THE ROLE OF MARITIME FORCES IN PEACE SUPPORT OPERATIONS AND ANALYSIS OF MARITIME FORCE REQUIREMENTS*

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Abstract: Maritime forces have been the choice of first response for many crises in the world. They are flexible, deployable and bring many capabilities to an operation. The analysis of NATO's maritime force requirements considers the range of operations that these forces must support. This analysis has traditionally addressed requirements for peacetime operations, crisis response and conflict, but admittedly, the focus of analysis has been on the high end of the conflict spectrum. Changes in the Alliance and its strategy have motivated more detailed assessments of force requirements for operations other than war (OOTW) and in particular for Peace Support Operations. A general tri-service methodology has been developed for this analysis. It comprises a situation analysis to define the Peace Support situations that could be encountered, a mission analysis to identify the tasks that forces would have to conduct, a capability analysis to identify the "generic" NATO units capable of executing a given task in a given situation and a synthesis to produce a force package capable of achieving the mission objectives. Within the framework of this methodology, a number of existing tools and techniques were used to identify requirements for some of the maritime tasks. For other tasks, tools were derived and military judgement was formalised. The paper will describe the role of maritime forces in Peace Support Operations, experiences in analysing associated maritime force requirements and challenges that lie ahead.

Introduction

The Operations Research Division at the NATO Consultation, Command and Control Agency (NC3A) supports defence planning at NATO by participating in studies to identify military force levels, readiness structure and capabilities required by the Alliance. The results of these studies are important inputs to the Alliance's force planning process.

The studies assess the future security environment in order to define planning situations, agree assumptions and methodology, direct scientific analysis and document the findings of the review. In the past, analysis focused on defence of the Alliance. Changes in strategy have resulted in an increasing focus on crisis management and Peace Support Operations. As a result, it was important to find a way to analyse how new missions and potentially new operations areas impact on the required forces, readiness and capabilities.

This paper describes an analysis of NATO force requirements for Peace Support Operations. Although the analysis was tri-service, this paper focuses on the role of and requirement for maritime forces. It will introduce Peace Support Operations and discuss the roles for maritime forces in these operations. The paper will summarise a general tri-service methodology that was developed to identify force requirements for Peace Support Operations. The methodology will be illustrated through its application to the identification of

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maritime force requirements. The paper will conclude by addressing challenges encountered and charting the way ahead for future analysis.

Peace Support Operations

The term "Peace Support Operations" is used by NATO to describe multi-functional operations conducted impartially in support of a UN/OSCE mandate. These operations involve military forces and diplomatic and humanitarian agencies. They aim to achieve a long term political settlement or other conditions specified in the mandate. The term encompasses the following:

- <u>Peacekeeping</u> operations generally undertaken under Chapter VI of the UN Charter that are conducted with the consent of all parties to monitor and facilitate implementation of a peace agreement.

- <u>Peace Enforcement</u> operations generally undertaken under Chapter VII of the UN Charter. These operations may be conducted when the consent of all parties to a conflict has not been achieved or might be uncertain and are designed to maintain or re-establish peace or enforce terms specified in a mandate.

- <u>Conflict Prevention</u> operations generally undertaken under Chapter VI of the UN Charter that range from diplomatic initiatives to preventive deployments of forces. These operations aim to prevent disputes from escalating into armed conflicts or from spreading.

- Diplomatic <u>Peacemaking</u> activities conducted after the commencement of a conflict aimed at establishing a cease-fire or a rapid peaceful settlement.

- <u>Peace Building</u> operations that support political, economic, social and military measures and structures aiming to strengthen and solidify political settlements in order to redress the causes of a conflict.

- <u>Humanitarian Operations</u> that are conducted to alleviate human suffering.

The analysis of requirements for force planning considers those Peace Support Operations that have been assessed to be force drivers namely: Peacekeeping, Peace Enforcement and the Preventative Deployment mission type of Conflict Prevention. Special requirements related to the provision of Humanitarian Aid are also addressed within the context of Peacekeeping, Peace Enforcement and Preventative Deployment operations.

Roles for Maritime Forces in Peace Support Operations

Maritime forces have an important role to play in Peace Support Operations. They are flexible, deployable and have a wide range of capabilities. They are used to quickly respond to developing crises around the world and have been seen to perform many different roles in Peace Support Operations. What follows is a description of high level roles and some examples. The list is not intended to be complete and we can expect that it will evolve.

- <u>Sea Control</u> ensures freedom of movement of the Peace Support Force on the seas. It helps to create a secure environment within which peace can grow. It also allows naval forces of former enemies to be kept separated. Some control of the sea is required in any operation where maritime forces are present in the Peace Support Force. An example was seen in the Adriatic where maritime forces supported United Nations Protection Force (UNPROFOR), Implementation Force (IFOR) and Stabilisation Force (SFOR) operations in Bosnia-Herzegovina.

