# AIRMOBILE OPERATIONS AIR AND LAND DIMENSIONS OF CONTEMPORARY BATTLEFIELD

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**Summary.** The paper deals with the role of airmobile units, the aim of operations in the depth, contact operations (combat) and rear area operations.

Key words: air operation, air assault, airreconnaissance, airmobile units, airborne

### **1. INTRODUCTION**

Historical conditions of a battlefield – combat in the third dimension – have been deciding and will decide on the development of combat means and ways of their employment. The first structures of airmobile forces were created in Poland (as the first country of the former eastern block) in the midnineties of the 20th century. This resulted in the necessity to define principles and rules of engagement for these forces in various kinds and forms of combat operations. Conducting airmobile operations has its specific character different from the ones carried out on land by mechanized or armoured troops.

I am fully aware that airmobile units and sub-units perform many other tasks than those which are mentioned and described in this article. Operations other than war take on a specific character. It must be taken into consideration that these forces can be employed to perform security operations for representatives of international peace organizations and providing security and protection for state officials visiting armed conflict areas, moreover to evacuate the wounded and sick from conflict and war zones, supply local population with food and other necessary items and a whole range of missions connected with restoring and keeping peace.

### 2. AIRMOBILE OPERATION CREATION AND MISSIONS

The first theoretical studies concerning airmobile operations involve translations of American and Western regulations<sup>1</sup> and Airmobile Brigade Operations Manual<sup>2</sup> in Poland, which as the first Central European country created forces capable of conducting on their own operations in air-land and marine-land environment within its armed forces' structures.

Along with the changing defence doctrine and in that case a modified concept of the strategic defence of the state, the shape of the armed forces assigned to its realization was defined. The need to include airmobile forces in their structures was noticed. These forces, specially prepared to carry out air-land operations were supposed to effectively replace less efficient in these operations mechanized units. Experiences from armed conflicts in Chechnya, the Persian Gulf and the Balkan Peninsula area as well as operations aimed at combating terrorist groups in Africa and Asia confirmed that thesis.

In accordance with the operational art theory it was assumed that on the operational level or for the need of conducting an operation the composition and organizational structure of assets are created appropriately to the goals and consequently missions that these forces are to accomplish. The missions

<sup>&</sup>lt;sup>1</sup>Air mobile operations (ATP-41A), NATO; Air assault operations (FM 90-4), NATO.

<sup>&</sup>lt;sup>2</sup>24 Airmobile Brigade Operations Manual, NATO.

that air-land formations (Airmobile Task Force - ATF) are to perform have to be taken into account while their activation.

Airmobile Task Force should be a formation composed of air assault units, helicopters as well as combat support and logistic support units. Their composition and equipment is adopted according to the specific character of a given mission conducted under a single common command<sup>3</sup>. The size of the formation depends on the mission, therefore it might be a brigade, battalion or only a company (cavalry troop).

There are two components in an Airmobile Task Force: the land and air ones. As a rule, the reinforcement refers to artillery, air defence, engineers or other units (depending on tasks).

These groups can conduct several missions, the most typical ones include:

♦ interception and maintaining key terrain positions and facilities (passes, gorges, bridges, points of crossing, etc.);

- conducting raids;
- ♦ attacking, isolating and destroying enemy amphibious landing forces;
- conducting reconnaissance;
- ♦ conducting simulation operations;
- preventing the enemy infiltration in depth of the friendly forces' formation;
- supporting the forces fighting in an encirclement;
- ♦ air-dropping or airlifting reconnaissance elements.

#### **Conclusions:**

- It is necessary to establish temporary (for the mission execution) new structures within airmobile task forces.
- An airmobile task force should be led by the commander who performs the main mission.

Thus airmobile operations could be conducted by airmobile forces and other units suitably prepared to such operations.

Forecasts relating to future war operations show a leading role of forces' operational and tactical mobility both in land and air dimensions. The maneuver way of operation covering large areas proves that a large scale of dispersal of forces and assets involved will be characteristic for a future battlefield. Therefore such a state may be defined as a focal character of combat with immense changeability of its intensity in time and space. Such a vision of a future battlefield induces to put forward a thesis that an effective fight against an enemy will require combining highly maneuverable operations of forces engaged in combat.

