An Analysis of Reception, Staging, Onward Movement and Integration in a Coalition Framework

A Monograph

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Multinational logistics is proposed as having considerable potential, but this has yet to be substantially realized in any post-Cold War coalition operation. This delta between what is perceived possible and the current level of logistic support to coalition operations is the impetus for this monograph. Rather than a broad, generic analysis of this topic, specificity allows a more concrete appraisal of the issues. This is achieved through focus upon a logistic function and placing the analysis in the context of an actual coalition relationship. The function chosen for this purpose is Reception, Staging, Onward Movement and Integration (RSOI). The coalition partners chosen are the U.S. and Australia. The purpose, therefore, is to seek options to improve the conduct of RSOI within the framework of the U.S. and Australian military relationship. This in turn becomes a micro-analysis of multinational logistics. The finding of this analysis is that there is potential available for improved efficiency and effectiveness through the application of multinational logistics. Progress, however, is not available through a singular solution but through multiple steps consisting of reactive fixes and long term measures. Furthermore, for marked progress to be made requires a long term commitment to improved multinational compatibility.

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Abstract

An Analysis of Reception, Staging, Onward Movement and Integration in a Coalition Framework by MAJOR Jason K Walk, Australian Regular Army, 65 pages.

Multinational logistics is proposed as having considerable potential, but this has yet to be substantially realized in any post-Cold War coalition operation. This delta between what is perceived possible and the current level of logistic support to coalition operations is the impetus for this monograph. The intent is to explore the potential and limitations of multinational logistics.

Rather than a broad, generic analysis of this topic, specificity allows a more concrete appraisal of the issues. This is achieved through focus upon a logistic function and placing the analysis in the context of an actual coalition relationship. The function chosen for this purpose is Reception, Staging, Onward Movement and Integration (RSOI). The coalition partners chosen are the U.S. and Australia. The purpose, therefore, is to seek options to improve the conduct of RSOI within the framework of the U.S. and Australian military relationship. This in turn becomes a micro-analysis of multinational logistics.

The methodology used to achieve this purpose entails an assessment of the current levels of interoperability between Australian and the U.S., defined in terms of doctrine equipment and demonstrated performance. This allows identification of gaps in interoperability, and a consideration of viable options for improvement.

There is a high level of consistency and compatibility throughout the single service and joint doctrine of both nations in respect to the definitions and terminology that relate to the RSOI process. This is also true of the coalition doctrine applicable to both. While this offers a firm basis, there is an absence of guidance regarding the detailed procedures for conducting RSOI within a multinational framework. A more active and definitive doctrinal role by the American, British, Canadian and Australian Armies' (ABCA) Program, as the de facto coalition organization for both nations, is a feasible solution.

The level of equipment interoperability between the two nations varies. More significantly, budgetary constraints and competing requirements such as the pursuit of self reliance by Australia render it difficult to pursue further compatibility of equipment fleets and materiel. What is perceived as viable is increasing the interoperability of information systems that assist in the conduct of RSOI.

It is within the performance of RSOI that the degree of interoperability appears most deficient. The review of recent coalition operations undertaken by both nations does reveal the provision of mutual assistance and support. However, it also highlights failure or shortfalls in the application of agreements and arrangements designed to facilitate multinational logistics. Also witnessed was the necessity for ad hoc arrangements to compensate. In general, a more deliberate and committed approach is necessary to ensure improved performance in the future.

The finding of this analysis is that there is potential available for improved efficiency and effectiveness through the application of multinational logistics. Progress, however, is not available through a singular solution but through multiple steps consisting of reactive fixes and long term measures. Furthermore, for marked progress to be made requires a long term commitment to improved multinational compatibility. This commitment must commence well before the identification of coalition partners for any given operation.

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CHAPTER ONE

INTRODUCTION

A characteristic of the post-Cold War environment is the proclivity toward coalition operations. The expense involved in mounting military operations and the desire for international legitimacy are two factors that have contributed toward this tendency and will ensure it remains a characteristic of military activity into the future. The conduct of multinational operations has understandably received considerable attention as a consequence of this trend. Inclusive within this focus has been the conduct of multinational logistics. Much of the professional literature on this subject has alluded to multinational logistics as being an attractive but elusive panacea. Idealistically, a vision is portrayed of a cohesive, multinational organization, with commonality in equipment and training; providing effective support to a coalition and at the same time reducing the logistic footprint to only what is necessary. Calls for a North Atlantic Treaty Organization (NATO) Multinational Logistics Command and similar organizations are indicative of the endeavor to attain these benefits.[1] The reality to date in the conduct of multinational logistics has been a tendency toward duplication of effort and resources within the theater of operations, competition for what is often a scarcity of resources available through Host Nation Support (HNS), and significant inefficiency in the provision of logistics to the coalition force. This delta between what is perceived possible and the current level of logistic support to coalition operations is the backdrop and inspiration for this monograph.

Rather than a generic discussion of the subject, there is value in refinement. Multinational logistics is a complex issue and while there are potentially broad initiatives available that may improve the conduct of this military activity, there is also value in considering logistic processes in isolation. Certain logistic functions require unique responses to the difficulties encountered in a coalition environment. Furthermore, focus upon a specific function lends credence to what broad

[1] Eugene Mittuch, "Logistics Support for NATO's New Strategic Concept: The Need for a Multinational Logistics Command" (Masters Thesis, Naval War College, 2002), 17.

initiatives are proposed, demonstrating their value in concrete terms. Therefore, the purpose of this monograph is to explore the potential and limitations of multinational logistics, using a specific logistic function as a medium.

The logistic function that will be used for this analysis is the conduct of the Reception, Staging, Onward Movement and Integration (RSOI) process.[2] The focus will be upon methods of improving interoperability between coalition partners during the conduct of this process.

The choice of RSOI is significant. Selection of this subject matter is reflective of the preponderance of expeditionary operations conducted by Western militaries within recent history and the subsequent importance of the deployment phase in the achievement of military success. Key to a rapid and effective transition process from deployment to employment is the successful conduct of RSOI. Within the context of a coalition framework, it is posited that the importance of this process is elevated. It is the process during which coalition partners first combine, often within the constraints of limited infrastructure necessary for the projection of forces into a theater of operations. This is further complicated by the fact that the process represents a seam between the strategic and operational levels of war, during which the transferal of command and control arrangements occur. It is therefore an appropriate topic through which to gain insight into the challenges of multinational logistics.

[2] The definition of RSOI and its four segments is as follows: RSOI is the essential process that transitions deploying forces, consisting of personnel, equipment and materiel arriving in theatre into forces capable of meeting operational requirements. Reception includes all functions required to receive and clear unit personnel, equipment and materiel through Ports of Debarkation. Staging includes assembly, temporarily holding and organising arriving personnel, equipment and materiel into their units and forces and preparing them for onward movement and tactical operations. Onward Movement is the process of moving units and accompanying material from reception facilities and staging areas to tactical assembly areas or other theatre destinations. Integration is the synchronized hand over of units into an operational commander's force prior to mission execution. The definitions that are used have been extracted from Australian Defence Doctrine Publication 4.2 Support Operations. It is however, almost identical to the definitions provided in U.S. Joint Publication 4-01.8 Joint Tactics, Techniques and Procedures for Joint Reception, Staging, Onward Movement and Integration. The comparison of definitions will be discussed further in Chapter Two: Doctrine.

One final broad parameter that will be placed upon this analysis is to put it in the context of an actual coalition relationship, namely the U.S. and Australia. This represents a realistic future coalition. Both are alliance partners as signatories of the ANZUS Treaty (September 1951) and members of the American, British, Canadian, Australian (ABCA) Armies' Program.[3] Australia's defense policy clearly recognizes the U.S. as its major ally.[4] The U.S. National Security Strategy refers to its relationship with Australia as one of continuing close cooperation.[5] Australia's recent involvement in Operations Enduring Freedom and Iraqi Freedom is reflective of a similar stance to the U.S., in its response to the contemporary threats to national security, and suggests future potential involvement in similar operations. Further description of the U.S. and Australian military relationship is provided at Appendix A.

It is within the context of a real-world coalition framework that the complexity of advancing multinational logistics is realized. Lofty aspirations toward commonality of equipment and procedures for example, are placed in the sobering light of the disparity between comparative defense budgets. The U.S. defense budget is over (U.S.) $300 billion while Australia's is (U.S.) $6 billion.[6] The lure of increased interoperability with the U.S. is viewed with caution within Australia, given the imbalance it may cause to Australian forces thus affecting its ability to deal with all of its responsibilities.[7] Consequently, improvement of the RSOI process must account for the limitations of the nations involved and seek resourceful methods to enhance the conduct of this activity in a coalition framework.

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[3] The ABCA Armies' Program was initiated in the aftermath of the Second World War in an attempt to maintain the standardization that had been achieved during the conflict between the member nations. Further detail on this program is provided in Chapter 5, The Way Forward.

[4] Australian Department of Defence. *Defence 2000. Our Future Defence Force, June 2000,* http://www.defence.gov.au/whitepaper/docs/wpaper.pdf, 11 August 2004. 34.

[5] U.S. President. The National Security Strategy of the United States of America, September 2002, George W. Bush, 2002. 26.

[6] R. Huisken, *ANZUS: Life After 50, Alliance Management in the 21st Century*, Working Paper No. 361, Defence and Strategic Studies Centre, (Canberra: Australian National University, 2001), 19.

[7] Owen Livermore, "Self Reliance Within an Alliance Framework: Achievable or a Fundamental Contradiction?" *Yolla. Journal of Australian Defence Colleges Association* (September 2003): 59.

Problem statement

What realistic steps can be taken to optimize the RSOI process in a coalition framework? This question will be examined in the context of a U.S. and Australian coalition.

Methodology

The methodology used to consider the problem statement is derived from the methodology used to examine similar issues by the ABCA Armies' Program. This process is referred to as an 'interoperability gap analysis' and entails an assessment of the current level of interoperability, defined in terms of doctrine, equipment and demonstrated performance. This allows the identification of gaps in the level of interoperability. This next step entails an assessment of potential ways of addressing these gaps. From this assessment recommendations can be made as to what steps can be taken to optimize the conduct of the RSOI process.

An assessment of doctrine will incorporate an examination of Australian and U.S. Joint and Army doctrine. The assessment will also include a consideration of ABCA doctrine. The purpose of this inclusion is not only to evaluate the degree of standardization, but also to consider its value and whether this can be increased with greater specificity or by another means. NATO doctrine will also be reviewed as the recognized leader in multinational doctrine. The benefit of its inclusion is to provide potential direction for methods of improving the current level of compatibility. Finally, emerging doctrine and documents designed to shape future doctrine will be considered with the intent of determining future compatibility in this area.

An assessment of equipment and technology will be brief. This is based upon an intuitive understanding that many equipment issues do not pertain to an improvement in the RSOI process. It is recognized that disparities in technological capabilities may cause 'mechanical' problems, such as an inability to lift certain loads by coalition partner transport assets. These types of issues require a significant level of cooperation to address them, which may be beyond what is likely to be a realistic expectation in the pursuit of multinational compatibility with one potential partner.