- <u>Embargo</u> requires localised Sea Control but also includes elements of maritime interception operations. Embargo operations can contribute to the successful completion of the Peace Support mission by isolating the area of operations and by deterring external intervention in the crisis. One example is the participation of NATO's Standing Naval Forces, STANAVFORLANT and STANAVFORMED, in Operation Sharp Guard that enforced an arms embargo of the Former Yugoslavia.

- <u>Protection of Sea Lines of Communication</u> ensures the safe and timely arrival of the Peace Support Force and protects shipping both military and humanitarian. It can include minecountermeasures

to clear entries to ports and other key areas. Fortunately we have not seen too many cases where sea mines have threatened the success of a Peace Support Operation, but mining is cheap, can be done clandestinely and can produce significant damage. Threats to the Sea Lines of Communications need to be protected against and Italian MCM forces were part of SFOR's maritime component in the Adriatic to respond to mining incidents as required.

- Maritime forces, in particular amphibious forces, can provide an evacuation capability for both non-combatants and forces. This capability has been exercised again and again. The most recent example is the deployment of amphibious forces from the United Kingdom and United Stated to evacuate civilians from Kinshasa, the besieged capital of the Democratic Republic of the Congo (former Zaire).

- Power Projection can be used to secure ports of entry and other key sites quickly and safely. It can also provide a rapid reinforcement capability in the event that hostilities flare up in a location. A recent exercise in Bosnia-Herzegovina, Exercise Dynamic Response, illustrated how strategic reserve forces could be used to reinforce a Peace Support Force.

- Other important roles are providing a deterrent presence, performing surveillance and gathering intelligence.

Analysis of Requirements

Force planning studies into future requirements must identify forces for the range of operations they could be called upon to support. For NATO, this includes the Peace Support Operations already described. A methodology has been developed allow these operations to be analysed in a systematic way.
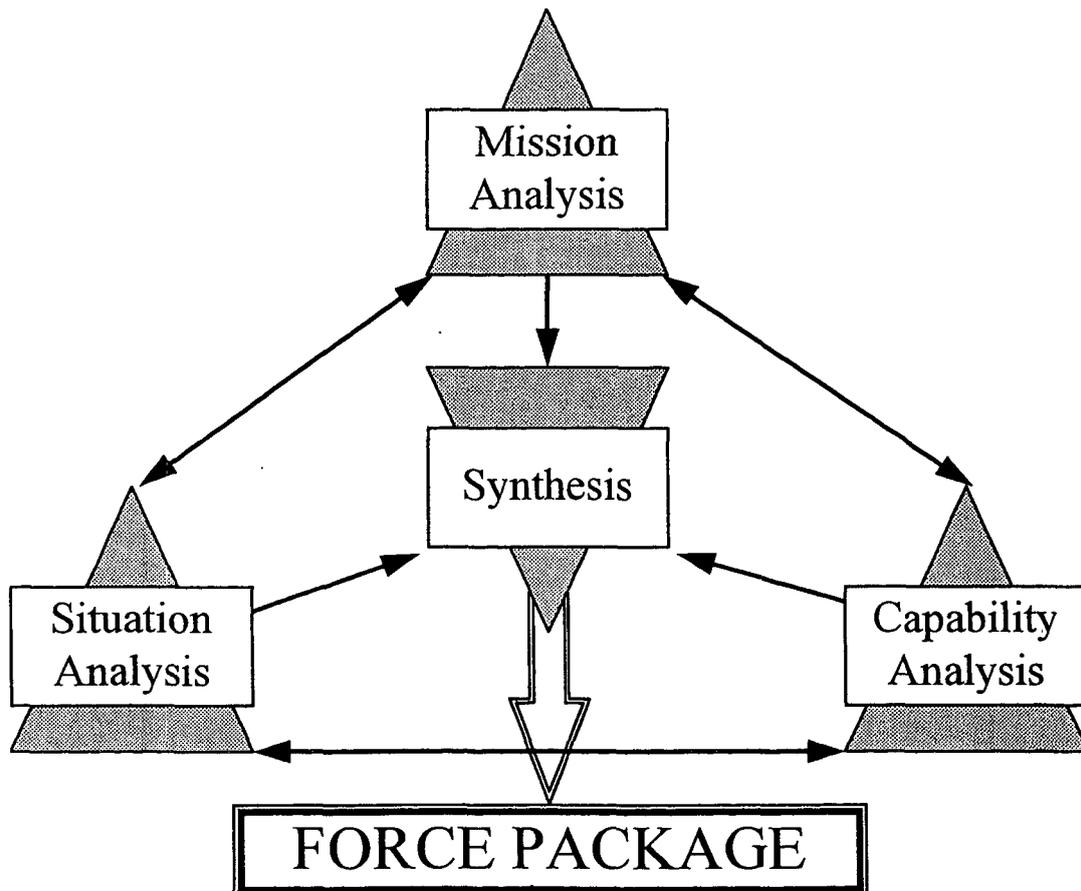

Figure 1 - Key Analytical Components

General Methodology

Figure 1 illustrates the key components of the methodology developed for the analysis. The methodology comprises a situation analysis to identify the important aspects of situations that could be encountered (including geographic locations), a mission analysis to identify the military mission and associated tasks, a capability analysis to identify the capabilities needed to perform the tasks and a synthesis to pull everything together. The end result of the analysis is a force package capable of performing all the tasks in a given situation.

