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MILITARY LOGISTICS AND THE SOUTH AFRICAN NATIONAL DEFENCE FORCE*

1. INTRODUCTION

The South African Department of Defence (DoD) has a strong prestige motivation to maintain a high standard of logistical delivery, especially to the peacekeeping and peace support operations in Africa. The South African National Defence Force (SANDF) deployments on the African continent are major elements in the DoD's activities, and rank second only to the defence of the sovereignty and territorial integrity of the Republic, among the Minister of Defence's objectives.¹⁾

The Minister of Defence's priorities for the financial years 2007/08 to 2009/10 include the need for sufficient operational capacity for peace missions. Smooth running logistical arrangements and clear reporting lines are also specified as priorities, obviously to ensure that the peace missions will be successful.²⁾

The Minister's strategic guidelines include the advanced training

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and preparation, for the integration of a number of new A400M military strategic airlift aircraft, which are yet to be delivered. This underlines the Air Force's major logistical role in successful peacekeeping deployments over vast distances in Africa, where overland communication networks are poor. "Effective logistic lines" is included in a list of strategic guidelines issued as early as September 2005, just before another comprehensive list of guidelines headed "promoting peace, security and stability in the region and on the continent".³⁾ The DoD/SANDF has thus given its first priority to peacekeeping, after the defence of South Africa's territorial integrity, and consequently peacekeeping has been given the timely logistical priority it requires.

From time-to-time the Government has tasked the SANDF to deploy peacekeeping forces in new areas without suitable warning, to suit its political aims. To its credit the SANDF has managed to execute those missions in spite of the unexpected need for more troops, and the escalation of required logistical back-up needed to support the troops. Additional funds are in most cases not made available quickly either, leading to the need for short-term financial juggling.

2. MILITARY LOGISTICAL THEORY

The term logistics, which coupled with administration, forms a major heading in military operational orders, is evidently derived from the Greek adjective '*logistikos*' which means 'skilled in calculating'. The first use of the term in an administrative context goes back to the Roman and Byzantine empires, where the post of a military administrative official was entitled the '*logistica*'. Whereas the emphasis in Roman times lay on the skill involved in the calculating, the first use of the term logistics, in relation to military administration, was by the often referred to military theoretician Antoine-Henri Jomini. In 1838 he formulated a theory of war which was based on the unity of strategy, ground tactics and logistics.⁴⁾

Logistics in a military context can be referred to as 'combat service support', and in the SANDF's case, more suitably as 'peacekeeping service support'. Logistical appreciations often address extremely uncertain conditions, and ultimately South African logistical staff officers and their commanders must make decisions based on an understanding of strategy, finance, intelligence, personnel, peacekeeping and

peace enforcement operations, and lastly international relations and co-operation with bodies such as the African Union (AU) and the United Nations (UN).

The definition of the term 'logistics' used in the United States (US) Department of Defense's Dictionary of Military and Associated Terms, is virtually the same as that used in the South African Military Dictionary. It reads as follows: "logistics – The science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense, those aspects of military operations which deal with: a. design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of material; b. movement, evacuation, and hospitalization of personnel; c. acquisition or construction, maintenance, operation and disposition of facilities; and d. acquisition or furnishing of services".⁵⁾

The United States (US) military general staff system was adopted by the South African Defence Force (SADF) in the 1970s, and continues to function in the SANDF. The system includes a logistical staff division, designated as the fourth staff division, for example, G4 at an army headquarters, or D4 at a division headquarters, after G1 personnel, G2 intelligence and G3 operations, which is generally responsible for planning, co-ordinating and supervising the supply, maintenance and transportation, construction, evacuation and hospitalisation, as well as other related missions of the commanders. At a national defence headquarters the logistical staff division will have a major role to play in acquisition of new equipment, the maintenance of it whilst in service, and the discarding of it at the end of its lifespan. Naturally other staff divisions such as operations and finance also play a major role in the fields of acquisition, maintenance, and the discarding of equipment.

The logistical staff division is responsible for two documents involved in mission planning which have a large degree of similarity in content. However, they are prepared for two very different purposes. A logistical appreciation, the first document, is prepared before the commander makes his decision how to proceed, and it is written for the specific purpose of assisting the commander to reach his decision. The second document, described as a 'feasibility test' is prepared to conduct a test which is done to determine whether the favoured plan is logistically supportable.

