

# OPERATIONAL LOGISTICS AND THE LIMITS OF THE CAMPAIGN

Logistics condition the operational limits of the campaign. Operations and logistics are two sides of any war that cannot be separated. Although logistical plans are derived from operational objectives, there is no area of command that can claim primacy.

By Leonardo Arcadio Zarza

## INTRODUCTION

In order not to make mistakes as regards national defense, the aim is to train Commanders of military operations that can integrate and interact in joint staff and can be competent as regards joint military planning. Also, the development of competence for any commander to properly manage human and material resources in case of crisis is implicit.

Logistics, at the maximum levels of command, is so important that it conditions the execution of military operations. If this aspect is not clear in the design of any military campaign, efforts will be useless and may lead to great inconvenience.

When training commanders, it is generally said that a proper knowledge of strategy allows to know how to do something and a proper management of logistics gives the possibility to do something.

The whole joint provisions of the area of logistics is to be updated with the purpose of generating situational awareness, critical and creative thinking in any military commander so that they can understand the problem of logistics and, therefore, make the right decision during critical moments as to how much would be really enough.

At operational level, besides the operational maneuver, there is also implicit a logistical maneuver. It finds its origin upon its conception (design) and ends when the user sees that his requirements have been met (planning and execution of logistical responsibilities).

Logistical maneuver is part of the operational maneuver and implies assuring that logistical support is permanent, proper and sufficient.

Even though it may seem a bit exaggerated for some positions that exacerbate the importance of the role of the operations cell in any staff, it may be possible to state that

logistics, at operational level of war set conditions to the maneuver, while at tactical level of war, logistics is subject to its maneuver.

### THE MILITARY LOGISTICAL SYSTEM

Logistics is understood as the science and art that, when applied to the military environment, refer to the set of activities aimed at generating and sustaining military capabilities providing resources with the proper aptitude in quantity, quality, at the right time and place<sup>1</sup>. Logistical support in the military will include personnel, materials and finance.

Material logistics includes responsibilities regarding supply, transport, Infrastructure, maintenance and others (real property, firefighting, veterinary, zone damage control and security in the rear area).

Personnel logistics includes maintenance of troops, Replacement, staff management, discipline, law and order, prisoners of war, Military Welfare Service, obituary, internal administration, civil administration, health service and accidents prevention. Last, one of the most important areas of logistical command is, finance, includes budget, credit and funds.

Military logistics has the feature of having a close coordination and integrity of procedures developed from the inferior levels up to the maximum specific or joint level in order to get and maintain the operational reach required by the Force.

In order to understand its importance as to command, it is necessary to address logistics from a systemic approach.

The logistical system is a set of organic structures, means, procedures and methods that will allow to develop logistical responsibilities, the mission of which will be to make human and material resources interact in an organized way so that objectives previously set can effectively be achieved.

Besides this, it includes the set of stages that are part of the logical sequence (logistic cycle) that will be executed by means of a procedure already accepted for the purpose of achieving logistical objectives (to give support to a certain action) through the proper and rational use of resources (at the lowest cost and greatest value- added service). In order to do this, efficiency must be executed at a certain time-opportunity.

In conclusion, the Logistical Cycle must be synchronized with the tempo of military operations.

The logistical system is the one that allows to comply with the logistical support to the military instrument. It is mainly composed of entities and specialized units that carry out logistical responsibilities within or subject to the Joint Staff of the Armed Forces, General Staff, Theater

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Command, Subordinate Command and Tactical Command.

When there is more than one Theater of Operations, military strategy will set priorities as to the allotment of resources for each of them.

### MODULARITY

The Argentine Armed Forces have the challenge to find the proper modular transformation that allows to have expeditionary forces of quality to defend, together with their allies, broad interests of the nation and the Latin American region.

A modular organization is the one that has a great response capability, it is simple, flexible and adaptable. This concept of Modular Logistical Force is based on logistical modules which may be structured and interchanged, if required, properly determining the necessary supply for the fulfillment of the mission and, therefore, avoiding stock.

The logistical design of the theater may be prepared in modules to support any phase of the campaign.

In order to reach these objectives, current forces must be reorganized in such a way that any operational commander can have logistical forces that may support the reaction of great deployable capability, for example, the Rapid Deployment Force of the Argentine Army in such a large national territory.

