

PDC Meeting to be held in the **KINGDOM OF TONGA**

22 - 25 April 1997

Geography

The Kingdom of Tonga is regarded as a developing country, and has a population of approximately 100,000 people scattered over 176 volcanic and coral islands with a land area of over 700 square kilometres, and a sea area of about 393,000 square kilometres. The Kingdom of Tonga is situated about 650 kilometres to the East of the Fiji Islands and about 1300 kilometres to the north east of New Zealand.

There are four groups of islands extending over the north-south axis. Tongatapu and 'Eua in the south; Ha'apai in the middle; Vava'u in the north and the small Niua group in the far north. Nuku'alofa is the capital, located in Tongatapu, the largest island (260 square kilometres). The Kingdom has a tropical climate with an average annual temperature of 23°C, ranging from 32°C to 11°C.

Government

Tonga has a constitutional monarchy form of government, based on the Westminster system. The constitution is based on that granted in 1875 by King George Tupou I. It provides for a government consisting of:

- the Sovereign;
- the Privy Council, appointed by the Sovereign, consisting of the Sovereign and the Cabinet;
- the Cabinet, which consists of the Prime Minister, Deputy Prime Minister, other ministers and the Governor of Vava'u and Ha'apai;
- the legislative assembly; and
- the judiciary.

Economy

The Tongan economy is predominantly agricultural. More than 75% of the Tongan national product, and over 70% of the labour force originate in agriculture. The Tongan economy is also becoming highly dependent on foreign aid and overseas remittance, and to some degree on tourism, fisheries and diversified small industries.

Tonga Defence Services

The Kingdom maintains a small defence force which is responsible for the security of the Sovereignty and the Kingdom. The Tonga Defence Services are also responsible for surveillance and search and rescue operations; civil defence, social economic roles and ceremonial duties. The TDS is more than 400 strong and organisationally structured to

provide a unified system of command capable of exerting centralised direction. At the same time it permits decentralisation of responsibilities to lower levels as necessary, so as to assume the mutual support of each command component. The TDS comprises a Land Force, Navy, and Air Wing, supported by an Administration and Technical Support Unit.

Project Development Meeting

The Kingdom of Tonga and the United States of America will co-host the 26th Pacific Area Senior Officer Logistics Seminar (PASOLS XXVI) PDC in Nuku'alofa, from 22 April 1997. This is Tonga's first opportunity to host such an event. Thirty to thirty five delegates are expected from twenty PASOLS member countries.

The theme for PASOLS XXVI is "Logistic Co-operation: Technology Solutions". The PDC will discuss and develop topics for PASOLS XXVI, which is scheduled to be held in Canada from 5th to 9th August 1997. PDC discussion will also cover the past initiatives, planning and draft agenda for PASOLS XXVI and other action areas. The PDC provides its recommendations to the Logistic Steering Group (LSG) during the week of PASOLS. The LSG is the governing body of PASOLS, and comprises the senior delegate from each member nation.

Tonga is looking forward to this event, putting a great deal of effort into the preparation phase. It is our earnest wish that the PASOLS XXVI PDC meeting in Tonga will be a memorable and successful one.

Contributed by: Major T. 'Uta'atu of the Tonga Defence Services

PACIFIC AREA CATALOGUING SYSTEM

By Mr Rick Grove,
Director of Cataloguing and Initial Provisioning,
National Defence Headquarters, Canada.

Introduction

The 4th meeting of the Pacific Area Cataloguing System (PACS) Working Group was held in Bali, Indonesia during the period 16-18 September 1996. Despite some notable absences, fourteen PACS nations were in attendance for this meeting, which was hosted by the National Cataloguing Bureau of Indonesia.

A Synopsis

The 4th meeting of the PACS Working Group represents a very important and significant milestone towards the realisation of a Pacific Area Cataloguing System.

Under the Chairmanship of James Burns, the Director of the New Zealand National Codification Bureau, the 4th meeting has set the stage for PACS to move from the conceptual, or developmental, stage to the point where final implementation is now clearly in sight.

However, and notwithstanding the logistical advantages which PACS can offer to the countries of the Pacific community, the concept of a Pacific Area Cataloguing System is still, understandably, an emerging one. It was first proposed during the 1994 PASOLS meeting in Kuala Lumpur, Malaysia. Subsequent meetings of the Working Group have been dedicated to developing the concept and laying the groundwork for implementation. The 4th meeting of PACS was somewhat different - although no less relevant - from those preceding it. At this meeting, members were encouraged to focus their attention not on the concept of PACS but on topics and issues which were essential to bring PACS to the stage of final implementation.



PACS Working Group Meeting September 1996

PACS Achievements

Despite having been in existence for less than two years, the PACS WG can take credit for advancing the concept of a Pacific Area Cataloguing System to the point where final implementation is no longer a possibility - it is now clearly in sight. Along the way, the WG can also take credit for a number of significant achievements.

PACS Charter

A significant number of member nations have now endorsed the PACS Charter - a document unique to PACS which is intended to clearly define the fundamental principles and objectives of the Pacific Area Cataloguing System. This is an extremely positive step forward and clearly indicates that member nations support the establishment of a Pacific Area Cataloguing System and are committed to furthering the PACS initiative in the future.