The focus of this section will therefore be upon silver bullets that will yield considerable improvement in the process comparative to the effort expended. The field of asset visibility is an example of this.

An assessment of demonstrated performance obviously needs to reflect each nation's current capability rather than provide a historical analysis. Subsequently, the operations that are reviewed will fall within the previous ten years. Although the focus will be upon those operations involving both the U.S. and Australia as coalition partners, this will not be exclusive. Other operations within the time period that reveal each nation's performance of RSOI will also be considered. The research material used to conduct this assessment will be After Activity Reports (AARs), consolidated lessons learned and similar documentation from these operations.

The final part of this paper will explore a variety of options and proposals for the improvement of RSOI. This will entail a review of secondary sources relating to coalition operations, RSOI and related topics. The suggestions put forward within these secondary sources will be compared to the findings of the previous chapters and, where applicable, used to provide recommendations for improvement. The selection of recommendations and what constitutes a realistic proposal will be assessed utilizing the Feasibility, Acceptability and Suitability (FAS) test, taking into account the circumstances of both Australia and the US[8].

Limitation

While many of the issues relating to RSOI are of a Joint character, the focus of this monograph is on the role of the Australian and U.S. Army in the conduct of this process.

[8] Joint Publication 1-02 The Department of Defense Dictionary of Military and Associated Terms (2000), defines this term as follows: Feasibility – The determination of whether the assigned tasks could be accomplished by utilizing the available resources. Acceptability – The determination whether the contemplated course of action is worth the cost in manpower, materiel and time involved; is consistent with the law of war; and militarily and politically acceptable. Suitability – The determination that the course of action will reasonably accomplish the identified objectives, missions, or tasks if carried out successfully.

Involvement and interaction with other services will be considered, but only in the context of what effect it has on the respective Armies' conduct of RSOI.

Assumption

This paper is not a detailed discussion of the RSOI process itself. For example, the specific activities of each stage and the planning considerations for the various nodes are not addressed at length. Rather, a rudimentary knowledge of force reception is assumed for the purpose of engaging in the more advanced enquiry of how coalition operations influences the conduct of this process.

CHAPTER TWO

DOCTRINE

A comprehensive review of doctrine requires consideration of national doctrine for both Australia and the U.S., including both single service and joint doctrine. It is also necessary to include multinational doctrine. In the context of this study, ABCA doctrine will be the focus of this review given its overarching role for the two nations, although NATO doctrine is also considered. Finally, emerging doctrine is reviewed in order to account for future doctrinal direction and its potential impact upon the conduct of RSOI in a coalition framework. The review of doctrine related to RSOI produced mixed results. Australian doctrine is presently undergoing restructure and is not complete in its new format or its guidance on this subject. Alternately, U.S. doctrine is quite detailed and established, with publications focused on (J)RSOI[9] at the Joint and Army levels. A review of multinational doctrine highlights recent development of NATO doctrine, and that the corresponding publications produced by ABCA are similar in detail. Articles and documents that reveal emerging doctrine and concepts of both the U.S. and

[9] Within U.S. joint doctrine the RSOI process is referred to as Joint Reception, Staging, Onward Movement and Integration (JRSOI). Within Australian doctrine and U.S. Army doctrine it continues to be referred to as RSOI. The appropriate acronym will be utilized in association with its parent doctrine within this paper.

Australian military thought are understandably vague on the subject matter but suggest inconsistencies that require resolution. In broad terms, there is considerable potential for advancement in doctrine in relation to RSOI in a combined environment.

Australian Doctrine

Australian Joint doctrine is being reorganized to better reflect a more structured hierarchy of doctrinal publications. This transition has incorporated a revision of the content of the doctrine, including emphasis on several areas that were previously ignored. The RSOI process has benefited from this revision. The antecedent doctrine that related to deployment did not specifically address the function of force reception. Rather, it addressed procedures and activities that are a facet of the RSOI process.[10] The new Australian Joint doctrine has corrected this omission, or at least promises to do so.

The Australian Joint hierarchy of doctrine is based on three tiers: Capstone doctrine, Keystone doctrine (key doctrine publications within each functional stream), and other joint (application) doctrine. Subordinate to these publications there is also numerous procedural manuals. "Although these manuals are not to be considered 'doctrinal' they do support the application of doctrine, as they detail the tactics, techniques and procedures to be followed by commanders and their staffs for specific functions and operations."[11] The new keystone doctrine that encompasses RSOI in subject area now addresses this process in detail.[12] In fact, in comparison to the equivalent US doctrinal publication, it is superior in detail.[13] What is still

[10] See Australian Defence Force Publication (ADFP) 14 Air Transport (April 2001); ADFP 20 Logistics Support in Joint Operations (23 February 1999); and ADFP 21 Movement in Support Operations (10 March 1999).

[11] Ikawa Hiroshi, "Command and Control of Australian Defence Force in Doctrine" *Japanese Defense Research Center Annual Report*, (30 September 2003): 16.

[12] Australian Defence Doctrine Publication (ADDP) 4.2 Support to Operations, (17 October 2003): 5-9-5-14.

[13] Australian and U.S. doctrine are not identical in organizational structure, however the close similarities indicates that Joint Publication (JP) 3-35 Joint Deployment and Redeployment Operations, (7 September 1999), serves a very similar purpose to ADDP 4.2 Support to Operations.

lacking is the subordinate procedural manual solely focused upon the conduct of RSOI. Such a manual has however been identified as a future publication to be introduced into the Australian joint doctrine series.[14]

Australian Army doctrine lacks similar rigor in its coverage of RSOI. There is neither procedural doctrine relating to RSOI nor any indication of an intent to produce such a publication. At the keystone or application level, there is only a brief reference to the process. This reference does little more than identify RSOI as a G1 responsibility.[15] [16]As such, Australian Army doctrine is discordant with Australian joint doctrine, both in the level of emphasis placed upon RSOI and the allocation of responsibility for the process. Rather than a G1 responsibility, joint doctrine clearly specifies RSOI as being the responsibility of the Commander Joint Task Force, and normally managed by the Joint Logistics Component Commander or another nominated commander.[17] In this allocation of responsibility, and the delineation between responsibility and management of the process, it is joint doctrine that is consistent with both U.S. doctrine and coalition publications, and Army doctrine that is dissonant.

Other doctrine that relates to this issue is the guidance offered on the conduct of coalition operations. The joint doctrine on this topic is consistent with the Australian joint doctrine that discusses RSOI, and the guidance offered by U.S. doctrine and coalition publications. It outlines the possibilities for the command structure of a coalition operation, describing the features of integrated, parallel, lead nation commands, or a combination of them. In detailing the shortfalls of the other command structures, it offers an implicit preference for the lead nation framework, or a

[14] ADDP 4.2 Support to Operations: 5-14.

[15] Land Warfare Doctrine (LWD) 4.0 Combat Service Support (19 June 2003): Annex A.

[16] Like many militaries, headquarter organizations within the Australian Army are based on the Continental Staff System. This organizational design divides staff responsibility into discrete functional areas. The G1 staff section is normally responsible for Personnel and Administration.

[17] ADDP 4.2 Support to Operations: 5-10.

combination including this structure.[18] This position is in keeping with the other U.S. and coalition publications that provide guidance on command structure. The discussion of logistics within a coalition framework supports the lead nation concept while also promoting the principle of national self-sufficiency of coalition partners.[19] This represents a departure from the previous concept that logistics is a purely national responsibility even when participating within a coalition. Again, this reflects a recent trend of opinion that has gained legitimacy through its inclusion in national doctrine (including the U.S.), and coalition publications.

Australian Army doctrine for coalition operations has yet to be published. It has been identified as a future publication for the Army doctrine series. The most recent doctrine organization chart indicates however, that work has yet to commence on this product.[20] There is no other doctrine related to RSOI, or more generally to multinational logistics within the Army list.

There is a clear divide between Australian joint and Army doctrine, although both suffer from a paucity of information on RSOI. Joint doctrine has demonstrated an intention to remedy that deficit, whereas Australian Army doctrine has given no indication of a similar intent. The content of either the joint or single service Australian doctrine is difficult to critique given the brevity of coverage of the topic. Of the terminology, concepts and direction provided within the joint doctrine, there is consistency between publications and a high degree of standardization with U.S. doctrine and ABCA publications. Further assessment of the guidance provided within joint doctrine would be premature without the further explanation and clarification promised with the future technical manual on the subject. The content of Army doctrine on RSOI is both extremely brief and in conflict with the direction offered within joint doctrine. Furthermore, the guidance offered in relation to activities conducted during the RSOI process are insufficient in detail and

[18] ADDP 00.3 Coalition Operations (October 2002): 6-3.
[19] Ibid., 5-7 and 6-6.
[20] LWD 1 The Fundamentals of Warfare (2002): Appendix A to Annex A.

largely redundant without reference to their conduct within the larger process. There is clear potential for improvement of Australian doctrine in relation to the conduct of RSOI. Fulfillment of the intent to introduce a technical publication at the joint doctrine level and fundamental revision of doctrine at the Army level are two broad methods that could aid this improvement. Until this has occurred, a more sophisticated appraisal is not possible.

U.S. Doctrine

U.S. doctrine offers a much more detailed and complex consideration of RSOI, commensurate with the size of its military. Both U.S. joint and Army doctrine are organized in a similar manner to Australian doctrine, with a hierarchical structure in place. Where U.S. doctrine differs is in the existence of technical publications on RSOI at the joint and Army levels, and more specific supporting publications.[21] There are however, aspects of U.S. doctrine that are subject to improvement.

U.S. joint doctrine possesses many positive features in its guidance on JRSOI. It successfully fulfills what is contended to be its primary purpose; guidance on the conduct of JRSOI in the joint environment and as a guide for single services doctrinal development on the subject. The several publications that discuss this process are consistent in both terminology and concept. A considered strength of the joint doctrine is its clarification of the command relationships necessary for the conduct of JRSOI in the joint environment. This includes an articulation of the relationship between joint and single service component responsibilities. This is not a universally held view, with other commentaries suggesting that the seam between the supporting and supported commanders is not resolved by doctrine and requires clarification

[21] JP 4-08 Joint Doctrine for Logistics Support of Multinational Operations (25 Sep 2002) is a case in point of the supporting publications. In comparison, Australian doctrine has only devoted several paragraphs to this topic in its joint publication on coalition operations.

during the planning stage.[22] This highlights the continual challenge of doctrine production in maintaining a balance between sufficient description and prescription.

U.S. joint doctrine lacks in its failure to adequately consider the conduct of JRSOI in a coalition environment. Fleeting references are made to the requirements and impact of operating in such an environment. These comments however, lack any depth and offer inadequate guidance for dealing with this added complexity.[23] For example, the Joint Movement Control Center is identified as responsible for liaison with coalition partners for all transportation issues, but liaison responsibilities for other activities are not detailed. [24] This brings into question the ability to achieve synchronization, the second principle of JRSOI. Strong argument in defense of this shortfall is whether joint doctrine should address multinational operations in specific detail, when its primary purpose is to provide guidance for the joint environment. Indeed there are other, more appropriate publications that could address this aspect of the issue such as multinational doctrine. The caveat that is provided in response to this contention is that while joint doctrine should not need to elaborate, it should establish the means to incorporate consideration for coalition operations into the joint environment.