Clearly logistics is not only about the supply of material to the military for operations. It also includes the ability of the national infra-

structure to equip, support and supply the military and so ensure that the transportation system exists to move the forces to be deployed, to re-supply the force once deployed, and to extract the force after operations are completed. Most modern DoDs have civil service officials working in the headquarters ostensibly to ensure civilian control of the military. Theoretically they should be able to liaise very effectively with civil servants in other state departments, and with the private sector to ensure national support for the military.

Logistical staff officers, as is the case with staff officers of other divisions, must have a high degree of professional competence. Sir Winston Churchill in an address to US officers in Washington, DC in 1956 stated that "professional competence, based upon prolonged personal study as well as collective study at service colleges, rank by rank, and age by age were the title deeds of future commanders, and the secret of future victories".⁶⁾ He could just as well have added staff officers after commanders, for without good staff, and in particular logistical staff, commanders will achieve little.

An amusing statement by an unknown author, which contains a lot of wisdom, is often quoted in relation to military logistical theory and reads as follows: "Logisticians are a sad and embittered race of men who are very much in demand in war, and who sink resentfully into obscurity in peace. They deal only in facts, but must work for men who merchant in theories. They emerge during war because war is very much a fact. They disappear in peace because peace is mostly theory. The people who merchant in theories, and who employ logisticians in war and ignore them in peace, are generals". In an updated version the author would probably have ended with "generals, politically appointed civil servants and politicians". One can conclude that logisticians are not going to be ignored readily, since there is no indication that war and the need for peacekeeping operations will end soon.

3. POST-COLD WAR MILITARY LOGISTICS

The collapse of the Soviet Union in 1989 resulted in the end of the Cold War, and the cessation of Soviet Russian and surrogate operations in Africa, which aimed at enhancing the spread of Marxist ideology and the expansion of Soviet influence. Closer to home it resulted in a new political dispensation in South Africa, an end to the South African

military deployments in Namibia and Angola, and SANDF peacekeeping deployments even further afield than Angola.

Force projection over large distances have had a profound effect on logistical practice. Not only in South Africa but in the US and United Kingdom (UK) as well. Long distance deployments make the concept of logistic support to military forces by the holding of first, second and third line support on the ground problematical. The type of force projection which the military now executes links the force's supply chain to the home base more closely than before. This being the case, contracted logistical support to military operations is possible and should be implemented as far as is practicable.⁷⁾

Support to SANDF forces deployed in Africa is provided to a large extent by aircraft flying over foreign states. Although the countries have good diplomatic relations with South Africa, road and rail communications are not good. The magnitude of the logistical task is thus not to be underestimated. It is to the credit of the DoD, and more particularly the SANDF, that the logistic support provided is succeeding in keeping the forces deployed operational. Media coverage from time-to-time reports the results of poor logistic support, but generally the SANDF has managed to adopt and adapt the military logistical system to the operational scenario. Ultimately a military logistical support system depends upon a real knowledge of the supply and movement factors involved in the operations being conducted. The South African military has had years of experience in supporting its African peacekeeping deployments, and it would thus be surprising if its logistical procedures were not well established by now, that is in 2008.

4. THE STATE OF SOUTH AFRICAN MILITARY LOGISTICS

In spite of its logistical success in supporting its force deployments in Africa, it is evident that the overall SANDF logistical system, and command and control generally, are not functioning well. As a result it has been announced that the organisation of the force is to be restructured since the system introduced in the 1990s was based on business principles, and it is not effective in a military environment. One of its many failings is the lack of inter-corps training in the army, which the Army's Vision 2020 will no doubt rectify, the other is the over-complicated

logistical system which has some major weaknesses.

To its credit the DoD has published its logistical weaknesses in an unclassified form stating that the main risks confronting the Joint Logistic Services are in the fields of maintenance and repair of facilities, vehicles and equipment, as well as the lack of skills and experience of its personnel.⁸⁾ The condition of the DoD's facilities and infrastructure are considered to be so poor that much of it no longer conforms to the minimum requirements of the *Occupational Health and Safety Act*.⁹⁾

During 2005 the responsibility for the management of the SANDF property portfolio was transferred from the Ministry of Public Works to the DoD, for which the latter received R845 million in addition to its R22,4 billion budget for that year.¹⁰⁾ During the financial year 2006-2007 R49,71 million was spent on the Repair and Maintenance Programme but it was found to be insufficient. However, repair work to 1 Military Hospital commenced.¹¹⁾ Fortunately additional funds for infrastructure repair, and maintenance of defence facilities have been allocated. In the Defence Budget Vote 2008, the amounts added are listed as R80 million for 2007/08, R230 million for 2008/09, and R200 million for 2010/11. As a result of the additional allocations received, the Repair and Maintenance Programme will increase from R330 million in 2007/08 to as much as R526 million in 2010/11.