Standardization Agreements

A number of member nations have now formally ratified Pacific Area Standardisation Agreements (PASTAGs) Nos. 1 and 2 which were first distributed in draft form at the 1st meeting of the PACS WG, and accepted at the 3rd WG meeting. By ratifying these agreements - which were patterned upon NATO Standardisation Agreements 3150 and 3151 - signatories have endorsed the concept of a 'common materiel management language' and have taken a major step forward in the realisation of a Pacific Area Cataloguing System. The success of the ratification process has also ensured that efforts within PACS will be totally compatible with the cataloguing systems employed by countries within the NATO alliance.

Disaster Relief Database

Under the stewardship of the United States, a number of major improvements have been made to the Disaster Relief Database and an updated CD-ROM copy of the product was distributed during the 4th meeting. In response to the request of some nations, the United States has now agreed to make future issues of the Disaster Relief Database available in diskette format.

Master Cross-Reference List

Work has also been progressing on the development of a Cross Reference List designed to address the needs of the Pacific Area Cataloguing System community. During the 4th meeting, member nations were provided with the latest version of the PACS MCRL in CD-ROM format.

The United States continues to lead this effort, but, to this point, has received input from few Pacific Rim countries.

Big Brother

It is clear that Pacific Area nations fully understand the logistical advantages of a 'common materiel management language' and they endorse the Pacific Area Cataloguing System as a means to achieve this objective.

Notwithstanding, the adoption of the NATO Codification System as an 'inventory management' tool does not come without cost and for this reason many of the smaller PACS countries are reluctant to fully embrace the system.

During the 4th meeting, Australia tabled a discussion paper which proposed the adoption of a 'Big Brother' concept for the Pacific Area Cataloguing System. This concept, which was enthusiastically received by all attendees, overcomes a major impediment to full PACS implementation by providing smaller countries with an equally effective but less costly alternative.

Since the 4th meeting, both Fiji and Tonga have entered into 'big brother' discussions with Australia and several other nations are considering similar 'big brother' relationships suited to their own cataloguing needs.

Conclusion

The 5th and probably the final meeting of the PACS Working Group is scheduled to take place in Wellington, New Zealand during the period 12-14 March 1997. At this time, it is anticipated that all of the preliminary work necessary to establish and provide a solid framework for a common cataloguing system within the Pacific Rim will have been completed and the Working Group will most likely be dissolved.

Those nations which have participated in the work of the PACS WG can take immense pride in the work that they have done. They have significantly advanced the concept of 'cooperative logistics' within the Pacific Rim.

In 1994, when the PACS WG was first formed under the sponsorship of PASOLS, seven Pacific Rim countries were significantly involved in the NATO Codification System, with only Canada and the United States being NATO members. Australia, Malaysia, New Zealand, Singapore and South Korea have fully adopted the principles of NATO Cataloguing System for application within their countries.

Today, as the Working Group prepares for its final implementation meeting, the situation in the Pacific is considerably different. At least four other countries are in varying stages of implementation.

The Future

Notwithstanding the success that PACS has enjoyed to date, and despite the fact that the Working Group will probably be dissolved at the conclusion of the 5th meeting, there are still many challenges to be faced and overcome.

First, PACS must continue its efforts to encourage the active participation of new PASOLS member countries such as Japan and China in the PACS initiative.

Secondly, larger and more advanced PACS nations must become actively involved as a 'Big Brother' to one (or more) of the small PACS countries.

Conclusion

Markets are inevitably and inexorably expanding beyond the national or even continental confines and a common system of 'item identification' will become more and more important. In alliance with its counterparts within NATO, the Pacific Area Cataloguing System can, and will, play a significant role in facilitating the march towards a 'global economy'. PACS will form an important span in the bridge to global logistics knowledge.

Mr R. H. Grove is the Director of Cataloguing and Initial Provisioning for the Canadian Department of National Defence. He has 28 years' experience in military logistics and has represented Canada on various NATO codification committees and panels. Mr Grove is currently the Canadian Representative on NATO Allied Committee 135 - the Group of National Directors on Codification, and also on the Pacific Area Cataloguing System Working Group.

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A QUALITY ASSURANCE FORUM FOR PASOLS

By M. Yves Boudreau

In The Beginning

During the hundred years' war, the English armies, made up of professional soldiers, were provided with tools of war from the King's stores at the Tower of London. It was soon realised that, unless "quality" and "performance" were satisfactory, the morale of the common soldier would not continue high, even through a single campaign.

After Henry the VIII came to the throne in 1509, he set out to make England self-supporting in munitions. Inspection was established for gun casting. In 1660 King Charles named a Surveyor General, required to ensure that everything purchased was inspected and, if approved, "stamped" with the the broad arrow. This mark, in use through the second world war, signified the basic principle of control of quality.

In the early 20th century, quality was primarily achieved through the use of craftsmen. The industrial revolution brought supervision as a means of production of quality goods. With industrialisation, inspection specialists and quality control techniques surfaced, progressing to techniques of defect elimination, quality assurance and, most recently, quality management.

Background

During the PASOLS XXV meeting in Bangladesh, in September 1996, Mr Gordon J. Hunter, Director General Equipment Programme Services of Canada's Department of National Defence, gave a presentation on Defence Quality Assurance. As a result, the PASOLS Project Development Committee (PDC) recommended that Canada and Australia co-ordinate in leading an inaugural meeting on Quality Assurance. This was approved under PASOLS Initiative 96-I-01. Mr Hunter's presentation is summarised below.