Another related shortfall of joint doctrine is the failure to identify who conducts the management of JRSOI. While the various commanders, organizations and supporting agencies are defined in terms of their responsibilities and inter-relationships, no single organization is identified as responsible for the overall management of this process. Instead, "These functions are typically performed by *ad hoc* task-organized elements that lack training and equipment to

[22] Howard Killian, "Beyond the Port Support Activity; The Role of the Port Task Force in Conducting Reception Staging, and Onward Movement in Europe" (Research Paper, Army War College, 2003), 5.

[23] While JP 4-08 Joint Doctrine for Logistic Support of Multinational Operations (25 Sep 2002) deals in detail with multinational logistics, it does so generically and does not address the specific issues involved in the conduct of JRSOI.

[24] JP 4-01.3 Joint Tactics, Techniques and Procedures for Movement Control (9 April 2002): III-1.

perform these tasks".[25] This has lead to recommendations for the development of a joint Theater Support Command (TSC), based closely upon the Army organization in function and purpose.[26] The relevance of this shortfall is that there is no organizational conduit at the joint level that would allow for the facilitation of coalition operations. Without the existence of such an organization, or guidance for its creation, any attempt to integrate coalition forces into the JRSOI process will be reliant upon improvised arrangements with no guarantee of unity of effort. Of note is that the U.S. joint doctrine that discusses logistics for multinational operations refers to a Multinational Joint Logistics Center (MJLC). Although brief in description, this organization could fulfill the need for a central agency, for the management of JRSOI within a coalition framework.[27] As mentioned, Army has already developed such an organization at the single service level. The linkage between these options is presently missing in joint doctrine.

U.S. Army doctrine is largely consistent with U.S. joint doctrine in the definitions used and concepts advanced in relation to RSOI. There are minor discrepancies between the two levels, exemplified in the different principles of (J)RSOI.[28] The differences of language and other technical detail however, are considered superficial and do not constitute contradictions or disharmony between the levels of doctrine.

One weakness of Army doctrine is within its explanation of the command relationships between sea port and aerial port operators, and other organizations responsible for aspects of RSOI. It contains ambiguity as to which organizations are ultimately responsible for numerous activities during the inter-modal phases of the process. The lack of clarity contained within the

[25] Institute for Defense Analysis, Doctrine, Organization and Systems for Reception, Staging, Onward Movement and Integration (RSOI) Operations, (Research Report, Alexandria, Virginia: January 1997): 8.

[26] Ibid., 9.

[27] JP 4-08 Joint Doctrine for Logistics Support of Multinational Operations, II-10. While it offers a relatively brief description of this organization, it refers to NATO doctrine which is much more expansive in its discussion of structure and function.

[28] Joint doctrine states the principles of JRSOI as being unity of command, synchronization and balance. Army doctrine states the principles of RSOI as being unity of command, unit integrity, optimum logistic footprint and unity of effort.

guidance provided for the division of responsibilities at an aerial port during the reception process is a case in point.[29] In this respect, joint doctrine provides the better guidance. In contrast to joint doctrine however, U.S. Army doctrine is more detailed in what could be described as the more practical or tactical facets of RSOI. For example, further explanation is provided regarding the logistic support required during each part of the process. Additionally, as has already been highlighted, Army doctrine does place name and structure to the organization that would manage the RSOI process. This is both in a single service environment and with the recognition that it may be required to assume the role in a joint environment. In respect to these differences Army and joint doctrine act as a good counterpoint to each other, although it is suspected this is somewhat coincidental. Nevertheless, these differences represent areas that must be improved within U.S. doctrine.

In its ability to support the conduct of RSOI within a coalition framework, U.S. doctrine is a well developed, comprehensive guide. The primary shortfall is that while it discusses coalition operations and the RSOI process in detail, it does not discuss them collectively and is therefore vague in its identification of enablers to facilitate this eventuality. However, it needs to be emphasized that this shortfall and the other issues that have been raised are representative of a well advanced doctrinal consideration of the subject matter. The shortfalls found within Australian doctrine by comparison are much more fundamental.

Coalition Doctrine

The primary coalition doctrine that relates to a U.S. and Australian coalition is that produced by ABCA. Whether the publications produced by this body can be termed doctrine is questionable, as unlike NATO, the ABCA program is not a formal alliance with the associated commitment placed upon its member nations. Nevertheless, the guidance provided by this

[29] Field Manual (FM) 100-17-3 Reception, Staging, Onward Movement and Integration, (17 March 1999): 3-6.

program has become more doctrinal in nature over the last decade. Previously, the output of the program consisted of the numerous, individual standardization agreements and very limited coordinating guidance, including the Coalition Logistics Planning Guide. This guidance has now been expanded into a number of coalition handbooks which detail definitions, functions and broad concepts for the conduct of coalition operations. It is the ABCA Coalition Logistics Handbook that will be considered in relation to the conduct of the RSOI process.

The nature of the information provided within the ABCA Logistics Handbook is similar to application level or keystone doctrine within the U.S. and Australian doctrine hierarchy. The Handbook generally describes how concepts and methods can be applied to a coalition environment, although occasionally it recommends techniques and procedures to be used. The content is consistent with much of the national doctrine and other combined doctrine. For example, the Handbook advocates the Lead Nation concept for the coordination of multinational logistics which has only been reflected in recent revisions of NATO logistics doctrine.[30] Similarly to the national keystone doctrine that has been reviewed, the Handbook discusses basic concepts for the conduct of RSOI, or RSOM&I as it is referred to.[31] Significantly, within its guidance on the RSOM&I process, the Handbook recommends the use of the MJLC that is defined in NATO doctrine and mentioned in U.S. doctrine, and makes referral to the U.S. construct for a TSC.[32] In doing so it gives shape to who would manage RSOM&I in an ABCA coalition.

Does the Handbook achieve its intended purpose? "…it prepares the mind of the reader for multinational logistics, providing the intellectual base needed when the reader must meet with coalition partners to design a suitable cooperative logistics system, including structures,

[30] Christopher Gregory, "Evolution of NATO Multinational Logistics Doctrine: The Link Between Funding and Logistics", *Navy Supply Corps Serving NATO,* (July/August 1999): 3.

[31] RSOM&I is the acronym used in ABCA literature to refer to Reception, Staging, Onward Movement and (&) Integration. The definition of this process contains no new processes or concepts in comparison to either national doctrinal definition.

[32] American British Canadian Australian (ABCA) Coalition Logistics Handbook (01 June 2003): 3-4 and 11-7.

responsibilities and procedures."[33] If suitable structures can be assumed to include organizations, then it is proposed that the Handbook is insufficient. A brief description is provided of both the TSC and the MJLC, and reference is made to other publications for further explanation. The reference to a TSC assumes a U.S. lead nation role which although likely, is not certain. The reference to the NATO specific MJLC offers a broad conceptual vision but neglects a variety of nuances between a five nation[34] English speaking coalition and a 26 nation multilingual coalition. Similarly, stages of the RSOM&I process are discussed within the Handbook, such as onward movement. Sweeping statements are made regarding such challenges as accommodating the different national requirements while simultaneously coordinating a central movement plan through a coalition agency.[35] While identifying the challenge, no guidance is offered on methods of addressing these issues.In respect to the RSOI process, the ABCA Coalition Logistics Handbook does not meet its intent.

A further issue is raised in respect to the value of the Handbook for the conduct of RSOI in a coalition framework. The intent to establish a general mindset within the reader is not of practical value for those who need to conduct RSOI. Obviously, RSOI occurs at the commencement of an operation. Yet the Logistics Handbook, in its discussion of reception and staging, emphasizes the importance of an established MJLC to oversee the 'tremendous coordination' required for these activities, without detailing its composition or its relationship with the myriad other agencies it would be required to interact with.[36] The luxury of developing organizations and procedures for a process which takes place at the beginning of an operation makes an assumption of available time earlier within the deployment phase that is by no means

[33] Ibid., 1-2.
[34] New Zealand became an associate member of the program in 1965 and is effectively a member nation.
[35] ABCA Coalition Logistic Handbook, 11-9.
[36] Ibid., 11-7 and 11-8.

assured. The recent tendency toward expeditionary operations by the ABCA member nations would suggest that this is actually a poor assumption.

To summarize, the ABCA Coalition Logistics Handbook does not adequately support the conduct of RSOI within a coalition framework. It does not meet its stated purpose when viewed in the context of a specific logistic function and needs to go beyond its purpose and provide guidance for techniques and procedures for certain operations and activities. It is proposed that the ABCA program should evolve to produce doctrine in a similar role to NATO. The obstacles to this proposal are the complexities involved in developing agreed to multinational doctrine and the political willingness required. However, in terms of filling a doctrinal void and meeting the aims of the ABCA Program, this is conceived to be a logical progression that is not unrealistic.

Comparison with NATO publications indicates the close association between the written material produced by this alliance and that produced by the ABCA Program. Indeed many of the ABCA standardization agreements are derivatives of NATO agreements. The ABCA series of handbooks match the NATO handbooks that have been published. Where NATO publications are more advanced is in the production of the Allied Joint Publication (AJP) series, which represent NATO doctrine (this series includes AJP 4.6 (A) MJLC Doctrine). Replication of this initiative is a viable method for the ABCA Program to develop its own doctrine.

Emerging Doctrine

An assessment of the various doctrine that relates to RSOI in a coalition environment would be limited if emerging doctrine was not considered. This is particularly pertinent in the current context given the modernization initiatives being undertaken by both the Australian and U.S. Armies.

The Australian Army has entered a modernization initiative focused upon force structure and capability change. This initiative has been coined as the development of a more ‘hardened

and networked Army'.[37] The emerging doctrine and conceptual papers that support this initiative reflect similar capability aspirations compared to the U.S., albeit framed within a different strategic setting. This is equally true of the material that discusses logistical support of the force. Little relates directly to RSOI although the ability to support force reception is declared integral due to the rapid deployment and redeployment expected to be necessary.[38]

U.S. emerging doctrine is more expansive and ambitious than the Australian equivalent. By way of example, the future operational concept for U.S. forces involves the ability to deploy independent of deployment infrastructure and have the ability to shift nodes and links as the threat demands.[39] This capability is beyond what is considered within Australian future conceptual documents. It is difficult to gauge the effect of these differing objectives as it cannot be discerned whether this represents a continuation of the capability gap that exists between the two Armies, or an increase that would significantly impair the ability to conduct RSOI within a coalition operation. What can be drawn from this brief comparison is that both nations are similar in future concepts, but the capability gap may broaden with adverse effect.