A logistical structure that provides command unit from the strategic level to the fox hole of a soldier is the initial point for the construction of this system.

The defensive strategy of Argentina, as the eighth largest country in the world, requires a logistical system that can be integrated into a joint logistical system. This must be built up under a modular logistical concept, integrated for command and control, but structured over Logistical Support Basis for the land component, a modern logistical system of the naval component and another that is of their own for the air component of the theater.

Other organizations should respond to structures of specific or joint nature if required and which are the result

of a territory preparation such as the Logistical Support Regional Center. These are organizations at the operational level of war that should facilitate the logistical command and control, sustainment brigade operations (that have organic logistical elements), they should not have a fixed organization and should be structured based on a mission with the possibility to fit regions or geographical areas of the country.

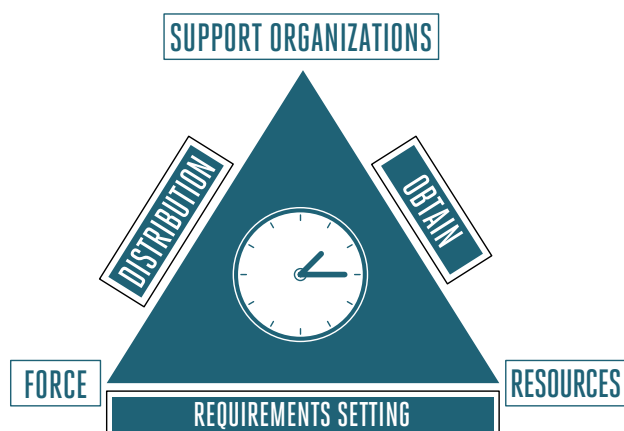
In the territorial Argentine maritime area, besides the self-sustaining own logistics that features the fleet in operations, there should be a system of basis and naval workshops that allow to sustain operations of the surface fleet in terms of logistics, submarine forces, naval aviation systems and naval infantry in the Argentine Sea.

The largest sovereign responsibility, at national level, is the air space area. It requires basis and centers that need a logistical system support that is extremely expensive, particular, sensitive and devoted to sustain air operations in an increasingly complex operational area.

Even though Argentina has not an offensive global strategy, this does not mean that its forces do not have an important planning capacity. Actually, requirements of peacekeeping forces generation that are currently deployed in Haiti or Cyprus, clearly show the requirement to have joint logistical resources that are proper to inter-operate with the Latin American allies.

The ideal situation would be to have a joint expeditionary modular logistical force with planning capacity of, at least, one joint tasks force/brigade, in any point in Latin America in order to reach the proper regional inter-operability logistical capacity.

## LOGISTICAL CYCLE



Source: Ministry of Defense- Joint Staff of the Argentine Armed Forces- PC 14-02 "Logística de Material para la Acción Militar Conjunta" [Materials logistics for joint military action]; 1998 edition.

***This concept of Modular Logistical Force is based on logistical modules which may be structured and interchanged, if requested, properly determining the necessary supply chain management for the fulfillment of the mission.***

## LOGISTICAL DESIGN

At operational level, logistical organizations of the Argentine Armed Forces are, in principle, joint but they require keeping certain characteristics of the force they support and they are structured according to the mission.

For this reason, logistical organizations at this level must have planning based on a logistical design with a high flexibility and prediction degree.

In spite of the importance of the joint military action, it is necessary to highlight what the current joint logistical doctrine establishes: each armed force (Army-Navy and Air Force) is responsible for the logistical support of its own elements, even when it is part of a joint command.

The logistical design at operational level may be centralized, decentralized or mixed.

- › **Centralized logistical design:** The Commander of the Theater delegates the logistical command of the campaign to a Logistical Commander of the Theater of Operations. Generally, a Joint Logistic Support Regional Center is organized and composed of staff and means of the three armed forces that sustain the operations of the theater integrating the logistics of the operational level with the tactical elements.
- › **Decentralized logistical design:** There is a directly available Joint Logistical Center for the Commander of the Theater. This center synchronizes logistical operations and keeps him updated as to the information about the logistical status of the forces available. However, logistical organizations of each force are separated and sustain the logistical flow from the military strategy through specific channels and feed tactical operations that each component requires.
- › **Mixed logistical design:** This is a combination of the previous ones and is frequently the most used. It is worth mentioning that in the centralized design, the

1. Ministry of Defense of the Argentine Republic – Joint Staff of the Armed Forces-PC 00-02 "Glosario de las Fuerzas Armadas Argentinas" [Glossary of the Armed Forces]; 010, pages L-5-7; 2010 edition.