Quality - A Word/A World

Given that all products or services exist ultimately for a customer, it is important to know the customer perception of "quality". Definitions of quality include "fitness for use" and "effective production of the quality expected by the market as opposed to perfection". Clearly these definitions have in common the idea that quality means satisfying customer expectations. Customer needs are the fundamentals; safety, comfort, getting work done on time and within budget. Customer requirements, on the other hand, deal with how products and services meet these needs - for example, functional specifications of a safety system, dimensions of passenger seats, delivery schedules for component parts, absence of defects. Needs and requirements together form customer expectations. Quality is "consistently providing products and services that meet customer expectations".

Quality Assurance Versus Quality Control

It is important to distinguish between "quality control" and "quality assurance".

Quality Control (QC) involves operational techniques and activities like inspection and test aimed at detection and correction of non-conformity.

Quality Assurance (QA) has a primary aim of preventing non-conformity through application of quality system elements such as policy definition, planning, training, documentation development and QC efforts.

Quality Assurance not only provides confidence that a product or service will fulfil requirements but is also a management tool which helps prevent failures, and detects them before the product or service is delivered. The customer is the focal point of such a system.

Customer satisfaction can only be assured through harmony of interaction between management responsibility, human and financial resources and the quality system. Management must establish a policy for quality and customer satisfaction. Successful implementation is dependent upon management commitment to its development and effective operation.

Quality Management

Quality responsibility is shared among all levels of management but fully endorsed and driven by top management. Management should develop and document a quality policy, and ensure that it is promulgated, understood, implemented and maintained.

Quality management includes *planning* to establish the objectives and requirements for quality and the application of a quality system and quality improvement activities to increase the effectiveness and efficiency of processes. Modern concepts of quality management address fundamental causes of inefficiency and waste and are aimed at increasing customer satisfaction, both within and outside the organisation.

Government Quality Assurance

Defence capability depends largely on the quality of weapon systems. The quality of these systems must be assured well in advance of their delivery from suppliers. Both purchasers and suppliers have inter-related responsibilities.

Purchasers have a primary responsibility to define needs accurately and completely and translate them into technical requirements; select the supplier and prepare contracts. The purchaser's confidence in the supplier will determine the purchaser's activities to support that contract.

Suppliers have responsibility to design and/or produce product which conforms to contract requirements including any sub-contracted product.

The supplier of defence materiel is responsible for the obligations set out in the terms and conditions of the contract and applicable specifications. This includes responsibility for product quality, and for offering to the purchaser only conforming product. A Government Quality Assurance (GQA) Programme is based on this relationship. To illustrate what a

GQA Programme includes and some of the concepts applicable to GQA, we will now describe the Canadian Defence programme.

Government QA - The Modern Approach

Canada, as with other PASOLS member nations, has experienced benefits and cost savings through a Government Quality Assurance Programme. The Canadian GQA concept is based on adherence to the modern management principle that producing quality is a process that must be managed and that suppliers who manage their quality process produce value both for their customers and for themselves. We therefore participate with industry in the quality process for our mutual benefit. We realise, however, that production of quality rests with the contractor, and that our role is to provide customer confidence in the products provided. We address the concerns of DND customers by *Selective Surveillance* - concentrating our efforts on the relatively few products with the greatest risks. We are confident that this provides value-added support.

As the Department of National Defence in Canada is rapidly changing, its business strategy has had to innovate and keep pace with new ways of doing business. For the last three to four years, we have been reviewing our mission, vision, values and methodology. Operational concepts, refined as we move forward, include:

- promote the benefits of implementing a quality management system modelled on ISO 9000;
- ensure that industry understands our approach and their accountability;
- the QA team approach - getting closer to customers by developing a sense of team spirit;
- emphasis on training to ensure that our workforce keeps abreast of the constant evolution in the world of quality;
- encourage our QA Representatives to be mobile rather than resident at suppliers' facilities;
- move from product focus to evaluation of a quality management system;
- support for the Standards Council of Canada National Accreditation Programme for registrars of quality systems ;
- improve management processes to enable us to monitor and measure performance; and
- use public resources judiciously.

The Five Tier QA Programme

Our National Defence five tier GQA Programme consists of.

Quality Leadership which aims to have all suppliers develop and implement an effective quality system modelled on the ISO 9000 series and promotes commitment to continuous improvement.

Quality Contracting which aims to improve documentation at the earliest possible stage ie, before the contract is let. The QA role in this phase is to define the quality requirements for the contract. **Note:** The level of surveillance does not relate directly to QA requirements, but to risks associated with production of the product or service.

Quality System Evaluation examines a supplier's quality system to determine its adequacy and level of implementation. It provides us with the status of the supplier's quality system. Through this activity we can also assist suppliers to establish and implement quality management systems.

Quality Surveillance involves assessing *risk* associated with *product* and *supplier* to determine the surveillance required. Surveillance concentrates on quality system and process controls.

Quality Performance has the goal of providing feedback on the quality of materiel released and on its performance in service. This is accomplished through reports from users and supply organisations.