There are several observations that can be made with an overview of the current national, coalition and emerging doctrine. A high level of consistency exists throughout the doctrine in respect to the definitions and terminology that relate to the RSOI process. The level of consistency is marginally lower in regard to the conceptual approaches that are applied. While this offers a firm basis, there are marked differences between the level of detail devoted to the conduct of the process. A preliminary recommendation is that this needs to improve to facilitate the effective conduct of force reception. The most notable issue is that there is no doctrine detailing tactics, techniques and procedures for RSOI within a multinational framework. Two

[37] Lieutenant General Peter Leahy, AO, Speech to the Defence Watch Seminar in Canberra ACT, 10 February 2004, [On-line]; available from www.defence.gov.au/army.

[38] Australian Army, Future Joint Logistics Concept paper, 16 April 2002, 21.

[39] U.S. Joint Forces Command, The Joint Operational Environment – Into the Future, (Coordinating Draft 5 March 2004): 94.

factors have the potential to exacerbate the effect of this absence of guidance. These are the proliferation of expeditionary operations for western militaries, and the anticipated increase in the rapidity of the deployment phase, to be enabled by future capabilities.

CHAPTER THREE

EQUIPMENT

An assessment of equipment that relates to RSOI is a potentially expansive analysis. Taken to the extreme it includes not only the military equipment that is required for the distribution of personnel, equipment and materiel through the RSOI process, but all of the equipment and materiel itself. The logic being that the characteristics of what requires distribution will influence the equipment necessary for the process. An extension of this logic could provide rationale for the inclusion of infrastructure at the ports of entry used during RSOI. Such an analysis would assume a limitless ability to affect the equipment issues that relate to RSOI. It is partially for the purpose of curtailing such an unrestrained analysis that the problem is considered within the framework of an Australian and U.S. coalition. It is within an assessment of the equipment issues that the constraints of military structures and defense budgets become apparent. This analysis considers what equipment issues are realistic in terms of not only their ability to improve the RSOI process during an Australian and U.S. combined operation, but also what is a reasonable expectation of a military in the pursuit of improved interoperability. The analysis will then focus on those issues that are deemed reasonable given the budgetary constraints and force structure issues of both nations. Use of the FAS test will be broadly applied to achieve this focus.

The ABCA program defines four levels of standardization:

"**Compatibility.** Capability of two or more items or components of equipment or material to exist or function in the same system or environment without mutual interference…

Interoperability. The ability of systems, units or forces to provide services to and accept services from other systems, units and forces and to use the forces so exchanged to enable them to

operate effectively together. This is best achieved through cooperatively developed doctrine and procedures.

Interchangeability. A condition which exists when two or more items possess such functional and physical characteristics as to be equivalent in performance and durability, and are capable of being exchanged one for another, without alteration of the items themselves, or of adjoining items, except for adjustment, and without selection for fit or performance.

Commonality. A state achieved when groups of individuals, organizations or nations use common doctrine, procedures or equipment"[40]

The Australian and U.S. militaries meet the definition of interoperability within most areas. The two militaries meet the definition of interchangeability in respect to certain equipment and materiel. The recent choice by the Australian government to acquire the M1A1 Abrams Main Battle Tank to replace the existing armored fleet is an example of future equipment interchangeability between the two militaries.[41] It is ventured that few militaries in the world have reached the nirvana of commonality between their services, let alone with foreign militaries. Ignoring the idealistic level of commonality, the attainment of interchangeability would greatly enhance the conduct of RSOI within a coalition framework. Equipment and materiel meeting this definition would allow throughput at intermodal nodes and onward distribution to be conducted by either military on behalf of the other. Other activities conducted during RSOI such as maintenance and sustainment could also be provided by either military for its coalition partner. This would potentially allow a significant reduction in duplication and aid in the attainment of the

[40] ABCA Coalition Logistics Handbook, 1-3.

[41] Minister of Defence. *M1 Abrams Chosen as Australian Army's Replacement Tank,* Media Release, 10 March 2004, [On-line]; available from www.minister.defence.gov.au. 9 November 2004.

reduced logistics footprint explicitly sought by the U.S. military, and a general goal of many military operations. [42]

Interchangeability Challenges

While the attainment of interchangeability would bring many benefits to the RSOI process, it is not a realistic expectation for a coalition of these two nations. Despite a proclaimed strategic interest in the maintenance of its relationship with the U.S., Australia's military strategy recognizes limitations in its pursuit of interoperability. "The development of interoperability – within limits of costs and other factors – is an important issue in capability development.[43] Competing influences upon capability development include satisfying Australia's unique operational requirements, integrating national infrastructure and the overriding pressure of achieving cost effectiveness.[44] These operational requirements include meeting the unique challenges posed by the geographic characteristics of this region. It also refers to the challenge of every military to conduct a holistic approach to force structure development to achieve the spectrum of tasks it may be required to accomplish. Similarly, a 2001 Rand Corporation study found that although the U.S. Army recognized the benefit of multinational operations, it had no overarching, coordinated effort designed to advance compatibility with coalition partner forces.[45] Subsequently, the lens of reality reveals the complexities and difficulties involved in progressing from a level of interoperability to interchangeability.

The relative size of the two militaries also influences the issue of equipment. Even when there is a large degree of interchangeability, the comparable size of the militaries can see an

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[42] Director for Plans and Strategic Policy, J5, Strategy Division, *Joint Vision 2020*, (Washington D.C.: U.S. Government Printing Office, 2000), 32 (text only version).

[43] Australian Department of Defence. Defence 2000. Our Future Defence Force, June 2000, 55.

[44] Ibid., 54 and 57.

[45] The study found that the primary mechanism to achieve greater compatibility was the Theater Engagement Plan developed by each Combatant Command. These plans were driven by the preferences of each Combatant Command without any oversight or policy direction with regard to Army level preferences. See Thomas Szanya and others, *Planning for Future Multinational Coalition Operations*, (Santa Monica: Rand Corporation, 2001), 7 and 8.

adverse effect on the conduct of RSOI. Recent operational experience gives an insight into the potential of such an effect. The Hingston Report is a compilation of the lessons learned from Australian operational experience within Afghanistan and Iraq. This report related a challenge faced by the Australian military during the deployment phase, due to a shortage of L-pallets.[46]. There were several variables that caused the shortage, however a critical factor was the withdrawal of U.S. owned L-pallets, upon which Australia was reliant.

"A number of L-Pallets owned by the US are generally dispersed through [Royal Australian Air Force] RAAF air terminals in peacetime to support US aircraft transiting or exercising in Australia. This informal arrangement has in the past bolstered the ADF [Australian Defence Force] inventory. The size of commitment to the [Middle East Area of Operations] MEAO resulted in the US clamouring [*sic*] for all L-pallets they could claim across the globe."[47]

In response to the shortage of L-pallets, containerization was introduced as an alternate method of unitization to relieve the shortfall. Containerization has been firmly embedded within the U.S. military for some time. In contrast, while Australia has embraced the concept, this method is not as widely employed by the Australian Defence Force. One factor that has hampered further utilization of containerization is the relative size of the Australian military. The smaller force size that is being supported, be it on exercise or operations, can make containerization an inefficient method and a smaller, more flexible form of unitization can often make more effective use of sparse distribution assets. Given these circumstances, it is not surprising that the introduction of containerization caused difficulties during the Australian commitment to Afghanistan and Iraq. The unit responsible for force reception was not structured appropriately to

[46] L-pallet is the colloquial term for aircraft aluminum pallets that are used for constructing loads for movement by air.

[47] Joint Logistics Command, "An Evaluation of ADF Logistics Support to Operations in the Middle East with a View to Informing Future Logistic Capability Development", (Canberra: Australian Defence Force, 30 September 2003), K-6.

handle containers.[48] Additionally, it was realized that there were also insufficient containers to support the operations and short-notice procurement and intensive container management was required to address the deficiency.[49]

This recent operational example demonstrates that interchangeability is an attractive concept however there are practical complications in its application. It requires prioritization and careful management to ensure that the needs of both coalition partners are being fulfilled. Furthermore, the achievement of interchangeability is not always representative of the most effective method for all militaries involved. The pursuit of equipment interchangeability between Australia and the U.S. would require much greater integration and, in the case of Australia, a change in defense priorities.[50] Despite the close affiliations of the two military partners, interchangeability is not feasible.

Given these issues in respect to interchangeability, and specifically the example of containerization, there are disconcerting ramifications of several transformation initiatives being contemplated by the U.S. military. The concept of velocity management and related focus upon Distribution Based Logistics are designed to reduce the logistics footprint in theater and create an inventory in motion to replace stockpiles of supplies.[51] This vision has directed investment toward Load Handling System (LHS) technology for the future fleet of U.S. Army vehicles. The intent is to build pre-configured loads to facilitate throughput to forward areas, minimize handling and reduce the reliance upon forward stockpiles.[52] With a preponderance of vehicles in the rear

[48] Ibid., K-7.
[49] Ibid.
[50] This assertion relates to an earlier comment that for Australia to achieve greater interchangeability would require different prioritization of its defense budget. Rather than give primacy to the concept of self-reliance with a subordinate policy of continuing to foster its close military relationship with the U.S., it would necessitate Australia to place this relationship as the primary consideration for all force structure, organizational, and capability development decisions.
[51] Mark O'Konski, "Revolution in Military Logistics: An Overview," *Army Logistician*, (January/February 1999): 11.
[52] Alan Cunningham, "Will the Force XXI Revolution in Military Affairs Support Coalition Forces in 2010?" (Research Paper, U.S. Army War College, 2000), 4.

area equipped with LHS technology, coalition partners of the U.S. will have to either embrace containerization in order to maintain the current degree of compatibility, or remain self reliant in terms of distribution.

Information Technology

Analysis of this facet of multinational logistics highlights the complexity of improving interoperability via this means. Furthermore, future capability development does not necessarily promise improvement but in fact suggests increased complexity as the difference in defense budgets becomes realized in a potentially expanding technological divide. There is one area however, that is advanced as offering improvement in interoperability and meets the requirements of a cost-benefit analysis. Joint Vision 2020 provides direction on where such benefit can be obtained.

"In all cases, effective command and control is the primary means of successfully extending the joint vision to multinational operations. Technological developments that connect the information systems of partners will provide the links that lead to a common relevant operational picture and improve command and control."[53]

It is ventured that this quote has particular relevance to RSOI. The need to transform arriving units in theater into combat power through a process comprised of a series of stages lends itself to the application of information systems for improved visibility and coordination. Furthermore, in comparison to the procurement of specific fleets of equipment to achieve improved interoperability, with the accompanying effects upon force structure and operational flexibility, developing compatible information technology is an enticing alternative. For these reasons, the definition of equipment is recognized to include information systems.

[53] *Joint Vision 2020*. 23 (text only version), [On-line]; available from http://www.dtic.mil/jointvision/jvpub2.htm.