The DoD/SANDF reports an extreme lack of funds to maintain its equipment, whilst there is already a huge backlog in this respect. In specialised fields there are serious shortages in logistic personnel, and those in service are deployed too frequently. The report of the Joint Logistics Services continues by stating that the DoD Logistic Agency's mandate, capacity, morale and command and control are very seriously constricted by the non-approval of the changes required to the philosophy, strategy, process and structure of the organisation, and that there is a lack of progress in achieving an agreed way forward. Furthermore, there is an essential requirement for the realignment of logistics and the establishment of a capacitated chief of logistics, so that an effective, efficient and economic logistical service delivery can be rendered.¹²⁾

The Joint Logistic Service report also states that the greatest risk to the DoD is the threat to the safety of personnel, and the loss of life and property, due to the risk of unsafe and unstable ammunition.¹³⁾ Al-

though the concern in regard to the disposal of unsafe ammunition is openly expressed, the briefing to the Defence Portfolio Committee on 31 October 2006 about the disposal plan was closed to the public. It can consequently be assumed that the problem remains very serious, and that the plan requires more funding.

The logistical situation in the DoD can be summed up by reference to another candid report in the DoD's Annual Report FY 2006-2007. It states under the heading "Outputs of the Logistic Agency" that:¹⁴⁾

- The serviceability of equipment deployed stood at only 60 per cent due to lack of resources.
- The joint support bases were incapable of supplying an efficient service to their clients, due to the fact that the bases were underfunded and understaffed.

The adjustments to the organisation and the functioning of logistics are also mentioned in the above reports, but the lack of funding remains a constant problem throughout the DoD.

5. FINANCIAL RESOURCES ALLOCATED TO LOGISTICS

The initial defence acquisition package announced by the then Deputy President, Thabo Mbeki, at a media conference on 18 November 1998, consisted of the following six core procurement programmes:

- Four Corvettes, which have subsequently more correctly been referred to as frigates.
- Three submarines.
- Four maritime helicopters.
- 40 light utility helicopters.
- 28 light fighter aircraft.
- 24 lead-in fighter trainer aircraft.

The above programmes have been progressing more or less as planned. In September 2006 it was announced that the South African Government intended to exercise an option to buy an additional fifth MEKO-class A 200 frigate. The Navy also has projects which include

the acquisition of strategic logistic support ships and multi-mission offshore patrol vessels.¹⁵⁾ Subsequently the Government decided to acquire between eight and 14 Airbus A400M strategic transport aircraft to replace the C-130s currently in service.¹⁶⁾ Obviously the acquisition programmes are intended to update South Africa's air and maritime equipment and to be able to deploy forces anywhere in Africa.

The DoD has had to execute the acquisition programmes with a limited budget of R19,472 billion in 2002 to a planned R25,933 billion in 2008. The Special Defence account used to buy weapons for the SANDF accounted for 34,4 per cent of the total budget in 2006 and it was expected to account for 28,9 per cent of the budget in 2008. Pay and allowances for personnel took up 37 per cent of the budget in 2006, with goods and services allocated as much as 24 per cent of the funds in the same year. Between 2002 and 2005 expenditure on deployment on African external operations grew at an average rate of 22,8 per cent.¹⁷⁾

The above figures for equipment procurement may well have escalated since the Army also requires new equipment, and a project to update its infantry fighting vehicle fleet has been approved. The South African Air Force has repeatedly reported in the open printed media and official DoD/SANDF documents, that its operating budget is inadequate. Early in February 2008 the chief of the Air Force stated that the Air Force's budget was constantly shrinking in real terms because inflation in aviation operating costs was as high as 15 per cent per annum, while the budget increased by a mere five per cent annually. Aircraft fuel which made up 10 per cent of the operating budget had increased in price by 95 per cent over the last six years.¹⁸⁾

The personnel costs portion of the Air Force's budget continues to grow at the expense of operational capabilities. The fact that technical personnel leave the force to join the private sector while their expertise is required to operate and maintain more technologically advanced equipment which is being introduced into the system, is in itself a risk.