Under various bilateral and multilateral agreements this Programme is applied to acquisition in Canada by foreign defence departments.

A CASE FOR QA IN PASOLS

Reciprocal GQA

Reciprocal GQA is the "process by which GQA is performed by the appropriate National Authority of one nation, at the request of another nation". In other words, participating nations agree that the National Authority in a manufacturing country will provide GQA in its country, upon request by the National Authority in a purchasing country. This GQA is restricted to circumstances where quality cannot be satisfactorily verified after receipt of material or when GQA at source is considered essential.

Cost / Benefit

There is a cost associated with the development and application of a GQA programme. The complexity of modern weapon systems, the impact of their failure and the environments in which they are used all dictate the need for confidence in their performance. In this age of the global market place, multinational companies join together to design and develop complex equipment for critical missions. Nations procuring military equipment from another nation require the confidence provided by GQA. The presence of a GQA programme will enhance the probability of companies in our nations being awarded contracts or participating in multinational consortia. The absence of a GQA programme in a foreign country, from which military systems are procured will increase the cost of obtaining this additional confidence.

Conclusion

We see the PASOLS Forum as a golden opportunity for collaboration on quality issues, to share national approaches and solutions so that participating nations all benefit from the experience of others. All PASOLS nations are strongly encouraged to support the concept of a PASOLS QA Forum and actively participate in the inaugural meeting.

QA In PASOLS - Future Steps

An inaugural meeting will be held in Kuala Lumpur, Malaysia, from 15-18 April 1997. The meeting's objective will be to prepare a proposal for a PASOLS Quality Assurance Forum for presentation at PASOLS XXVI in Vancouver, Canada in August 1997.

We, in Canada, look forward to hosting the meeting and working with our PASOLS partners to promote quality management principles and practices.

Canadian Defence 5 Tier QA Programme

Leadership	Contracting	System Evaluation	Surveillance	Performance
Promoting quality system based on ISO 9000?				
Partnership with Industry	Documenting requirements	Measuring adequacy of system	Measuring adequacy of performance	Did it Work?
Encouraging commitment Encouraging continuous improvement	Defining quality system standards Requiring commitment	Monitoring implementation	Is it working?	Feedback on product performance
	Risk identification	Assist in developing and implementing quality system Minimise risk associated with quality system	Are process controls in place? Ensuring risk is countered	Cost and effect of poor performance or failure
Policy Development	Pre Contract	During Contract		Post Contract

Prepared by:

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PASOLS XXV MEETS IN BANGLADESH

By Colonel Karen S Rhodey, USAF

Photograph courtesy of the Bangladesh Armed Forces

The Silver Anniversary meeting of PASOLS was held in Dhaka, Bangladesh, from 22-26 September 1996. Thirty countries were represented by 130 delegates, 30 of which were flag officers. This level of representation equalled that of PASOLS XXIV, held in Seoul, Korea, which was the largest meeting in the history of the forum. Making a first-ever appearance at PASOLS were delegates from Vietnam, Laos, Uzbekistan and Kazakhstan.

PASOLS is an international forum where senior defence logistics officers from the Pacific and Indian Ocean regions gather each year to exchange information on logistics and pursue bilateral or multilateral initiatives agreed upon by interested parties. The seminar is sponsored by the Office of the Secretary of Defense, U.S. Joint Staff and U.S. Commander in Chief, Pacific Command (USCINCPAC). The seminar began in 1971, with nine Pacific area countries and has continued to grow over the years to include a total of 20 member nations and 10 observer nations.

The agenda featured presentations and panel discussions to reinforce this year's theme *Logistics Co-operation: Keeping It Simple*. The topics discussed by panel groups included ideas for better logistics integration of the civilian and military sectors, quality assurance and resourceful ways of advancing the Pacific Area Co-operative Acquisition and Logistics System (PACALS).

In the opening address, Lt Gen Muhammad Mahbubur Rahman, Chief of Army Staff, Bangladesh Army, traced the history of logistics in the Asia and Pacific region and pointed out the importance it has played throughout time. He explained how PASOLS has been so successful at promoting cooperation and understanding among participants and the tremendous contributions it has made in diplomatic as well as economic circles. He went on to describe two recurring logistics challenges faced by the Bangladesh Army which included responding to disasters and low intensity conflicts.

Gen Muhbubur concluded by highlighting the three panel discussion topics for the seminar and challenged each delegate to contribute to the discussions. Welcoming remarks were provided by the co-hosts, MGen Mohammad Anwar Hosain, Chief of General Staff, Bangladesh Army, and BGen Dennis K Jackson, Director of Logistics and Security Assistance, USCINCPAC, and PASOLS Secretariat.

The keynote address was delivered by Ambassador Charles B Salmon, the former Foreign Policy Adviser to the CINCPAC. The Ambassador opened his speech by stating that he has high regard for logisticians because they make things happen. The main thrust of his speech was a review of U.S. policy in the Asia and Pacific region. He talked about the enormous economic growth being experienced in the region and the importance of U.S. presence to maintain a peaceful atmosphere and to facilitate a continuance of this trend. He outlined the three main principles of U.S. security strategy in the region including a substantial forward deployed force, bilateral engagement with treaty allies and bilateral

dialogues under the Co-operative Engagement Strategy, and U.S. support for and participation in multinational security forums such as the ASEAN Regional Forum. He went on to point out that ASEAN has become the model for regional integration and co-operation paving the way for other initiatives to promote economic development and enhanced security.

