizing the risk against enemy air defense systems. Because helicopters do not require runways, they provide the OPFOR the means to attack quickly from more dispersed locations.

During adaptive operations, the OPFOR can employ operational shielding to protect its aviation assets. Helicopters will be more dispersed than in regional operations. Fixed-wing assets may be shielded by positioning them in relative safe areas of the regionâ $\mathbb{Z}$  such neighboring neutral countries, areas of high civil population, and areas that may cause high collateral damage if attacked.

The centralized control of aviation assets may be elevated to a higher level during adaptive operations. Because of the high risk associated with flying missions against the extraregional force, theater and OSC commanders may retain the authority to determine what targets are valuable enough to risk aviation assets. This elevation of employment authority also allows for windows of opportunity to be recognized or created in a timely manner using other assets found at these levels.

In addition to scrutinizing the target selection, the theater or OSC commanders closely analyze the mission planning. During adaptive operations, the OPFOR commander is more likely to plan and execute missions: during periods of limited visibility, within specified ranges, and with minimal numbers of aircraft. The objective of every aviation mission during adaptive operations must support a strategic goal.