Commander of the Theater does not delegate responsibility at any time and only delegates part of the authority to another commander called Logistical Commander of the Theater who is a commander from the same level of the Component's Command subject to him and who will only command logistical operations of the forces appointed to the Theater of Operations.

### LOGISTICAL PLANNING

In about 700 b.C., Assyrians developed the first regular army in living memory. In order to move a force of 500,000 men, they had to plan a great organization to supply such a great number of troops in the desert and in mountains.

The expression "to live, it is necessary to move" was coined during this age. In fact, if commanders did not take some logistical support with them, they got supplies from the territories they conquered. This concept is still current.

*When training commanders, it is generally said that a proper knowledge of strategy allows to know how to do something and a proper management of logistics gives the possibility to do something.*

However, after the First World War, a new era started due to the high consumption of ammunitions and the expansion of transport and, thus, *an army in movement was more difficult to be supplied*<sup>2</sup>.

Operational logistics tries to summarize by means of estimations the certainty grounds that will determine whether it is possible and acceptable to carry out a military campaign. If resources are not enough, an operational pause or planning another campaign will be necessary.

There is sometimes some confusion and logistics is only associated with material logistics. It is important to remember that the areas of staff, material and finance have to be involved in the military logistics.

However, according to the Material Joint Logistics Doctrine, which is currently under revision, this is about the logistical planning of materials of the armed forces at the following stages:

- 1) Preparation of general plan
- 2) Development of general plan
- 3) Guidelines, plans and orders<sup>3</sup>

Currently, it may be seen that the approach to the logistics problem is not to be deal with in stages, but in an integral way and from the start of the planning.

There should only be two logistical planning categories:

- › **Logistical planning:** It responds to the initial planning process of the commander and is used during the very development of the modes of action in order to determine



feasibility and to know the restrictions of the campaign immediately after the *step of planning* confrontation.

This will be the start of the logistical cycle to determine requirements.

- ) **Planning for logistical support:** It follows the conclusions and decisions of the Commander that are made during the logistical planning and it develops the execution details for the logistical structure and systems.

While each type of planning responds to different purposes, both are necessary parts of the effort for planning at each conduction level. Actually, a great part of the planning effort in both categories takes place simultaneously.

Currently, it is more frequent to talk about operations process and planning is part of it. Operations process can be summarized in the basic activities of conduction: Planning, Organization, Direction, Coordination and Supervision- Control. Other armed forces just call them in this way: Preparation, Planning, Execution and Supervision.

The operational level is a level that translates strategy into tactics. Therefore, it is highly important to understand and identify the right problem before starting planning.

In order to identify the problem, it is usual to use, nowadays, the concepts of operational design from which a planning guideline will be derived in order to guide the operational approach and the concept of the operation to be developed.

It is convenient for the process of common planning to be used at operational level to include logistics together with operations and intelligence since the beginning at all stages and in a holistic way.

A proposed method for a logistical planning process may include:

- 1) Identification of the problem (this includes the logistical point of view)
- 2) Preparation and analysis of modes of action and enemy capacities (this includes the logistical point of view)
- 3) Confrontation (from which restrictions and initial requirements will be determined)
- 4) Comparison
- 5) Resolution (this derives from the determination of requirements and beginning of the logistical support planning for the campaign. Once the decision has been adopted and the commander does not have support, risk is taken. Risk analysis must always be carried out, the important thing is that the commander gets to know how much risk they can take).
- 6) Development and distribution of plans
- 7) Supervision

***In spite of the importance of the joint military action, it is necessary to highlight what the current joint logistical doctrine establishes: each armed force is responsible for the logistical support of its own elements, even when it is part of a joint command.***

These stages are part of a method proposed in which there is the idea of stating the logistical problem from the beginning in the method of operational level planning and this method must be implemented in a recurrent way and permanently updated.