Other presentations supporting the panel discussions were as follows:

- *The Need for Harmony between Civilian and Military Elements*, by MGen Jalaluddin Ahmad, Quartermaster General, Bangladesh Army.
- *Australian Defence Infrastructure*, by BGen Campbell, Director General Logistics, Australian Defence Force.
- *Quality Assurance*, by Mr Gordon Hunter, Director General Equipment, Canadian Defence Force; Capt Cornelia Beentjes, Director of Logistic Requirements, New Zealand Defence Force; and Mr In Bo Shim, Senior Researcher, Defence Quality Assurance Agency, Republic of Korea.
- *PACALS : An Overview*, by Lt Col John David, Director of Supply, Headquarters Papua New Guinea Defence Force.
- *Logistics Co-operation: Depot Maintenance*, by BGen Jin Soo Chang, Vice Deputy Chief of Staff, Republic of Korea Air Force.

Panel discussions netted informative exchanges and nine initiatives. In addition to the ideas shared on how to better integrate logistics in the military and civilian sectors, nations were asked to share other "best practices" for integration on the PASOLS Home Page. The need for and interest in a quality assurance forum, similar to that in other regions, will be explored, with Australia and Canada taking the lead to set up a working level meeting. Initiatives to advance PACALS included re-evaluating the original 18 possible projects and changing the standard operating procedures to streamline administrative processes. During several evenings of the action packed forum, the Bangladesh co-hosts kept delegates busy with grand receptions sponsored by the Armed Forces Division and Bangladesh Air Force. A cultural event, featuring an enjoyable river cruise and traditional local dishes, was sponsored by the Bangladesh Navy. Activities culminated with an elegant dinner, sponsored by the Bangladesh Army.

From the reception at Zia International Airport until the concluding ceremonies, PASOLS XXV maintained the PASOLS tradition for excellence in the advancement of logistics co-operation and sharing. The theme of the next PASOLS meeting, in Vancouver, Canada, will be

Logistics Co-operation : Technology Solutions.



Colonel Karen S Rhodney, USAF, is the Chief, International Logistics Division, Logistics and Security Assistance Directorate, Headquarters United States Pacific Command. She has a Master of Science degree in Systems Management from the University of Southern California and a Master of Arts degree in Political Science from the University of Hawaii. Colonel Rhodney is presently the PASOLS Secretary.

PASOLS XXVI

VANCOUVER, CANADA

Canada will host PASOLS XXVI in Vancouver as part of 1997 "The Year of Asia-Pacific in Canada".

PASOLS XXVI will be held at the Renaissance Vancouver Hotel, 4 - 9 August 1997. Official hosts will be the Department of National Defence, more specifically the Materiel Branch headed by Mr Pierre Lageux, Assistant Deputy Minister, Materiel.

The meeting dates will allow delegates the opportunity to attend the 1997 AIRSHOW CANADA, comprising an aerospace trade show and the largest flying show of its kind in North America.

The Seminar will be held in the hotel's main ballroom, equipped with all necessary audio visual equipment and five break out rooms for panel discussions.

Spouses are welcome. We have arranged for spousal occupancy of delegates' hotel rooms at no extra cost except meals. Spouses may join conference social activities and we will be pleased to assist in arranging commercial sightseeing tours on request.

In addition to the AIRSHOW visit, PASOLS delegates will take an afternoon ride in the beautiful Straights of Georgia on board a Canadian Navy frigate. As is the PASOLS custom, we will also hold a visiting nations dinner and a host nation dinner.

Canada is hard at work planning PASOLS XXVI and we look forward to welcoming you at Vancouver.

DUMPING - A NECESSITY FOR BANGLADESH

By Major General Jalaluddin Ahmad, ndu, psc

Bangladesh Army

Introduction

As the scale and complexity of modern warfare have increased, the importance of logistics to success in battle has increased. Dumping is an uneconomical method of accumulating reserves, but has a definite role to play. It can contribute immensely to success if undertaken after careful consideration. In the 1991 Gulf War dumping was used extensively and successfully to maintain troops.

Bangladesh is a deltaic land formed by the great river systems of the Ganges, the Brahmaputra and the Meghna - second only to the great deltaic plate of the Amazon. The land is generally flat, hardly rising 60 feet above the sea level, much less in coastal areas. Dumping is a method by which logisticians can overcome to a great extent the difficulties of maintaining troops in the field in this very difficult physical environment.

Definition Of Dumping

Placing stocks on the ground is called dumping. Ammunition is the main commodity for dumping, but POL, rations, defence and engineer stores may also be dumped. Usually we refer to dumping as building stocks in forward combat zones, but it may be used to increase stocks in depots located near combat zones. Additional reserve commodities are normally carried on wheels.

The Necessity Of Dumping

Dumping is necessary:

- when estimated expenditure exceeds the daily resupply lift available;
- when regular supplies may be interrupted and a reserve must be held;
or
- to form small stocks, either protected or hidden, in an area where mobile forces are to operate.