As a result, highly maneuverable airmobile forces must have the capability to perform tasks in an air-land dimension<sup>4</sup>. The literature of the subject-matter provides a few definitions of airmobile operations. Here are presented some of them:

"Airmobile operations involve all operations, in which tactical formations (units and subunits) conduct a maneuver over a battlefield in helicopters (aircraft) in order to carry out land combat.

The foundation of airmobile operations concept is to use helicopters (aircraft) in order to increase the fire power and land forces' units' mobility within an integrated air-land combat system"<sup>5</sup>.

Such an interpretation of airmobile operations connects two areas of conducting operations – the land and air ones. Airspace is used for maneuvers, whereas the effects of fighting against the enemy should ensure reaching the aim of the land forces' armed fighting.

These operations are usually conducted in undefended or poorly defended areas. However,

<sup>&</sup>lt;sup>3</sup>Działania kawalerii powietrznej (Air Cavalry Operations), Tomaszów Mazowiecki 1998, p.5.

<sup>&</sup>lt;sup>4</sup> Z. Kuczmański, *Możliwości tworzenia zgrupowań (oddziałów) aeromobilnych* (Possibilities of Creating Airmobile Task Groups (Units)), "Zeszyty Naukowe AON", 1998, no 1, p.124.

<sup>&</sup>lt;sup>5</sup>*Regulamin działań taktycznych* (Regulations of Tactical Operations), op. cit., p. 31, p. 150.

in exceptional cases they can be carried out in areas occupied by well organized armed forces of the enemy provided that an Airmobile Task Force is equipped with assets capable to break them through.

# **3. AIRMOBILE OPERATIONS**

"Airmobile operations involve air assault, amphibious-assault and in the nearest future airmechanized forces using airspace for their relocation in order to promptly create and move the battlefield's centers of gravity, perform rapid strikes and protect vast areas "<sup>6</sup>.

"... While in air operations aviation is used mainly for transportation tasks and air-drop of ground troops, in airmobile operations aviation together with land forces conduct combat in air and from air"<sup>7</sup>.

Both mentioned above statements do not define precisely tasks performed in airmobile operations by the air and land components. One very important element has been omitted, namely fighting on land.

Before the airmobile operation concept was implemented, groups and methods of task (mission) achievement by air assault forces had been defined.

"Air assault tactical formation (unit) is designated mainly for operations conducted in enemy's combat group using helicopters as basic means of transportation and fighting. It may function as an air drop or perform an air assault raid. Its aim is to ensure favourable conditions to perform main forces' tasks. This aim is achieved by destroying important objects and facilities (particularly munitions, elements of command, reconnaissance, communications and logistic, as well as radio-electronic warfare), occupying and temporary maintaining significant areas and grounds, as well as destroying enemy reserves."<sup>8</sup>.

The mentioned above quotation refers to air assault operations, however, it defines in detail the tasks of the air component and the way of carrying out fighting by the land component. It precisely outlines the aim of conducting air assault operations and shows how to achieve this aim.

As a result of introductory research, the author adopted the following definition of air mobile (airland) operations:

"Air mobile operations involve all operations conducted in air-land dimensions, in which tactical formations (units, sub-units) carry out a maneuver from air in order to conduct land combat. Helicopters (other aerial vehicles) perform transportation tasks for the land component and support it from air during conducting operations on land.

The division of air mobile operations is presented on Fig. 1.

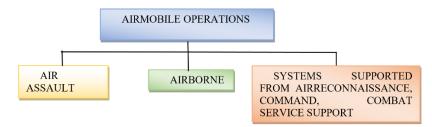


Figure 1 Division of air mobile operations [21]

<sup>&</sup>lt;sup>6</sup> Z. Kuczmański, *Wymiar powietrzno-lądowy w operacji obronnej, Materiały z sympozjum* (Air-Land Dimension of Defence Operation. Symposium materials), AON 1998, p. 90.

<sup>&</sup>lt;sup>7</sup> Ibidem, p. 90.

<sup>&</sup>lt;sup>8</sup> Regulamin działań taktycznych (Regulations of Tactical Operations), op. cit., p. 31

Avoiding a long-lasting, open and exhausting fight with the superior strength of the enemy should be a principle of airmobile forces' operations. If a situation like this appears, airmobile formations should be assigned tasks (missions) which cannot be performed by other forces.