As indicated by the arrows in the figure, the component analyses are interrelated. They must be performed in parallel to ensure that interactions are properly addressed. To illustrate the methodology, the component analyses will be described in turn with maritime aspects being highlighted.

Situation Analysis

In the situation analysis the types of Peace Support Operations to be considered were identified, as were the regions where such a crisis could take place and the Alliance could play a role. The resulting regions were grouped into clusters that share similar characteristics and that would likely require a similar response. Each of these clusters was reviewed to identify specific crises for analysis.

Maritime Parameters

A set of situation parameters was then defined for each crisis and then generalised for each cluster. The focus was on characteristics of the situation important for determining force requirements. The types of parameters considered for the maritime analysis answered the questions:

- Where is the operation? How far is it away from NATO nations?

- How long is the coast? How large are the territorial waters?

- What are the characteristics of the operations area?

- Are ports to be used as entry points into the country?

- Are there key maritime sites that need to be secured and/or protected?

- What naval forces are operating in the area?

These parameters describe the maritime characteristics of the operations area, potential threats to maritime forces and potential support for the operation. The operations area was characterised by its size, coastline, number of ports and distance to NATO territory. Capabilities of naval forces in the area were identified and the type of threat and area threatened were also assessed. Support to the Peace Support Operation could come from NATO airfields, ports and medical facilities or from a supportive neighbouring nation.

There are links to the other component analyses. Crisis characteristics can depend on the type of mission. For example, the potential threat posed to naval forces with a Peacekeeping mission may lower than that of an enforcement operation where general consent of all parties is not certain.

Mission Analysis

The mission analysis defined the military mission in more detail for each type of Peace Support Operation analysed. As was mentioned above, for force planning analysis we considered Peacekeeping, Peace Enforcement, Preventative Deployment operations as well as the Humanitarian Aid aspects of these operations. For each type of operation, the mandate was agreed and key mission elements required to achieve the mandate were identified. These key mission elements were at the level of the maritime roles identified earlier.

Primary and supporting tasks were then defined for each of the service elements. The tasks identified are at the level of detail required for force planning analysis, that is, tasks that drive the requirement for forces and capabilities. Examples of maritime primary tasks are minecountermeasures and surveillance. Examples of maritime supporting tasks are sustainment and medical support.

Finally an associated timeline for the mission with discrete phases was defined. There is a link to the situation analysis here because the timeline can depend on the situation parameters. For example, distances

have an impact on transit times for the Peace Support Force. Some situation parameters also determine whether a task is performed and if so when. The tasks of minecountermeasures will not be required in cases where the nation has no coast. Furthermore, mine clearance of ports may be necessary only early in an operation, but surveillance may be required throughout. The mission analysis identified the relationship between tasks, phases and times.

Capability Analysis

The capability analysis identified the units able to perform a task in a given situation. Units were defined in generic terms. Troop to task rules and simple models were identified to assess the requirement for these generic units.

Maritime Units

The analysis used generic maritime units with a NATO-agreed set of standard capabilities. This allowed requirements to be defined that were non-nation specific. The issue of how best to fulfil such a requirement with actual forces was addressed in a follow-on analysis. Examples of generic units considered are shown in Table 1.

Table 1 - Generic Maritime Units

Generic Unit	Description
CV	Aircraft Carriers
CVS	ASW and VSTOL/Helicopter Aircraft Carriers
CG	AEGIS equipped Cruisers
DD/FF	Destroyers and Frigates
FS	Corvettes
PG/PB	Patrol Boats
MH	Minehunters
MS	Minesweepers
SSN	Nuclear Submarines
SSK	Conventional Submarines (includes SSC)
MLSV	Mobile Logistic Support Vessel
MCSC	Mine Countermeasures Command and Support Ship
AMW	Amphibious Warfare Ships
MPA	Maritime Patrol Aircraft
AEW Aircraft	Airborne Early Warning Aircraft
AH	Hospital Ship
Command Ship	Ship capable of accommodating sea-based CJTF HQ. (i.e. LCC or AGF)

Because naval units operate in task units and task groups, the analysis also considered these groupings of generic units. Examples are carrier groups (CVG), minecountermeasures task units (MCM TU) and maritime patrol aircraft tasks. The composition of task groups and task units provides a good mix of capabilities. Furthermore some of the units have the effect of being force multipliers allowing a task group to be more capable than the sum of its generic units. MLSV and carrier-based aircraft are examples. Although the composition of task groups and task units can vary based on the mission and the operating environment, a notional composition was considered in the capability analysis.