Dumping in the Bangladesh Context

Bangladesh is one of the least developed countries in the world with poor communication networks and an undeveloped economic industrial base. Lines of communication, based on roads, railways and waterways are still inadequate. To assist smooth logistic resupply, as well as command and control, the country has been divided into a number of Area Commands and one Logistic Area. Each Area HQ and the Logistic Area Dhaka command logistic installations pertaining to supply and transport, medical, ordnance and electrical

and mechanical engineering functions. The concept also visualises use of all available suitable civil resources and installations.

In any war operation Forward Depots and Base Depots obviously play a vital role. They supply materiel to Replenishment Parks in order to maintain troops in forward defended localities. The physical characteristics of Bangladesh will seriously affect the supply system in the field during war, as will other factors, including:

- the small depth of Bangladesh, for which we have one set of Base Depots in and around the capital Dhaka. All Forward Depots depend on these Base Depots.
- Bangladesh is a deltaic, low lying riverine country. During the rainy season most of the land is submerged under flood waters, obviously affecting vehicle movement.
- supply from the base depots will be difficult not only because of the rivers - but also because of lack of adequate roads and bridges all over Bangladesh. Moreover the nature of the ground limits cross country movement of vehicles.
- In any major war it is likely that movement in and out of Dhaka will become restricted so replenishment from Base Depots will become difficult.

It is evident that in times of war replenishment from the Base Depots to Forward Depots will be very difficult. The situation will worsen because of probable lack of air superiority. It may safely be concluded that the formations will be fighting in their own areas independently without assurance of replenishments from the Base Depots. In this situation self-sustaining arrangements will have to be made early, and include the use of civil resources and installations in respective areas, augmented by dumping.

When To Dump

Bangladesh is a peace loving country. Its foreign policy is based on "friendship towards all and malice towards none". Hence its armed forces emphasise defence, but without neglecting the other operations of war. Dumping may be undertaken:

In Defence. Sectors, localities, gun and mortar areas may be stocked with sufficient ammunition and defence stores for units to fight alone for some time. The length of time will be determined after appreciation by the commander.

In Withdrawal. It may be necessary to stock intermediate positions for defence or to establish small dumps, particularly of POL and ammunition, on withdrawal routes to provide replenishment for withdrawing troops.

In Attack. Sufficient ammunition for fire plans is usually dumped at gun and base plate positions, or with formation. Additional stocks of combat supplies may be placed at Replenishment Parks.

Conclusion

Dumping has many disadvantages. Much effort is required to build up the dumps, it is seldom possible to remove them once they have been created and they may be over-run or destroyed before they are used. A Commander's plans, particularly for tactical manoeuvre, may be restricted by dump locations. Concealing dumps is difficult, jeopardising the security of future plans. Dumps are likely to be well dispersed causing problems in maintaining up-to-date stock records.

At times dumping is necessary, but it should be undertaken only when normal resupply methods are inadequate for operational needs. For Bangladesh, dumping seems to be necessary, but to avoid loss and wastage and guard against over-insurance, staff must closely supervise the siting, stocking and control of dumps. War is risky but some risks will always have to be taken in order to gain. It is the commander's responsibility to decide what risks can be accepted.

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Major General Jalaluddin Ahmad, ndu, psc

Quartermaster General of the Bangladesh Army.

MajGen Ahmad was commissioned in the Army Service Corps in 1969. Appointments held include:

*Deputy Assistant Adjutant and Quartermaster General in an Independent Infantry Brigade HQ,
Commanding Officer of Supply and Transport Battalions,
Commandant of Army Service Corps Centre and School,
Director Administration and Logistics, Prime Minister's Office, Armed Forces Division.*

MajGen Ahmad is a graduate of Defence Services Command and Staff College, Mirpur, Bangladesh, where he served as Directing Staff and Colonel General Staff. He attended Higher Command Course at National Defence University, China. He did an MBA from the Institute of Business Administration, University of Dhaka, Bangladesh and an MA in International Relations from the Johns Hopkins University School of Advanced International Studies, Washington DC, USA. He was a Visiting Research Associate at the Office of Arms Control, Disarmament and International Security, University of Illinois at Urbana-Champaign, USA.

A WHOLE OF BUSINESS APPROACH ADF EXPLOSIVE ORDNANCE

Contributed by the Australian Defence Force

Background

Over time and to meet particular operating environments, the individual Services of the Australian Defence Force (ADF) [The Australian Army, the Royal Australian Navy and the Royal Australian Air Force] have each developed logistic management systems to meet their combat forces' requirements for guided and non-guided explosive ordnance (EO). In recent times, there have been a number of high level reviews of the ADF which have highlighted the need to minimise the resource demands of support functions. The ADF logistic community is constantly seeking ways to reduce these demands, reduce the funds needed to implement and maintain support functions and increase logistic system efficiency.

In 1995, Headquarters Australian Defence Force (HQADF) completed two separate studies on guided and non-guided explosive ordnance logistic systems. These studies were titled 'ADF Explosive Ordnance Wholesale Storage and Distribution Study' and 'ADF Guided Weapons Maintenance and Wholesale Distribution Study'. The recommendations of both studies included conducting a review of the Services' EO logistic management systems then market testing the provision of non-core logistic support activities. In July 1996, HQADF initiated a single project, the ADF EO Project, which combined the activities to implement the recommendations of both studies.