Australia and the U.S. do not currently use a system that links their national information systems for the purposes of RSOI. The more traditional method of liaison is applied to this task. The potential to advance to this level of information exchange and interoperability does however exist. The Allied Command Europe Deployment and Movement System (ADAMS) is a prototype intended to fulfill the requirements for a joint and combined reception and movement system within NATO.[54] ADAMS function is to facilitate exchange of movement plans, situation reports and background between national automated systems and allied headquarters.[55] The system already has connectivity with the U.S. system. The extension of this system to include connectivity with Australian information systems is envisaged to be technically possible. A viable option for orchestrating the use of this NATO system by Australia is through the ABCA program.

Discussion of systems that offer interconnectivity between national information systems does not complete an exploration of the role of information technology in the conduct of RSOI. Review of the level and use of information technology within the respective militaries is also necessary.

The use of information technology as a planning tool for the RSOI process varies in application between the two militaries. The U.S. military possesses an array of information systems designed to support strategic deployment. If anything, the sheer number of information systems that contribute to this planning activity is the Achilles heel of the support provided by this technology. This potential confusion is largely mitigated by the use of the Joint Operation Planning and Execution System (JOPES). JOPES is designed to "monitor, plan and execute mobilization, deployment, employment, and sustainment activities associated with joint

[54] Senior Logisticians Conference Secretariat, NATO Logistics Handbook, (Brussels: NATO Headquarters, October 1997), [On-line]; available from www.nato.int/docu/logi-en/1997/lo-1419.htm

[55] Doctrine, Organization and Systems for RSOI, IV-22.

operations".[56] Integral to allowing JOPES to fulfill this role is the integrated architecture provided by the Global Command and Communication System (GCCS).[57] This provides a common operating environment for the variety of software suites to interact with each other and exchange data. In its role of supporting the deployment phase, JOPES is designed to produce the time-phased force deployment data base (TPFDD) in support of a movement plan and monitor its execution.

In contrast, information systems within the Australian military are not as sophisticated in the support they provide. Automation of movement tables and load plans for strategic assets sees Australian information technology support the planning of how the movement of forces to a theater is to occur. As such it closely replicates what is provided within the U.S. system by the TPFDD. What is missing within the Australian system is the additional support tools that can determine when the strategic transport system can deliver deploying units, equipment and sustainment to theater reception complexes during the deployment of a large force from multiple locations.[58] Understandably, the need for such tools within an Australian operational scenario is limited to its participation in a coalition.

It is emphasized that there are limitations to the support that available information technology provides to the conduct of RSOI. While JOPES is the most developed information technology available within either military, its creation as a strategic planning tool reduces its effectiveness for planning RSOI. It does not for example assist in planning or assessing how force flow moves through a theater LOC as it cannot represent multiple intermediate destinations

[56] James Bates, "JOPES and Joint Force Deployments" *Army Logistician* (Vol. 36 Issue 3, May-June 2004), 30.

[57] Doctrine, Organization and Systems for RSOI, IV-3.

[58] The software used by the U.S. military for this purpose is primarily the Dynamic Analysis and Replanning Tool (DART) and the Joint Flow and Analysis System for Transportation (JFAST). Both these software suites are incorporated into JOPES. See Doctrine, Organization and Systems for RSOI, IV-7 and IV-8.

(nodes of a LOC) for a deploying force.[59] Several nodes may exist within the RSOI process, each with individual characteristics concerning throughput, holding capacity and other variables. The absence of this capability for the purposes of planning RSOI is critical. Importantly, there are a number of tools being developed by the U.S. military that partially address this shortfall. The Enhanced Logistics Intratheater Support Tool (ELIST) contributes as an analytic tool that simulates the transportation aspects of the deployment of forces through a theater LOC.[60] Developmental node planning tools such as the Base Resource and Capability Estimator (BRACE) and the Port Simulation (PORTSIM) Model allow the physical characteristics of a port facility to be taken into account.[61]

In addition to its use for planning, information technology also has the potential to support RSOI as a reporting tool. Commanders and staffs at all echelons benefit from timely and accurate information during force reception. Asset visibility allows those conducting the process to prevent congestion, deconflict and maintain force flow. The state of the information technology and its ability to support in-transit visibility (ITV) or the broader concept of total asset visibility (TAV), is comparable between the two nations. The U.S. is attempting to consolidate a plethora of systems that are either service specific, function specific or both. For example, the Army uses the Worldwide Port System (WPS) to monitor and control activities at water terminals.[62] At the forefront of this consolidation attempt are joint systems such as the Transport Coordinator's Automated Information Management System (TC-AIMS).[63] TAV for the U.S. is still an evolutionary process as it is not yet able to conduct tracking of intermodal and intramodal shipments through the entire set of theater LOC nodes.

[59] Ibid., IV-9.
[60] Ibid., IV-12.
[61] Ibid., IV-18.
[62] Ibid., V-3.
[63] Ibid., V-8.

Australia is at a similar level of development although obviously on a smaller scale. The logistic system architecture established for Australia's participation in the operation in Afghanistan and Iraq comprised of three separate information systems with limited interface ability. Familiarity with the systems varied between the services which influenced the degree of their utilization.[64] The systems were more structured toward sustainment rather than force reception and the ADF still lacks an automated personnel tracking system. The report that reviewed the operations surmised that "it is clear the ADF has some way to go in fielding a fully effective and robust system of systems for logistics".[65]

Upon reflection, there is opportunity to improve interoperability through information technology. It is posited that the least complex opportunity lies in improving interconnectivity between the information systems used as planning tools for RSOI. Despite the disparity in the volume of planning tools, the information produced is quite similar. This enables the leverage of systems such as ADAMS to vastly improve the coordination of deployment without significant effort.

For the purpose of improving interoperability, the greater opportunity lies in the ability to establish asset visibility across a coalition force. It is of benefit to those conducting the process in order to maximize use of the available infrastructure and equipment necessary during RSOI. It also offers superior support to the coalition commander responsible for the process, providing a more complete picture of force reception compared to the receipt of information through separate national chains of command. This greater opportunity however, also offers the greater challenge. The technology associated with this capability is at a more rudimentary stage for both militaries. Development is still required to achieve TAV across respective joint environments before adding the further complexity of a coalition environment.

[64] The Hingston Report, O-7.
[65] Ibid., O-2.

CHAPTER FOUR

DEMONSTRATED PERFORMANCE

The operations used to assess the capability of both nations in the conduct of RSOI included East Timor, Bosnia, Kosovo, Afghanistan and Iraq. While not necessarily with each other, all of these operations represented coalition operations undertaken by both nations. The most significant revelation for this study is that despite these operations being prosecuted in a coalition framework, the conduct of RSOI was fundamentally unilateral in character. This was not exclusively the case. Certain activities were completed with a contribution or support from a coalition partner. Nevertheless, not one operation could warrant RSOI being categorized as a combined effort. Subsequently it must be emphasized that at present, stated intent does not reflect practice. Even though, both nations recognize the value of multinational logistics and make a commitment to utilize this practice. At least, that is what their respective doctrine and similar conceptual documents portrays. It is acknowledged that RSOI is but one of numerous functions that offer the opportunity to conduct multinational logistics. While the research was focused upon this process, it indicated moderate, but not substantial change in the level of cooperation or coordination during other stages of the operations. A conclusion is that in broad terms, the degree with which multinational logistics is practiced during RSOI is representative of the level of logistic interoperability achieved by Australia and the U.S.

This assessment will focus upon those areas that witnessed interaction between the two nations and their coalition partners in the completion of logistic activities related to RSOI. Consideration will also be given to their individual performance of RSOI. The purpose is to gain insight as to why a more coordinated approach was not applied. It is also to identify their suitability for increased compatibility.

Coalition Interaction

RSOI is a part of the deployment phase. As such it is affected by events that precede it during this phase. This was exemplified by Australia's movement plan for the deployment to both Afghanistan and Iraq. Like many other western nations, Australia does not possess sufficient strategic lift to conduct rapid force projection required for these operations. Subsequently, it utilized chartered civil air and U.S. air lift arranged through the Cooperative Military Airlift Agreement (CMAA). Under this arrangement, U.S. strategic lift had to be 'locked in' at an early stage, based upon initial deployment data. As plans matured, adjustments had to be made to the deployment plan, but changes could not be made to the program organized under the CMAA.[66] Although the solution was not discussed in the research material available, the consequent disruption to the movement plan could have been addressed by two methods. Either by the inefficient use of strategic lift in an effort to retain unit integrity, or by maximizing use of strategic transport with the subsequent increase in complexity, and potentially time, in the completion of RSOI. Neither option is considered a preferable solution.

A correlative experience for the U.S. was reported in Afghanistan. The visibility of arriving coalition forces was poor, as was knowledge of their logistic posture and requirements. It was therefore not possible to adequately forecast or prepare for their support and logistics became reactive during RSOI. This trend severely taxed the limited Army CSS capabilities that were available in the austere area of operations.[67] The use of information technology that enabled connectivity and collaboration between national databases and planning tools could have alleviated or at least reduced the magnitude of these issues.

A key factor that shaped the interaction between coalition partners during these operations was the international agreements that defined the levels of support to be provided. For Australia, as a minor coalition partner during the operations in Afghanistan and Iraq, these

[66] Ibid., K-1.
[67] CSS IIR Afghanistan, 15.

agreements were essential. They were critical in supplementation of the logistics effort and garrison support for the Australian components that were deployed to these locations.[68] While these agreements were perceived favorably at the strategic level, they proved problematic at the tactical level. A number of shortfalls were recognized as contributing to this situation. Pertinent to this assessment was the poor understanding of the arrangements at the tactical level by both national contingents and the practical difficulties in application of the agreements on the ground.[69] These shortfalls manifested into a lack of accommodation and life support for elements of the Australian contingent during RSOI.[70]

U.S. reports also detail difficulties with international agreements. Concerns were raised with regard to the versatility and fidelity of the U.S. Acquisition and Cross Servicing Agreements. Certain agreements were limited in geographical terms or had been established by a specific combatant command, and had to be adjusted to meet the operational requirements. Specific details to the operation also had to be reflected, such as the equal-value exchange procedures that would be applied between coalition partners.[71] This caused delays and hampered support of the coalition force by the U.S.[72]

Similar in effect to the international arrangements between coalition partners was the establishment of contracts. Australian contractor support in the Middle East consisted of singularly engaged contractor support and contractors that provided common support to the coalition. Of note to this assessment was the level of support received from contractors providing support to other coalition partners. As a relatively minor customer, some Australian elements received sub-standard service. Understandably, contractor focus was directed toward more

[68] Hingston Report, 18.
[69] Ibid., 19.
[70] Ibid., G-3.
[71] Equal-value exchange is a transaction conducted under an Acquisition and Cross Servicing Agreement that allows replacement of cash payment for support by the receiving party, with logistic support, supplies or services of an equal value to those received. This may be provided back to a single nation or in general support of several coalition partners.
[72] CSS IIR Afghanistan, 16.

lucrative customers such as the United Kingdom and the U.S.[73] The use of contractor support within coalition operations is not however of concern only to minor coalition partners. In Bosnia, the use of independent national contracts rather than common user contracts for arrangements such as port operations, fuel distribution and food supplies drastically increased the cost of supplies above the standard market prices.[74]

The Australian reliance upon the larger, more robust U.S. force employed in Afghanistan and Iraq included use of U.S military and commercial suppliers and support from the U.S. supply system. The level of priority that was initially allocated to Australian operational requirements significantly impeded the effectiveness of the support provided. The Force Activity Designator allocated to Australian forces meant that U.S. demands of priority 01, 02 and often 03 were satisfied ahead of urgent Australian demands.[75] It took considerable time and effort to remedy this issue. Although this situation developed during the sustainment phase, it has clear application to RSOI. The more integrated the RSOI process, the more detailed the planning needs to be to ensure balance is achieved in the support to coalition partners. This applies regardless of the source of support.