The corps' area of responsibility could be divided into three zones of operation:

- Zone of operations in the depth<sup>9</sup> starting from the coordination line of fire support into the depth of enemy group;
- Contact zone of operation<sup>10</sup> essential part of an operational formation;
- Zone of operations in the rear<sup>11</sup> from the rear border of the first echelon formations.

The aim of operations in the depth is primarily to limit the freedom of enemy operations, hold him far away from objects and facilities that could be a potential target for the enemy by creating favourable conditions for contact operations (combat).

The aim of contact operations (combat) is to fight the enemy, engage his forces and destroy his combat capabilities.

The aim of rear area operations is to ensure the freedom of logistic support of the troops, defend logistic units and equipment and create favourable conditions for defence and reserve maneuvers.

Airmobile operations can be conducted from any of these zones. Their highest intensity will be achieved in the contact zone of operations. In the remaining zones, the use of airmobile forces will depend on the type of conducted operation. In an offensive operation - the forces will be more active in the zone of operations in the depth; in a defensive one - in the zone of operations in the rear.

Airmobile operations can be conducted during any kind of land operations. Airmobile forces may operate with other types of units or independently. They allow a quick response in the whole breadth and depth of combat area of operational formations helping them to seize the initiative from the enemy and gain the freedom of operation. They are useful as a highly maneuverable reserve. These operations are usually conducted in undefended or poorly defended areas. However, they could be exceptionally carried out in areas occupied by well organized enemy forces.

The aim of an Airmobile Task Force is to:

- seize and hold key terrain objects (passes, gorges, bridges, crossings, etc.);
- destroy enemy important targets (objects);
- protect gaps and open flanks in the friendly forces' task group;
- close the breaches in defence that appeared due to enemy strikes;
- destroy landing and other enemy forces that conduct operations in the depth of the friendly forces;
- enhance enveloped forces;
- conduct reconnaissance missions;
- mislead the enemy with feints and demonstrations.

In order to meet the mentioned above tasks, air assault operations would be the basic forms of operations conducted by airborne, airmobile and air assault task forces, in which air assault units from helicopters (ground assault teams and assault groups) whose fighting is supported from combat helicopters play an essential role.

Air assault operations are made up the following operations:

• raids<sup>12</sup>;

4

<sup>&</sup>lt;sup>9</sup> Military operations conducted on the friendly area of responsibility but in the depth of the enemy group. An operation is deep when it reaches the area of responsibility of the superior level.

<sup>&</sup>lt;sup>10</sup> Operations of troops fighting in contact with the enemy. Contact operations on one level usually include direct operations as well as deep and rear ones of a subordinate level.

<sup>&</sup>lt;sup>11</sup> Operations conducted in the friendly rear in order to maintain operational freedom, protect areas under threat, as well as ensure command and control and support efficiency. One of airmobile troops' tasks conducted during rear operations is to counteract deep operations of the enemy.

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- assaults<sup>13</sup>;
- landings<sup>14</sup>.

Air assault operations are tasked with destroying the enemy with weapons onboard helicopters or with weapons used by air assault subunits positioned on helicopters. Air assault operations include:

- air assault<sup>15</sup>;
- air raid<sup>16</sup>;
- aerial ambush<sup>17</sup>.

The relocation (repositioning) of assets and materiel onto large distances in a very short time, conducting an efficient combat and its comprehensive support are airmobile operations' attributes, due to which they are capable of:

- gaining surprise by attacking an enemy from any direction and in inaccessible terrain;
- flying over barriers and bypassing enemy positions;
- rapid concentration of forces in a decisive place and time;
- quick dispersion in order to reduce the impact of the enemy strike;
- rapid response to the situation on the battlefield, also over long distances;
- maintaining a high tempo of operation by quickly moving the effort into other location or area of operation;
- being independent from ground transportation lines.

In spite of great maneuverability capabilities, airmobile operations have their limitations e.g. meteorological conditions hindering the employment of helicopters - for the new generation equipment this problem does not exist any more.