Objectives

The aim of the ADF EO Project is to define and implement an efficient system for logistic management of EO that meets both ADF and all single Service requirements.

Methodology

Two working parties, the Single Service Logistic Management (SSLM) Working Party and the Commercial Support Program (CSP) Management Review Team, have been established to undertake this project. The working parties operate concurrently, but in a staggered fashion with primacy afforded the SSLM review.

Single Service Logistic Management is a business process re-engineering activity which seeks to achieve greater overall economy and efficiency by one Service accepting management responsibility for logistic support to the other Services. CSP is a Defence initiative which seeks to ensure that non-core support services and products are provided to core Defence activities in the most cost-effective manner. Its central objective is to

transfer support activities to the civil sector where this is operationally feasible and cost-effective.

The initial work of the SSLM Working Party was to review the total scope of EO management activities, map current systems and then define a best practice model. The current practices employed by each Service were then to be reviewed and defined and used to develop the best practice future model. It is envisaged that a new EO organisation will be raised, jointly staffed, with Navy as the Managing Service.

The CSP Management Review Team is to undertake a multi program CSP activity which would cover all non-core EO wholesale stockholding, warehousing, maintenance and distribution functions performed by the three Services. The Team is to seek, through competitive market testing, the most efficient and cost-effective means of providing non-core EO storage, maintenance and distribution functions to meet ADF and single Service requirements.

Current Status

Project work to date has involved establishing the Tri-Service SSLM EO Working Party and the Multi-Program CSP Management Review Team. Much effort has been spent on developing management guidance, project management directives, project plans and financial statements to carry the work through the project definition phase, and establishing the necessary command and control arrangements for the latter phases of the project.

A series of workshops has been conducted to define, in common terms, the functions and processes used by each of the three Services in logistic support of EO. Staff and relevant unions have been briefed on the project.

Models representing current practice in each Service have been developed. These were validated by the Services early this year and form the basis for analysis and development of the options for an ADF wide EO organisation.

Expected Outcomes

The SSLM Review is to deliver a fully costed, output focussed, EO management system, organisational structure and supporting customer service agreements. Concurrently, CSP activities are to seek, through competitive market testing, the most efficient means of providing non-core ADF EO storage, maintenance and distribution functions to meet ADF and single Service requirements.

At the completion of this project, which is based upon a whole of business approach, there will be enhanced ADF combat capability through the provision of effective, safe and efficient explosive ordnance support as and where required by supported units.

FORMATION OF ROYAL NEW ZEALAND ARMY LOGISTIC REGIMENT

By Colonel J. R. Bright

On 9 December 1996 in a "Special Order of the Day" the Chief of General Staff for the New Zealand Army amalgamated the three main logistic Corps, ***The Royal New Zealand Corps of Transport, The Royal New Zealand Army Ordnance Corps and the Corps of Royal New Zealand Electrical and Mechanical Engineers*** into a single Regiment. This action was the culmination of a number of studies and actions which sought to improve logistic operations in the New Zealand Army.

The new Regiment, to be known as ***The Royal New Zealand Army Logistic Regiment***, will consist of four logistic battalions, a base logistic group, a force support company and a movements company. The Regimental Headquarters will be embodied in the Army Logistic Centre and Trade Training Schools.

The establishment of the Regiment will result in little change to the function and management of individual trades. Trade training and progression will remain the same. However, there will be significant change to the practice of logistics both on operations and in peace.

In the main this change will be in the way logistics will be managed. Current operational management regimes rely on separate control and management of each function. Whilst this has allowed each element to operate in an efficient and effective manner internally it has often resulted in significant dislocation where functions interface, or don't, as the case may be. Interface problems are not easy to fix and one of the first tasks is to ensure that all personnel focus on logistics rather than their own specialities.

The amalgamation of the three logistic Corps is only one of the steps designed to address this area of concern. Reorganisation of the logistic units within the Army has been ongoing for the last few years and whilst these reorganisations have in part addressed the problems, inter Corps boundaries have limited their effectiveness. The control of future logistic operations will be firmly vested at battalion headquarters level. Instead of separate management at company level, single operations cells will provide overall control, command and co-ordination of all elements in the battalion. This arrangement will automatically provide for a more co-operative and easily co-ordinated approach. Operations staff will necessarily need to take a wider view of the situation and not treat each element of the logistic operation as a separate and unrelated part. Cause and effect will become far more obvious and easier to understand and control.

It can be seen that the education and skills of senior Non-commissioned officers and officers will need to reflect this broader outlook. Whilst the specialties individuals currently develop will remain as important as before, a detailed appreciation of the working of logistics in the broadest sense will be essential in the future. It is not envisaged that every logistics SNCO and officer will become an expert in all aspects of operational logistics. However, to be successful, they will need to understand the principles, broad function and operation of all logistics elements within their command.

This process of education has already been initiated with the combination of intermediate and senior logistics courses for SNCOs and officers in the new Regiment. These courses concentrate on integrated and focussed logistics.

Except where it is clearly not cost effective, it is sensible to practice in peace what we intend doing on operations. Not only is a single system simpler and easier to understand, all non-operational effort provides an element of training. To this end the peacetime organisation and operating procedure will reflect as far as possible the operational way of doing business. It is fair to say that peacetime practice of economic and effective logistics using operational systems will assist the New Zealand Army to develop better ways of doing business to improve both effectiveness and efficiency.