The interaction that did occur between coalition partners during recent operations is instructive. The importance of standing agreements and those arranged specifically for the operation are pivotal in establishing the effectiveness of the interoperability achieved. Significantly, the observations revealed that many of the issues concerning these agreements

[73] Mittuch, The Need for a Multinational Logistics Command, 8.

[74] U.S. support of INTERFET was one of the few occasions it has been a minor coalition partner in recent history. Although issues with contractor support of this nature were not reported, it is suspected that this is more a consequence of the supportive role the U.S fulfilled and the diminutive force in theater that required such support.

[75] A Force Activity Designator is a level of prioritization used by both NATO and ABCA nations to identify a level of priority for a unit, an installation, a project, a program and any other group of activities that require order applied for assignment of resources. This is used in conjunction with a priority designator which is a numeric allocation of 1 to 15 used to establish the urgency of a demand for materiel through military supply chains. Both of these combined determine the order in which materiel is moved through the distribution network. See Hingston Report, G-3.

could have been avoided if greater effort had been applied to the establishment of these arrangements prior to the operational need. Better training and greater familiarization in the application of agreements would also have improved implementation.

Another observation is the criticality of these agreements for the minor coalition partner. For the major coalition partner with greater self reliance, inadequate agreements generally presented a bureaucratic concern. For the minor coalition partner they represented a potential impediment to the completion of the mission, or achievement of the contribution expected of them. This recent operational experience has caused Australia to be more wary of the expectations it places upon U.S. support, which is a prudent lesson.[76] For the U.S., a similar lesson should be the need to clearly articulate support capabilities to what, in most cases, will be minor coalition partners.

Individual Performance of RSOI

Further understanding of the current compatibility and potential compatibility of the U.S. and Australia can be gleaned from an assessment of their independent conduct of RSOI. An initial observation by this means highlights an ongoing challenge that will become even more difficult in the future. A common experience of U.S. forces operating in Kosovo, Afghanistan and Iraq was the circumscribed nature of the logistic network established to support them. Task Force Hawk was impeded in its execution of RSOI by the infrastructure available within the theater of operations.[77] Delivery of unit equipment was hampered by the lack of a hard surface road network and unloading was slowed by the limited space for cargo processing at the Aerial Port of Debarkation (APOD). [78] The fragile nature of the logistic support established in Afghanistan has already been highlighted, with unanticipated support required by coalition partners causing severe

[76] Ibid., G-5.

[77] Task Force Hawk was a composite force that was based in Albania in support of NATO operations in Kosovo.

[78] Ronald Sutton, John Catino, Robert Glisson, and David Delahoy, RSOI Task Force Hawk, 4

strain. Even the largest operational undertaking by the U.S. in the last ten years witnessed shortfalls in the logistic support to the RSOI process. During its reception for Operation Iraqi Freedom, the U.S. 3rd Infantry Division reported a lack of resources to conduct RSOI. There was a perception of inadequate numbers of movement personnel, buses, security escorts and cargo trucks to meet the volume of throughput required to achieve the formation's deployment timeline.[79]

These conditions will be recurring characteristics of future operations. U.S. concept papers predict a need to conduct deployments independent of deployment infrastructure because of a future enemy focus on these systems.[80] The U.S. military has also made a commitment to a reduced logistics footprint as a characteristic of its post-transformation force.[81] The implication of this logistic austerity is uncertainty over the ability for the U.S. to support coalition partners in its often assumed role as lead nation at least to the degree previously provided. The Australian experience in the Middle East collaborates the potential for such a development.

The U.S. decision to lighten its logistics footprint meant that Australia was unable to receive services it assumed were available, or at least not at the priority it required. In a similar vein, Australia deployed an inadequate force structure to conduct the receipt and distribution of stock. Based upon a misconception concerning the level of coalition support available, support elements were deployed with a reduced capability. This resulted in unloading difficulties and delays in delivery schedules for the Australian contingent during RSOI.[82]

This trend does not necessarily pose any greater impediment to the conduct of multinational logistics during RSOI or in support of any other stage of the operation for that matter. Reduction in the logistic element needed to support a coalition force is, after all, a

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[79] U.S. 3rd Infantry Division, Operation Iraqi Freedom After Activity Report, 12 May 2003, 7-2.
[80] Joint Operations Environment – Into the Future, 93-94.
[81] U.S. Army Training and Doctrine Command, *The Army Future Force: 21st Century Landpower*, August 2003, 0.
[82] The Hingston Report., K-5.

potential benefit offered by multinational logistics. What the intended reduction in logistics footprint does impose is the necessity for increased liaison and collaboration during the planning process. Imprecise planning in the future will not necessarily be accommodated by inherent flexibility in the deployed U.S logistics structure, as it has been in the past.

Assessment of each nation in its independent conduct of RSOI also reveals an issue that both nations face; the challenge of integrating operations at the joint level. Judging by the focus of several of the post-operational reports, this issue appears so consuming that it detracts from efforts to further interoperability at the coalition level. This situation is exemplified by the use of supporting information technology by the services.

The Australian deployment to the Middle East operated under a common logistics information systems architecture. This network consisted of several information systems that had been introduced at the joint level but were used with disparate frequency by the three services of the ADF. Short lead times in training prevented adequate familiarity with the systems prior to deployment and hindered effective utilization of these tools during the operation.[83] This was compounded by non-compliance with system requirements and cultural resistance to joint systems or what were perceived as another service's information system.[84]

The U.S. 1st Marine Division highlighted the presence of several personnel tracking systems in theater during Operation Iraqi Freedom used by several sources and levels of command. These were reported as manpower intensive to maintain and caused a duplication of effort.[85] A similar issue was the difficulty experienced in tracking casualties and it was recommended that an integrated system across the services be established.[86] It is also apparent that the services continue to operate their own ITV and that the doctrinal aspirations for joint

[83] Ibid., O-2.
[84] Ibid., O-10.
[85] U.S. 1st Marine Division, Operation Iraqi Freedom Lessons Learned, 29 May 2003, 1.
[86] Ibid., 4.

TAV have yet to be reached.[87] Again this issue of joint interoperability does not negate the ability to pursue the improvement of coalition interoperability. It does however increase the complexity of this task, requiring both issues to be pursued in synchronization with the other.

While the issues of logistic frugality and joint interoperability are challenging, they are not insurmountable. And yet there is no evidence within their recent conduct of the RSOI process to suggest why greater interaction between these two coalition partners is not pursued. Both nations utilize similar practices, abiding by their doctrinal guidelines that bear close resemblance to each other. The establishment of agreements that enables closer cooperation reveals a willingness to facilitate greater interaction. There is also an institutional familiarity between the two militaries, with regular combined exercises conducted by them.

Explanation appears to reside in the level of preparedness for coalition operations on the part of both militaries. The inadequate state of the standing international agreements is indicative of this. Slow responses to the need for specific agreements, and a lack of familiarity with their implementation also demonstrates this point. Finally, it is the absence of evidence that suggests any deliberate effort to further integration that is most telling. While it is not a universal trend, there appears to be a tendency for the level of interoperability to evolve as coalition partners grow in familiarity during the operation and ad hoc measures are developed as part of this process. Of significance to this assessment is that the benefits of this evolutionary process are not present at the commencement of the operation when RSOI takes place. For that to occur, greater commitment needs to be made to interoperability and it is contended this must take place prior to the decision to enter into a coalition.

CHAPTER FIVE

[87] JP 4-01.8 Joint Tactics Techniques and Procedures for JRSOI, VIII-4.

THE WAY FORWARD

The conduct of RSOI, as revealed by the assessments of doctrine, equipment and demonstrated performance, contains opportunities for improvement, but this is also subject to limitations. There are numerous initiatives that can improve the cooperation between Australia and the U.S. in the completion of the RSOI process. By the same token, the study has identified that the potential for improvement is not boundless. A number of practical realities limit the degree of interoperability that can be achieved between the two nations. This analysis also makes apparent the complexity involved in achieving such improvement. There is no singular initiative that can drastically improve the bilateral cooperation in this process, and each initiative taken has ramifications that must be considered. This then begs the question, in what manner can the conduct of RSOI be improved within a coalition between Australia and the U.S.? The response consists of a series of initiatives that are both reactive and proactive in nature. By this it is meant that several of the issues raised within the analysis can be addressed by specific remedies to that problem. Other proposals are more generic in nature, targeted at the macro level and designed to steer future direction for the purpose of improved interoperability.

Recommendations

The shortfalls of Australian doctrine have been discussed and recommendations for change have been outlined. The promised joint technical publication for RSOI will unquestionably advance the guidance on this topic. This step by itself however is insufficient and reconciliation between joint and Army doctrine is required.[88] Reconciliation needs to be both in content and the level of detail provided. Without adequate and consistent doctrinal guidance at the national level, the Australian military is hindered in any effort to improve its performance of RSOI, either independently or within a coalition. This recommendation cannot be

[88] Australian Army doctrine is the only other single service doctrine that refers to RSOI. Should other Australian single service doctrine incorporate the RSOI process in its content in the future, this recommendation would apply also.

overemphasized as it is through the medium of doctrine that interoperability can be greatly enhanced.

As highlighted, U.S. doctrinal guidance for RSOI is more advanced in detail and scope. The notable shortfall however, is in the control and management of the process at the joint level. Recent U.S. operational experience provides circumstantial evidence in support of this conclusion.[89] A method is offered in doctrine with the elevation of an Army TSC to perform a joint role. The brevity with which this suggestion is treated is inadequate guidance for a command and control structure needed at the commencement of an operation.[90] A lack of cooperation at the joint level is envisaged as being detrimental to improving cooperation at the combined level. This needs to be remedied to further interoperability between the U.S. and its coalition partners.

The previous recommendations are relatively unencumbered with additional consequences eventuating from their implementation. While the development of a joint TSC requires some organizational restructure and has a training liability attached, it could be built upon existing structures and capabilities. Improvement to coalition doctrine however, entails a more radical departure from its current form. ABCA is the program that provides doctrinal guidance for a prospective U.S. and Australian coalition (as well as the other member nations). For ABCA doctrine to evolve and increase in value not just to RSOI but coalition operations in general, a paradigm shift in the role and purpose of the organization is necessary.