Moreover, other factors that limit airmobile troops operations could be:

- enemy fire capabilities (including the impact of using weapons of mass destruction) which may disable landing in a selected point (area or landing zone);
- air defence operations during the flight to the mission area;
- lack or shortage of heavy equipment, vehicles including, which cannot be airlifted;
- dependence on supplies delivered by air;
- limited possibilities of cooperation with friendly ground forces while conducting operations in enemy formation's area.

Air assault brigade's and air cavalry brigade's full strength is seldom employed. More frequently it is rather an airmobile task group within the composition of an operational formation on the directions of a tactical formation. The way of mission accomplishment by these formations will depend on their character and the stage of operation within which they are conducted. The primary way of operations will employ helicopter raids of combat formations (forces) onto recognized elements of formations (forces) within the corps' area of responsibility having impact on enemy combat potential. An airmobile task group<sup>18</sup> may receive, depending on situation, three types of missions:

<sup>&</sup>lt;sup>12</sup> Raids are operations carried out independently in an enemy combat formation which are an integral component of combat operations on a larger scale a highly maneuverable element of a task force organized prior to accomplishing a mission  $\dots$  S. Koziej, *Rajdy bojowe* (Combat Raids). MON, Warszawa 1987, p.22

<sup>&</sup>lt;sup>13</sup> A strike on an object conducted by a ground echelon of an Airmobile Task Force. Cavalry Operations..., op. cit., p.21. <sup>14</sup> Seizing an object from air by airdropping a ground echelon from a helicopter. Ibidem, p. 22

<sup>&</sup>lt;sup>15</sup> Rapid and short air strike (without airdrop of the assault unit) employing helicopter's onboard weapons and guns. Ibidem, p. 22

<sup>&</sup>lt;sup>16</sup> Performing a helicopter low altitude air strike on vital elements of enemy combat groups. In exceptional cases the Airmobile Task Force ground component may be mounted. Ibidem, p. 23

<sup>&</sup>lt;sup>17</sup> Prepared in advance, covert deployment and then surprising, short and rapid enemy strike from air, or air-land. *Regulamin działań taktycznych wojsk lądowych* (Regulations of Land Forces' Tactical Operations), Warszawa 1999, p.133

<sup>&</sup>lt;sup>18</sup> Compare: Airmobile Task Force – an element organized due to the existing situation whose composition includes air assault units (airborne or air assault task groups) land forces' aviation and other units – depending on needs to accomplish

- destruction of one or several designated objects whose location has been recognized;
- free selection of strikes on object(s) in a designated area or direction;
- holding or seizing an important object.

Depending on the object characteristics, the method of operation will change. Basically, three kinds of strikes on the enemy objects aiming at their destruction may be predicted:

- assault helicopters' strike without mounting (airdropping) of the sub-unit;
- combat helicopters' strike jointly with airdropped air cavalry or air assault troops;
- ground attack of earlier airdropped troops.

Possessing an Airmobile Task Group in the operational formation allows not only a quick, rapid and effective strike but also vast areas' protection. Defining the Airmobile Task Group's missions it must be remembered that its employment should be short and then it is recommended to substitute it with motorized, mechanized or armoured units.

### **4. AIRMOBILE FORCES**

**Airmobile forces** are particularly destined to be employed in initial stages of a defensive operation, especially to carry out covering operations in mobilization or operational deployment of troops, and in defined circumstances to conduct defensive or delay operations.

It is not possible nowadays to limit the missions of forces conducting defensive operations into given stripes or kinds of combat operations as they require solving a diversity of operational problems and tactical tasks. Consequently, this leads to a significant flexibility in carrying out operations and increased mobility of defensive forces. All the more, the flash points will appear simultaneously in the whole depth of the operational formation of both the defender's and the attacker's.

In order to accomplish defence operation's missions, airmobile forces can:

- lock main directions (lines) of enemy break-offs and hold vital grounds and terrains in case of lack of capabilities to employ there mechanized or armoured reserves in appropriate time;
- destroy enemy landings;
- engage in counterstrikes (on the enemy rear and deep flanks);
- seize and hold important grounds on the directions (lines) of friendly forces' counterstrikes;
- disorganize command and control, fire control and logistic systems;
- engage in relieving encircled friendly forces;
- conduct general military reconnaissance operations.

The main **goal of airmobile operations** in a defensive operation is a battlefield interdiction and carrying out delay operations.