The Queen has approved the appointment of His Royal Highness, The Prince Andrew, Duke of York, CVO, ADC as Colonel-in-Chief of the new Regiment. The current affiliations with Corps and Regiments that already exist with the other Armies will be re-established in due course.

Colonel Jeff Bright is Assistant Chief of General Staff (Development) for the New Zealand Army. He was an officer of the Corps of Royal New Zealand Electrical and Mechanical Engineers prior to the formation of the new regiment.

ADF FREIGHT MOVEMENT TOWARDS 2000

Contributed by the Australian Defence Force

Introduction

The Australian Defence Force (ADF) is a large and complex organisation with activities throughout Australia and overseas which require logistics support, often in unique situations. This support encompasses many activities, but all relate to the positioning of materiel where it is required, in an appropriate timeframe for a specific purpose. Physical distribution is integral to this support, and has the potential to significantly enhance or degrade the operational effectiveness of the ADF, and impact on many non-operational activities. Hence, freight movement greatly influences ADF capabilities, both directly through physical movement of materiel, and indirectly through its effect on other logistics activities. The importance of achieving and maintaining an effective freight movement system cannot be overstated.

This paper aims to inform the Logistics community about current ADF initiatives to reshape the freight movement sector of the ADF logistics business system, leading to substantial benefits in both effectiveness and efficiency.

Background

Customers of the existing freight movement system have expressed dissatisfaction with the level of service for some time. Concerns related to:

- inefficiencies in the system, its components and procedures;
- general lack of responsiveness to customer requirements; and
- the system's inability to achieve required delivery standards.

To address these issues, a Working Party (WP) was formed to review ADF freight movement. The principal recommendations of the review included:

- market testing elements of the ADF Freight Movement function through the Commercial Support Program (CSP);
- transferring functional control of ADF freight movement to 1 Joint Movement Group (1 JMOVGP);
- review of distribution system standards;
- pursuance of in-transit item visibility through the integration of existing freight and logistics management information systems; and
- exploring initiatives for enhancing existing capabilities and services through the use of new technology.

The Director General Logistics was directed to implement the Freight Movement WP recommendations, along with his Navy, Army and Air Force counterparts and personnel from 1 JMOVGP.

Project Scope

Such a large and complex project is similar to a large scale acquisition and will use similar project management techniques. The Project will be conducted as a number of linked phases leading to Joint Logistic Management (JLM) and CSP solutions. Details and deficiencies will be addressed during JLM considerations, and the CSP process will be treated as an advanced acquisition.

The project will consider the processes involved with ADF Freight Movement in order to develop a system to provide effective support to ADF operational elements. The review will encompass:

- all freight movement between base logistics units and shore-based establishments, bases, barracks or deployed forces;
- freight movement between units and contractors in Australia;
- freight movement between Australia and overseas deployed forces;
- freight movement from Australia to overseas contractors; and
- Freight Distribution Centre activities which are compatible with preparation, consolidation and movement of freight, and are not the responsibility of a local service provider.

Objective

The overall objective is to improve the effectiveness of the ADF Freight Movement system by identifying and implementing more efficient processes using commercial best practices and market testing defined activities.

Issues to be Resolved

Many issues will require resolution prior to market testing freight movement activities under CSP. These will be addressed during the JLM phase, which will also prepare an environment for the market testing activity. Issues to be considered include:

- design of a new staff control and performance management system;
- centralising all mode coordination responsibilities with 1 JMOVGP;
- integration of Logistics Management Information Systems with the freight movement function;
- implementation of a program of continuous improvement for ADF Freight Movement services and functions;
- asset visibility;
- confirmation of core/ non-core tasks and 'Workforce Required in Uniform' implications; and

- the application of a 'user pays' principle for freight movement in a post CSP environment.

Market Testing under CSP

A Management Review Team will be established by the Director General Commercial Support Program (DGCSP) to define the Statement of Requirement and address related issues. The team will consist of members drawn from the three Services with a team leader provided by DGCSP.

The CSP Statement of Requirement will offer a contract for movement of freight which is beyond the capacity of ADF assets, or which cannot be moved by ADF assets for some reason. All items will be included, apart from ammunition and POL. It is expected that the contract will include carriage of freight, appropriate MIS support, agreed levels of cargo visibility, and related modal selection and coordination subject to ADF guidance. ADF assets will not be offered for contractor use, although space may be allocated within existing modes of service transport.

The Way Ahead

This project is a substantial undertaking, and there will inevitably be demands on the Services and other organisations for resources, particularly manpower. However, commitment of these resources is essential for the ADF to achieve the outcomes anticipated from this project. Long term gains in effectiveness will only follow if existing structural and procedural difficulties are resolved, and the ADF takes full advantage of civilian infrastructure capabilities.

It is expected that these initiatives will take some time to complete. On completion, the ADF Freight Movement System will:

- be fully integrated;
- make full use of civilian capabilities whilst retaining ADF capacity to use 'in-house' resources to perform core functions;
- be responsive to customer requirements and provide improved mobilisation capacity; and
- provide a 'Value for Money' ADF Freight Movement System

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