The ABCA program evolved from an agreement between General Eisenhower and Field Marshall Montgomery in 1947, to maintain and extend the cooperation and interoperability developed between the allies during World War II.[91] It has progressed from the production of

[89] Post-operational reports indicate very little inter-service cooperation. A variety of factors may have contributed to this trend but the absence of doctrinal guidance is a common factor across all operations.

[90] JP 4-01.8, Joint Tactics, Techniques and Procedures for Joint Reception, Staging, Onward Movement and Integration, II-6.

[91] ABCA Program home page, http://www.abca.hqda.pentagon.mil, 20 October 2004.

standardization agreements to the keystone or application level doctrinal guidance that was reviewed. Despite this evolution, it has maintained what could be termed a passive role in fulfilling its mission to optimize the interoperability of the ABCA Armies. Guidance is advisory in nature and it attempts to accommodate existing national practices and procedures rather than assume a directive function. As highlighted, this approach is inadequate in its attempt to improve integration during RSOI.

The need for rapid force projection in response to short notice contingencies requires greater fidelity and direction in any doctrinal guidance if it is to influence a process that occurs in the deployment stage of an operation. Subsequently it is recommended that ABCA produce specific doctrine detailing tactics, techniques and procedures along functional lines. While this step is evolutionary in the doctrinal guidance provided, it requires a subtle but significant role change on the part of the ABCA program. Rather than seeking compliance or interoperability where national programs and policy of member nations allow, the program would become more directive. This contention is primarily in reference to its doctrinal role. In a certain respect it would be required to adopt a role more akin to that fulfilled by NATO. Thus while evolutionary progression is recommended for coalition doctrine, philosophical change is recommended for the ABCA organization. A change that it is anticipated would increase the relevance and purpose of the program, but one that requires further commitment of the member nations to acquiesce to increased control of an external organization.

The assessment of equipment considered two broad areas. The first incorporated military materiel in general but its focus was upon that equipment that is used directly in the RSOI process. The second was directed toward information technology tools that are being used in support of planning and asset visibility for RSOI. The first subject area is the more complex issue. Implicit to this issue is the need to consider compatibility between equipment fleets. Subsequently, the financial implications alone increase the magnitude of the problem. It will

therefore be addressed within the discussion of future direction. The second area however, does have the opportunity for specific change.

There are three opportunities for change based upon the assessment of the information technology tools that support RSOI. These vary in their ability to meet the FAS considerations but all are regarded as viable. The introduction of a linking system that provides connectivity between existing national level information systems, similar to the ADAMS prototype discussed, is considered the least problematic. It is both feasible and suitable because the technology already exists and it requires little or no change to existing systems. The benefit is the integration of data that in turn provides exponential improvement in deployment planning of a coalition force, also making it an acceptable option. As mentioned, the medium that could implement this system is the ABCA program, which is further justification for its assumption of a more assertive role.

A related facet of the information technology interoperability issue is the continued development of those systems that support the planning of RSOI. The U.S. clearly leads the field in this area which is unsurprising given its unparalleled capacity for force projection. Certainly, enabling tools such as ELIST and PORTSIM are not replicated by similar software within the Australian military. A method of improving interoperability is increased integration of these planning support tools for RSOI into both militaries. Compared to the introduction of a linking system, this option entails considerably more information sharing. Rather than simply the exchange of data specific to an operation, this option would require the exchange of technology. As these planning tools are incomplete, it could also entail cooperative technology development in the future.

The feasibility of this option is not of concern. Information sharing would reduce the net resources being devoted to this issue, not expand them. Acceptability differs between the two militaries. For Australia there is the obvious advantage of gaining access to existing technologies more advanced than those currently utilized. The benefit is more intangible for the U.S. The

immediate reward of access to information technology is limited given Australia's relative development of these enabling tools. Benefit to the U.S. is derived from the more sophisticated planning that could be conducted for multinational operations involving a regular coalition partner. Acceptability also requires consideration of political compliance. The sentiment expressed by both nations during the signing of the recent memorandum of understanding to cooperate on a missile defense system indicates minimal impediment in this respect. Australian Minister of Defence Robert Hill reflected the level of commitment displayed by both nations at the media conference for this agreement: "We've learned a lot about interoperability, but we've also recognized where we can do better in that regard. And we're committed to further enhance our capabilities in terms of joint operations through a range of different interoperability initiatives."[92] Similarly to feasibility, the suitability of this option is deemed inconsequential as it does not detract from the original course of action of the continued development of these tools unilaterally.

The third opportunity for improved interoperability through the use of information technology relates to those systems that provide visibility of the process. The concept of TAV encapsulates the enabling tools that contribute to this capability. It is reiterated that this field of information technology offers greater potential benefit than those previously discussed. Similarly to any other military operation, the friction of warfare will always prevent the plan for deployment and RSOI from being realized in the precise manner in which it was envisaged. For an activity of the potential complexity as deployment, inclusive of RSOI, the ability to at least reduce the fog of war is therefore highly beneficial. It is contended that TAV across a coalition force that is captured and reported in a holistic manner is far superior for a coalition commander than attempting to formulate situational understanding using information that is available through

[92] American Forces Information Service News Articles (Washington), 7 July 2004.

disparate national stovepipes. The creation of common or at least compatible ITV between the two militaries would enable this possibility.

With increased potential benefit however, also comes increased challenge in its realization. As this option relates to future capabilities, its feasibility is not in question. It is the acceptability of this option that is contentious. It is the requisite hardware of ITV that complicates this issue. Although it does not have to be identical, a commitment to certain technologies is required to ensure a common operating environment. The use of radio frequency identification compared to infra-red technology is an example of this.[93] This requirement to procure hardware begins to conjure up the same difficulties found in the pursuit of equipment interchangeability. To attempt the challenge of TAV for a U.S. and Australian coalition would require considerable commitment by both nations, although comparatively to respective budgets the greater commitment would be on the part of Australia. The suitability of this option is yet to be determined as it is still in a developmental stage and neither military has a system that meets its demands. Although, in concord with the other information technology recommendations, its suitability does not alter whether ongoing development is conducted jointly or independently.

The assessment of demonstrated performance revealed that much of the espoused rhetoric, including doctrine, was not put into practice during actual operations. It is proposed that the underlying reasons for this require a review of policy and the methods used to encourage interoperability. Specific responses to the problems encountered are consequently of limited value. One exception to this is the observed shortfall in the variety of agreements between Australia and the U.S., and between the military forces and the contractors they employed.

[93] Radio frequency identification is the process of using an electrical transponder which stores information that can be used to identify the item to which the transponder is attached, similar to the way in which a bar code on a label stores information that can be used to identify the item to which the label is attached. Infra Red Technology is the transmission of data between a transceiver and a receptor using light waves. Because data is transferred via different mediums, they require different hardware to function.

Agreements of this nature fell into two categories, those that were permanent and those that were established for a specific operation. An obvious recommendation is that the permanent agreements are reviewed and the faults revealed by their operational performance be addressed. In retrospect, the inadequacies of several agreements were seemingly negligent in the lack of forethought applied to their construction. The Mutual Logistic Support Agreement (MLSA) between the Australian and U.S. military being limited to a specific geographic region because it was arranged through a U.S. regional combatant commander is a prominent example of this. In reality, it is suspected that they were based upon different assumptions to the requirements of the recent operations, or in the case of the MLSA were never designed to serve as an overarching agreement for all future contingencies. Therefore, in conducting the review of standing agreements it is recommended that without detriment to their versatility, they remain as generic as possible to account for all future contingencies. Furthermore, that they not be reviewed in isolation but in relation to each other to ensure sufficient coverage of potential requirements and that they be reviewed regularly to maintain their applicability.

Improvement to the operation specific agreements requires a more nuanced approach. The faults in these agreements were based upon inadequate information, poor understanding of the arrangements, poor communication of the responsibilities they entailed and impracticalities in their implementation at the tactical level.[94] A general observation is that the creation and application of agreements and contract arrangements is perceived as a specialized skill within both militaries. While there is some validity in this perception, wider education and training in the use and responsibilities of these agreements is necessary. This increased awareness then needs to be utilized to initiate a more interactive approach to their implementation between the levels of command that allows both understanding and feedback. Coalition operations will necessitate the

[94] Hingston Report, 19.

use of these arrangements and at least an elementary understanding of formal agreements and their application needs to become more widespread among the logisticians of both militaries.

While the recommendations relating to the formal agreements between the U.S. and Australian militaries applies equally to contracting support, one further recommendation is proposed. A more collaborative approach needs to be taken in the establishment of contract support. Rather than contract agreements being established by national agencies, contract agreements arranged on behalf of the coalition would benefit all coalition members. This removes the competition and the accompanying price inflation, and allows access to the potentially limited resources available via this means. These arrangements can also be emplaced immediately and adjusted to suit operational circumstances rather than attempt a completely ad hoc approach at short notice.

Once again it is the acceptability of these recommendations that casts any doubt over their viability. The review of standing agreements is largely an administrative task and the further education of both militaries in the management of formal agreements has a training liability. Commitment to a multilateral choice for contractor support for example, also reduces flexibility of the respective governments. Nevertheless, these are options within the resources of both militaries and are suitable responses to the shortfalls identified. They are considered reasonable solutions to the problems identified.

So far, the recommendations made have been responsive measures to specific issues identified by the assessment of the three areas. What they do not offer is an indication of future direction. Options of this nature will now be considered with recommendations regarding standardization, command and control and organizational structure.

Much of the literature that discusses multinational logistics focuses on command and control issues and offers little comment on standardization. This can be construed as an implicit acceptance of the philosophy that the higher degree of standardization the better between allies

and coalition partners. This is a philosophy that is advocated at least tacitly by organizations such as ABCA and NATO. As a generic objective this aim serves a purpose but in reality its application is dubious and as such should receive greater attention. Recent operational examples such as shipping containers and L-pallets is evidence of this issue. While commonality in procedures and doctrine are conceivable goals for the U.S. and Australia, commonality of equipment should be viewed more as a convenience than an aspiration. The chasm between the U.S. defense budget and Australia's, or for that matter any of its other potential coalition partners, is too wide to attempt anything more ambitious. The size differential between the two militaries lends further complexity to this issue.

How does recognition of this characteristic of the relationship between Australia and the U.S. translate into an actionable recommendation? No simple answer can be offered. Instilling recognition of this divide is the most obvious step. Although, there is a sense that this is already present even if it is not articulated in doctrine or policy. A further approach is to both increase and focus interaction between the two militaries on equipment interoperability issues, and capture the solutions for future application. In essence, it is perceived that equipment standardization issues are relatively ignored compared to command and control for example, and RSOI could be improved with greater attention applied to this problem.

Commentary on multinational logistics is almost inevitably a discussion of command and control relationships. Much of the literature considers this issue in the context of the NATO alliance. As such, many of the 'solutions' to improved multinational logistics is the establishment of some form of a multinational logistics command under the auspices of this organization. Some of the recommendations are esoteric in their description of such an organization, concentrating more on the outcomes such an organization could provide.[95] Others are very specific, proposing

[95] Peter Schmitz and John Rausch, "Operational Logistics in NATO," *Air Force Journal of Logistics* (Spring 2000): 38.

the establishment of a permanent logistics command within NATO based upon the construct of the MJLC outlined in doctrine.[96] The question posed is whether a similar recommendation is a viable measure for the improvement of RSOI in an Australian/U.S. coalition?