Modern logistical planning must aim at being completely digital with an updated database and with the capacity to inform about the situation of the force in real or almost real time to the military commander.

Current military logistics is integral and it is in a permanent process of adaptation and transformation requiring proper technology and management of administration concepts of the supply chain.

## THE OPERATIONAL REACH

***The Andes Army will always have the glory to say: we have carried out the campaign in twenty four days, we went through the highest mountains in the world, we defeated the tyrants and gave freedom to Chile.***

*General José de San Martín*

*Report of the Chacabuco Battle to the Supreme Director Santiago de Chile, February 28, 1817.*

In this battle report, distance and time to cross the Andes show the concept of operational scope of the forces of the Liberation Campaign. It took many years for San Martín to train forces in Mendoza before crossing to Chile, which explains to us the logistical principle of predictability.

Plans took into consideration the loss of cattle when crossing the mountains and, in fact, half of the cattle were

2. Thompson, Julian; *La Savia de la Guerra. La Logística del Conflicto Armado*; Instituto de Publicaciones Navales; Buenos Aires; 1991; pages 45 – 90

3. Ministry of Defense of the Argentine Republic – Joint Staff of the Armed Forces – PC 14-02 "Logística de Material para la Acción Militar Conjunta" [Material Logistics for Joint Military Action]; 1988 edition.

lost. However, they reached Chacabuco in proper conditions to fight the battle and could defeat the royalists.

This concept is current and the current operational logistics must be organized with a systemic approach in time and space according to the mission.

The operational scope is an element of operational design that may be used to determine the capacity to act within a distance that is compatible with magnitude and support of the force in order to get decisive points<sup>4</sup>.

This capacity is directly related to logistics and will be subject to the way to address the opponent's gravity center and to the operational pauses that are imposed based on the evolution of the culminating point.

Another important aspect of operational logistics is the transport capacity required for the deployment in operations. It is usually said that any logistical problem is a transport problem.

In the case of the Argentine Armed Forces, at military strategic level, transport is centralized and provided by the Joint Transport Command of the Armed Forces to take personnel and means from the basis to the Theater of Operations.

According to the logistical design of the theater, there may be a Joint Transport Command of the Theater or, in the framework of the joint staff of the theater, the logistical area of the logistical officer will appoint a transport officer that synchronizes operations of the specific land, air and naval transport commands as well as for civil means and other agencies to be transported.

From the analysis of this aspect, we can state the priority to have, in the short term, a National Defense Mobilization Law. That is to translate its execution body into the creation of a General Direction for Mobilization at military strategic

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level that directly reports to the Ministry of Defense as this will make it possible for the requirements stated in the plans to be met by means of the transformation of the national potential into real power.

### CONCLUSIONS

*If men and military equipment are the vehicle to apply the necessary force in order to win a war, logistics is the engine and fuel that power them<sup>5</sup>.*

Only those forces that actually have the capacity to carry out operations sustained at the end of a long communications line would be the ones that are, at least, useful for deterrence regarding new threats in the international setting<sup>6</sup>.

Joint Logistical Design must adapt to the operational environment and terrain and must generate the necessary modular material, staff and finance forces for the fulfillment of the mission.

It is key to know the logistics of the three armed forces in general and of each of them in particular according to their positions and responsibilities.

Proper and detailed planning is vital and gives some certainty to an uncertain environment.

Operational logistics subjects the limits of the campaign joining the strategic logistical flow with the tactical logistical one extending from interior and communications areas to tactical logistical basis.

The challenge of military commanders is to be able to execute the operational maneuver ad, at the same time, control and extend logistical conditioning. If this is not possible, they must know the risk to be taken.

The Malvinas lesson has shown the importance to have proper logistics and of the joint military action. This lesson has already been taught and mistakes have been paid with the lives of heroes. The important thing is for the Argentine Armed Forces and their allies to have taken and understood it. This will reinforce the idea of training to win. ■■■■■

4. Joint Staff College of the Armed Forces; "Manual de Estrategia y Planeamiento" [Strategy and Planning Manual]; 2012

5. Thompson, Julian; op. cit.; p. 242.

6. Thompson, Julian; op. cit.; p. 428.