Airmobile forces accomplish this goal by focusing their effort on holding and blocking successive enemy forces approaching from the depth and introduced into the combat in areas conclusive for the success of the operation, at the same time disorganizing the enemy information and supply systems.

In order to define airmobile forces' missions, it must be remembered that the employment of these units must be short but robust and decisive.

Basing on the analysis of documents of command and staff exercises conducted with the Polish Armed Forces' Land Forces' command and staffs in 1999 - 2008, it is concluded that airmobile forces in a defensive operation were located in the operational formation commander's reserves creating airmobile task forces in threatened directions (lines) and in threatened terrains which determined the success of the operation. A part of airmobile forces were frequently transferred by the corps' commander to be subordinated to a lower level, who in turn located these forces to his reserves.

aerial or land missions performing strikes from air or from both air and land. J. Zieliński, *Prowadzenie powietrzno-lądowej* operacji przez korpus "okręg" (Conducting an Air-Land Operation by a Corps (District)), AON, Warszawa 1998, p. 48.

A variant of airmobile forces' employment in a defensive operation is presented on Fig. 2.

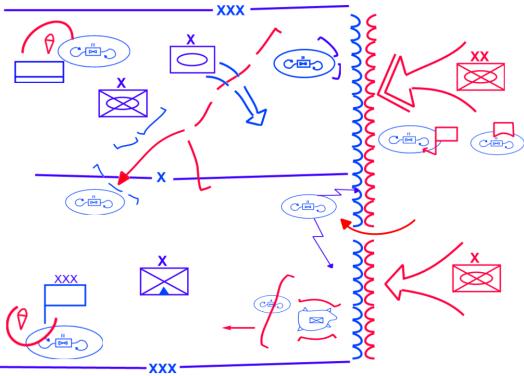


Figure 2 Airmobile forces' employment in a defensive operation – a variant [21]

In an offensive operation or in the third stage of a defensive operation, i.e. while performing a counterstrike, airmobile forces can carry out missions together with troops attacking on the ground, thus creating an air-land strike force. They primarily destroy objects and facilities of the first priority and enemy maneuvering reserves in order to hold them or delay their engagement in the battle. The main effort is focused on disorganizing the enemy defence on the successive grounds.

The basic missions in offensive operations that airmobile forces are tasked with are the following:

- to seize objects, facilities and grounds on enemy occupied territories;
- to engage the enemy reserves in combat in order to delay their approach in the break off area on the direction (line) of friendly forces' main strike;
- to block the enemy ways of approach and inhibit their forces;
- seizing bridgehead crossings and securing the crossing of wide water obstacles;
- to cover flanks of attacking land forces formations by seizing and holding suitable grounds until the main forces approach;
- to disorganize and destroy command and control, fire control and logistic systems;
- to destroy enemy landings;
- to seize and hold suitable grounds in the enemy depth of defence on the direction (line) of friendly forces' strike.

The missions that an Airmobile Task Force fulfils in an attack can be divided into two groups:

**a**) maneuverability tasks which involve transferring combat operations from one object to another including:

- disorganizing enemy reserves' strikes;
- attacking withdrawing enemy units and sub-units;

• destroying enemy command posts;

disorganization of the rear, command posts, command and control systems, communications, etc.;
b) non-active (static) tasks comprising seizing vital enemy objects and facilities and holding them

until friendly forces approach, which include:

- seizing bridgeheads and crossings on water obstacles;
- seizing and holding dominant and crucial summits, hills, gorges, straits and transportation hubs;
- covering of flanks and rear of attacking forces;
- seizing pockets of resistance.

It is possible for air assault formations to launch a counterattack on their own, however, such a formation does not have enough strike strength and capabilities to break through land tactical formations. Therefore it is more justifiable to employ such formations to support offensive operations conducted by land formations, i.e. transferring combat in an air-land dimension. Primarily, the ways of airmobile forces; combat operations include raids and concentrated strikes. But the basic **goal of airmobile forces' employment** is to disorganize and delay enemy operations in the depth of his defence and create more suitable conditions for land forces attacking in this direction.