An alternative is a command and control structure designed specifically to manage RSOI. The U.S. has begun exploration of this option, at least for its own purposes. This commenced with the assignment of TSCs to the task and has continued with the creation of Theater Force Opening Packages (TFOP). Most recently the U.S. Army has begun investigation and creation of a modular unit that is designed to coordinate deployment and provides command and control for all aspects of force reception.[97]

Application of the FAS test is critical to the recommendation proposed for a U.S./Australian coalition. The optimal solution would be development of an Australian equivalent to the modular unit being designed by the U.S. specifically to conduct RSOI. Such an approach would enable interchangeability and allow all the options of coalition command from role specialization to lead nation to be available for future operations. For the conduct of RSOI, integration of force elements and establishment of a command and control structure at this level is ideal. The feasibility of this option prevents its viability. Firstly, integration of force elements would imply standardization of equipment that has already been identified as unfeasible. Furthermore, Australia does not possess elements within its force structure that specialize in force reception as the U.S. does. Nor does it have the luxury of developing such units, even for the option of role specialization. Finally, the placement of an Australian C2 structure at this level in many cases would be inappropriate when force caps and other restrictions would only allow one logistics headquarters to deploy.

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[96] Renaud Dutt, "To determine what improvements could be done to increase the integration with NATO's Multinational support in peacekeeping operations, given the current doctrine and organization", (Student Paper for Logistic Executive Development Course, 2001). 8.

[97] Emily Hsu, "Army Crafting 'Theater Opening Packages' To Improve Force Reception," *Inside the Army* (19 April 2004): 1.

The concept of a generic logistics command has merit. The likelihood of only being able to deploy one logistics headquarters by Australia necessitates its utility for the entire operation rather than being process oriented. The concept of the MJLC is viable in terms of structure. The method of its development is considered of key importance. The option of a standing headquarters as proposed for NATO is unlikely to gain acceptance by either nation. The U.S. is already committed to its NATO obligations and its current operational tempo has placed pressure upon its manpower resources. Australia has recently experienced a similar stretch in its manpower due to its operational commitments. Despite the historical and recent close cooperation of the two nations, a standing headquarters is considered a bridge too far, even were it to be as part of the ABCA program. Rather, a dedicated coalition logistics headquarters developed in concept and outlined in doctrine is perceived the most acceptable option. For it to be suitable it is contended that training is pivotal.

Experience from Bosnia found that many of the interoperability problems were not caused by differences in equipment, but mistrust between organizations that had limited previous interaction.[98] This experience lead IFOR (NATO Implementation Force) command to the conclusion that to improve interoperability required an investment in more combined training.[99] For the use of a coalition logistics command to impose further cooperation and interoperability upon RSOI and multinational logistics in general, it is integral that a robust training program is implemented to prevent a paper tiger. The ABCA program is the logical medium as the established coalition framework for the U.S. and Australia. However, exercising such a concept requires a more thorough approach than the training conducted under this program to date. The

[98] Misuse of the multinational special forces teams were considered a consequence of the lack of training between them and the conventional forces in theater. See Mark Swiney, "Does Pre-Conflict Integration of Multinational Combat Forces into Operational Warfare Increase Unity of Effort," (Research Paper, Naval War College, 2003), 6.

[99] Tony Johnstone-Burt, "IFOR's C4I and information operations: a multinational perspective," (Research Paper, Naval War College, 1997), 1.

creation and practice of this headquarters during realistic training is required to maximize its utility for RSOI, rather than rely on an evolution in efficiency during the course of an operation.

The way forward is not a singular organizational, doctrinal, or materiel related solution. It is a multi-pronged approach, consisting of reactive fixes to existing shortfalls and a long term commitment to measures that will advance the level of interoperability and cooperation. These long term measures have the potential to support further integration in the future, and are a necessary intermediate step rather than attempt more ambitious goals immediately. To summarize, the recommendations of this paper are:

To amend existing gaps in respective national doctrine relating to RSOI;

To establish a more active role for the ABCA program, thus enabling the associated benefits to multinational interoperability and specifically to facilitate more detailed and therefore directive doctrine for RSOI. This must include doctrine detailing tactics, techniques and procedures;

The implementation of a linking information system to allow the exchange of deployment information between existing national systems;

Assuming a joint approach to continued research and development of RSOI planning enablers;

Assuming a joint approach to the pursuit of TAV, including the creation of compatible ITV between the two militaries;

Review of all relevant standing agreements and improvement of awareness and training in the use of these documents. This is to be used to facilitate a more interactive approach in design and implementation at all appropriate levels of command;

Establishing a bilateral approach to contract support;

The conduct of a detailed review of equipment standardization issues;

The design and creation of an ABCA based coalition logistics headquarters and implementation of the requisite training program to ensure success.

CHAPTER SIX

CONCLUSION

The original motivation for this paper was the allure of multinational logistics and all the potential benefits it promises. The choice of the RSOI process as a medium to explore this subject served this purpose. It exposed the difficulties and possibilities of multinational logistics with a more magnified lens than a generic study of the subject would have allowed. In this regard, it is postulated that while the logistic support to RSOI is but one of several logistic functions that may be conducted by a coalition, it is fairly representative of the challenges faced by a combined force. Many of the issues encountered during RSOI could well be enduring concerns throughout an operation. Asset visibility, access to host nation and contract support, and equipment interoperability all fit in this category.

Given the universal quality of this assessment, what insight does it provide to the conduct of multinational logistics? It demonstrates that despite good will and intent during peacetime, short notice expeditionary operations continue to thwart concerted attempts at a sophisticated approach to multinational logistics. The Australian and U.S. militaries at least, are pre-occupied with the normal complexities associated with military operations such as achieving joint interoperability. Subsequently, cooperation between coalition members is often characterized by ad hoc improvements in lieu of a more considered and coordinated approach. What also becomes apparent is that improvement requires considerable commitment during peacetime preparation for military operations, particularly to obtain the pinnacle of multinational logistics, a fully integrated multinational logistic force that seamlessly supports a coalition force. Such a commitment virtually necessitates dedication to select long term coalition partners. This is a policy option

potentially inconsistent with the U.S. approach to the global war against terrorism. “In leading the campaign against terrorism, we are forging new, productive international relationships and redefining existing ones in ways that meet the challenges of the twenty-first century”.[100]

In making these observations on multinational logistics, it is highlighted that this analysis was framed within a bilateral military relationship. Multiple partners within a coalition only adds further complexity to the challenge of seeking the benefit that multinational logistics offers. In respect to this relationship, the findings were also enlightening. The delta in size and defense resources between Australia and the U.S. are pervasive in their effect. There are specific measures that can be taken to mitigate this effect, as outlined within the recommendations. What becomes apparent is that solutions such as role specialization or the pursuit of interchangeability are suitable as broad aims or where providence allows. To offer these as deliberate policy objectives for the sake of improving multinational logistics denies the myriad other factors that influence the shape and constitution of a nation’s military. It is proposed that these findings are not exclusive to the U.S. and Australian relationship, but representative of most militaries in their endeavor to improve their performance in multinational operations.

A final comment is offered in respect to the conduct of RSOI. Both the challenges and solutions that have been discussed within this monograph are based on the current performance of this activity. The expressed intent of the U.S. is to develop the capability that will negate the need for RSOI in theater, during the conduct of an operational deployment. To achieve this aim and retain the ability to entertain a multilateral option for future crises, priority needs to be placed on resolving current issues.

[100] U.S. President. The National Security Strategy of the United States of America, September 2002, George W. Bush, 2002. 7.

APPENDIX A – THE U.S. AND AUSTRALIAN MILITARY RELATIONSHIP

The Rand Corporation conducted a project entitled "Improving Ground Force Performance in Future Coalitions"[101]. The purpose of the study was to improve U.S. Army planning of its activities in relation to the operational performance of ground forces in coalition operations across the spectrum of missions[102]. Integral to this project was the identification of the most likely long term future U.S. coalition partners, in order to direct future planning toward those nations deemed most compatible. The value of this project is its examination of the Australia and U.S. military relationship as part of this process, and placement of this relationship in the context of other military coalitions; albeit with the U.S. as the only constant factor.

The methodology used by this project to conduct the comparative analysis of coalition partners, aids in characterizing the relationship between Australia and the U.S. First the project ranked the states that were considered into three categories of high, medium and low; in accordance with that nation's ability to make a meaningful contribution of ground forces to a coalition, based upon standing force size. Second, it "distinguished between countries based upon the level of technological sophistication of their armed forces".[103] Third, the project considered what countries had shared regional and global interests necessary to become likely contributors to a coalition with the U.S. This was assessed using a history of past participation in coalition operations and a consideration of formal and informal security ties with the U.S. This was further balanced against comparable voting patterns in the United Nations General Assembly and the level of democratization of a nation, as determined by an external evaluator.[104]

The results saw Australia categorized in the intermediate level for its force strength but in the high category for its level of technological sophistication. While it was assessed as having an

[101] Thomas Szanya et al., *Improving Army Planning*, iii.
[102] Ibid.
[103] Ibid., 46.
[104] Ibid., 48.

intermediate level of participation, it was acknowledged that the operations Australia contributed to were outside the Asia/Pacific region. This recognized the role of geographical proximity in the level of participation of other survey participants. In the other categories of assessment criteria for shared regional and global interests, Australia scored within the highest levels.

The survey results were then used to prioritize the countries as potential future coalition partners. The highest ranked nations were categorized as worldwide partners, followed by regional partners, and prioritized in turn for each region. Of the 108 nations considered, Australia was ranked as second, in the second tier of worldwide partners with only Canada, Germany, France and the United Kingdom ranking ahead of it. Significantly it was the only nation from the Asia-Pacific region to be considered a worldwide partner.

The methodology and subsequent results of this project are mechanistic and should not be over-estimated in their significance. Nevertheless, they do give a broad indication of the military relationship between Australia and the U.S. It is a comparatively close relationship, supported by strong, common ideological ties and attitudes. Given the hegemonic position of the U.S. military, Australia and the U.S. enjoy relatively close technological development. The greatest delta between the U.S. and Australian militaries is their comparative size.

As a reflection on other potential coalition partners for either country, caution needs to be taken in using this relationship as a benchmark, although once again, brief conclusions can be drawn. Neither partner is necessarily the closest compatible ally of the other. The survey would indicate that the United Kingdom holds that position for the U.S. and there is a strong case that New Zealand fulfills that position for Australia. Australia and the U.S. do however represent close coalition partners at the upper end of the scale of potential coalition partners. Therefore, the challenges faced within this coalition would generally be considered relatively minimal and should only be expected to compound with most other coalition partners. The point being, this

analysis represents two compatible coalition partners and compatibility issues are likely to be more complex with the majority of other potential coalition partners.

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