Maritime Models & Assessments

The maritime capability analysis used a number of existing tools and techniques to identify those generic units, task units and/or task groups required for some tasks. For other tasks, rules of thumb were developed based on existing doctrine, military judgement and lessons learned.

Some maritime tasks can be required through the spectrum of peace, crisis and war. For this reason some of the analysis models we had in our portfolio were immediately applicable to Peace Support Operations. For example, the maritime forces required for minecountermeasure tasks were calculated using an existing model called MCM Expert. We are also developing a new model to help calculate maritime forces required for surveillance tasks. It is called MARSURV.

Where such analysis tools were not available we defined rules of thumb to identify the forces required as a function of the situation parameters. Some of the tasks and associated force requirements had been explicitly addressed by doctrine. This was the case for the tasks associated with the sea control role. For other tasks, such as securing ports or providing medical support, we consulted experts to get their best military judgement. We were also able to use lessons learned during operations and exercises to scope the requirements for other tasks. Operation Sharp Guard provided valuable experience in conducting maritime embargo operations and Exercise Dynamic Response gave insight into the employment of amphibious forces as strategic reserves.

Synthesis

The synthesis pulled everything together. It took the parameters from the situation analysis, the tasks from the mission analysis and the rules and tools from the capability analysis and identified the required forces. The force package defined could perform all the tasks in a given phase of a mission for a set of situation parameters.

Trade-offs were made to ensure that force packages transition smoothly from one phase in the operation to the next and that tri-service interfaces were addressed. The final results were force packages for each Peace Support Operation type in each situation cluster. Because it is difficult to predict which situations are likely to occur, the force packages were reviewed, and a pool of forces for the range of situations and Peace Support Operation types was also identified.

Challenges

There are a number of reasons why this analysis presents a challenge. The very nature of Peace Support Operations and how nations decide to support them are political. Nations decide whether to participate and what to contribute. These decisions are often made on a case by case basis.

Also in Peace Support Operations there are many different players. The military force works alongside civilian agencies and is itself usually a multinational coalition of forces. The situation in Bosnia-Herzegovina is good example. SFOR is a combined joint force with units from NATO nations and other nations. SFOR works closely with the UN Mission in Bosnia-Herzegovina, other regional organisations, international agencies, etc. Experience has shown that different units or agencies can often perform a task in a Peace Support Operation. The question becomes not who can do it, but who should do it and who is willing to do it. It is difficult to answer this question and the answer could vary by situation.

For these reasons, force planning must address a range of operations and situations and allow flexibility of response. That is why the analysis identified a pool of forces for use in Peace Support Operations. In addition, the forces identified for Peace Support Operations must be consistent with NATO's overall force structure. We should not create a duplicate force structure to address these types of operations. In this way, NATO's operational planners will have options when planning a specific operation.

The analysis of maritime force requirements has a unique character. Maritime forces come with many capabilities and can often perform multiple tasks. This has a number of positive side-effects. First, different generic units, task units or task groups can often perform a given task. This gives flexibility, but the analysis requires an assessment of the best option in order to specify the requirement. Second, maritime forces identified based on the most challenging tasks in a mission often brings with them additional capabilities. The analysis needs to review these additional capabilities to see if they can be used to support the mission. The challenge is to find the best mix of forces addressing the required tasks throughout the operations area.

Way Ahead

The analysis of Peace Support Operations described in this paper followed a systematic assessment of representative situations that could be addressed by NATO. It identified the elements of missions that are important in determining maritime force requirements. It also identified models and rules that could be used to assess the maritime capabilities required to perform tasks in a given situation. This methodology was a good way to assess the requirements for new operation types and areas.

We are currently building on this work. We are refining the methodology by re-examining the mission analysis and validating the rules of the capability analysis. Lessons learned from Peace Support Operations are being reviewed and incorporated into the analysis.

There is also an initiative to formalise the analysis process and identify the areas for automation and the development of support tools. Automation of the steps in the analysis would make the results more transparent and reproducible. Automation would also facilitate extension and enhancement of the methodology. It could provide valuable tools for use in future force planning analysis and which may find application in different types of planning situations and other areas of planning. As part of this initiative, a maritime application is currently under development to support the capability analysis. It will be called MARCAP.

More immediately, we are applying the methodology right now in support of a follow-on study of the forces required by NATO for Peace Support Operations.

Acknowledgements