Experience gained from local wars and conflicts prove that landing forces that seize gorges, ravines, transportation hubs, dominant and crucial hills and other objects favour the deployment of fast tempo of attack. Landings along with bypassing units (helicopters including) can create active areas of combat at the enemy rear, dividing his echelons and reserves, improving conditions to combat the enemy in parts. A surprising and rapid strike even with not high strength of the air-landing may bring sustainable results, and the coordination with attacking forces from the forward area enables fast breaking of the enemy.

Seizing a particular enemy object in the depth of his defence does not only mean a formal break down of the enemy points of resistance or breaking the consolidation of resistance. In general it also means opening of this direction and creating possibilities for the attacking troops to maneuver in a suitable area, strike the rear and flanks of successive pockets of resistance. It may also create conditions to maneuver for those forces that lacked that possibility earlier in the battle and at the same time deprive the enemy to reposition his forces.

A variant of airmobile forces' employment in an offensive operation is presented on Fig. 3.

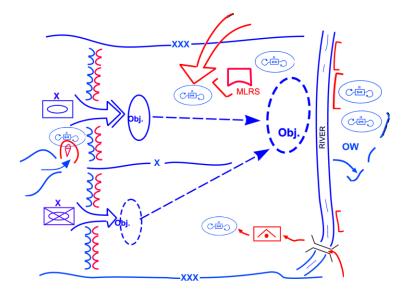


Figure 3 Airmobile forces' employment in an offensive operation – a variant [21]

Airmobile forces can be widely employed in delay operations. They are able to carry out raids or strengthen forces enabling a fast concentration of troops in key positions. They can also disperse fast in order to decrease the vulnerability to strikes and play the role of reserve forces. Armed helicopters

can effectively support ground delay forces by striking enemy armoured targets. Reconnaissance, multi-purpose and transport helicopters may perform a vital role in delay operations by:

- increasing interoperability of command and control and communications;
- conducting reconnaissance, surveillance and targeting;
- repositioning of objects and facilities security units;
- repositioning of troops between delay positions;
- scattered mine laying;
- evacuation of the wounded and sick;
- provision of forces.

The basic missions in delay operations that airmobile forces are tasked with are the following:

- securing open flanks;
- strengthening encircled forces;
- filling indirect lines of defence;
- fighting with enemy landings;
- strengthening defending forces on successive positions;
- engaging in combat bypassing (designated) units.

Airmobile forces can carry out permanent counteracting on enemy forces by the method of successive airmobile task forces' strikes and filling the delay positions alternating with mechanized (armoured) forces.

The delay operations zone may contain various crucial terrain objects that have a defined importance for both sides. Therefore, in order to deprive the enemy of using for instance crossings through water obstacles or terrain straits and at the same time ensure the freedom of movement, these objects need to be maintained. Airmobile forces are these forces which due to their high maneuverability capabilities can shortly engage in fighting to seize such terrain objects, in case when the enemy attempts to use them in order to gain advantage.

A variant of airmobile forces' employment in delay operations is presented on Fig. 4.

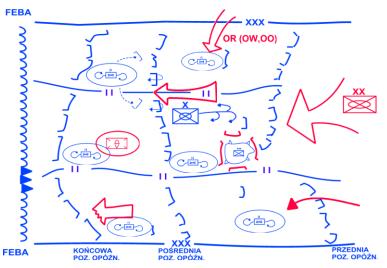


Figure 4 Airmobile forces' employment in delay operations – a variant [21]

Końcowa poz. opóźn. – Rear delay position pośrednia poz. opóźn. – Intermediate delay position Przednia poz. opóźn. – Forward delay position

# **5. CONCLUSIONS**

- Airmobile operations include all operations in which tactical formations (units, sub-units) perform maneuvers over a battlefield in helicopters (or other aerial vehicles) in order to carry out ground combat in the form of air assault, airborne and army aviation operations.
- In air assault operations the enemy is combated from air with onboard helicopter weapons and with weapons of air assault or air cavalry sub- units located in helicopters. As a rule, air-landing of ground forces does not occur, or if, in a limited scope, in such a type of operations.
- Sub-units airdropped from helicopters (land assault teams or landing assault groups) play a primary role to combat the enemy in air assault operations. Their fighting is supported by helicopters.
- Army aviation conducts reconnaissance, fire support and maneuver support missions. Depending on the character of the tasks it carries out operations on its own or cooperating with other military branches.

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