The Air Force reports that its aircraft systems, support facilities and operational infrastructure are continuing to deteriorate. Lack of funds further leads to lack of flying hours and the lack of pilot training, and will result in the newly acquired aircraft not being utilised as was intended.¹⁹⁾

The South African Military Health Service (SAMHS) reported that

the main risk factors involving the Military Health Support Programme were the deterioration of hospitals, facilities and equipment. At the same time the high rate of inflation of medical costs was a main risk factor as was an unacceptable high workload of medical professional staff. Once again the above point to a lack of funds.²⁰⁾

The South African Navy reports that its most important output risk is the lack of funds to meet all its requirements. The risk manifests itself mainly in the acceptance of its new ships and related high technology equipment into the Navy infrastructure. The National Treasury has evidently allocated additional funds to help the Navy get the frigates operational.²¹⁾ The funds allocated over three years from 2005 amounted to R63 million, but this still left the Navy with a 50 per cent deficit.²²⁾

The Army is extremely diplomatic in stating that it is a challenge to balance Government expectations with the resources which the Government makes available to meet those challenges. However, it does add in its reports that the service spends as much as 75 per cent of its budget on personnel, which is hardly surprising since the Army is by nature personnel heavy. The result is that the Army has too little funding available to maintain its main equipment and vehicles, and to replace that which has become obsolete and unserviceable. The maintenance and upgrading of deteriorated facilities is also mentioned among risk factors which require attention.²³⁾

From the above extracts from military reports it is clear that true to military practise and tradition, the SANDF attempts to carry out the missions the Government orders it to perform to the best of its ability. The contents of the Annual Reports and Strategic Business Plans are clear and unambiguous enough to inform higher civilian authority of the contradictions which exist in Government expectations, and financial allocations involved in achieving mission success. The missions have to be executed in accordance with the UN's standards expected from a national peacekeeping force. If this is not accomplished it serves little purpose in deploying for peacekeeping missions in Africa at all, and will in fact merely negatively affect South Africa's reputation.

An example of a logistic failing leading to financial loss is the low level of serviceability of SANDF vehicles and equipment deployed on some peacekeeping missions. Recent media reports state that the DoD spends roughly R850 million on peacekeeping operations an-

nually. The UN reimburses costs for deployment and use of equipment based on the level of its serviceability expressed in a percentage. Evidently a mere 25 per cent of the vehicles and equipment deployed in the Democratic Republic of the Congo (DRC) in late 2006 was serviceable, consequently the DoD forfeited 75 per cent of the potential reimbursement.²⁴⁾

6. TRAINING AND TRANSFORMATION

Joint Logistic Services mentioned in its 2007 annual report that a serious shortage of personnel in specialised logistic fields existed. At the same time the reserves in the DoD Logistic Agency were not fully trained. In fact since 1999 all formal recruitment and training of reserves had ceased.²⁵⁾

After the reported loss of a large number of R-4 and R-1 rifles in the Eastern Cape and the Soutpansberg military area, the head of the SANDF's legal services formally stated that the SANDF's policy, procedure, control, storage, transport and repair of firearms and ammunition required review to bring the procedures in line with the Firearms Control Act. In a presentation to the Military Council in April 2007, he further stated the following:

- The SANDF had no system by which it could immediately report thefts and losses of firearms and ammunition.
- It had no register for the particulars of all its firearms with a calibre of less than 20mm, and did not possess the details of every member in possession of such a firearm.
- There was no system to ensure that SANDF members declared unfit by a military court to possess a firearm, would be precluded from obtaining one.²⁶⁾

Hopefully the above weaknesses have been rectified. However, even if they have, no system or registers will solve the problems of weapons control until discipline, accountability, training, and an awareness and tradition of sound accounting procedures and maintenance are in place. In the Army, platoon sergeants, company sergeant majors, regimental sergeant majors and ultimately formation sergeant majors

must see to and inspect weapon serviceability, all equipment maintenance, as well as discipline and turn-out. They must see to it that every private soldier is fit to perform his/her duties, and inculcate an attitude of pride in the standards of their units as regards maintenance and functionality of their equipment.

The commissioned officers from the platoon leader up to and including the regimental commanders and ultimately the Chief of the Defence Force, must be held accountable, not just responsible, for the control, maintenance and functionality of all the equipment under their command. Should an officer prove incapable of commanding he must be removed from such responsibility, and if he was negligent he should be punished or at least reprimanded. Where commissioned officers prove to be involved in corruption of any kind, particularly involving weaponry, their commissions should be revoked. The practise whereby officers are demoted after having been found guilty of serious infringements is not good practice. An officer incapable of honourable military duty at any level is not suitable for service at lower levels.

Training of all military personnel in the logistics and administration applicable at their levels should be repeated often, particularly when qualifying for promotion. When-ever officers are appointed to command self accounting units or formations, they should attend refresher courses to inform them of current logistic and accounting practices particularly those involving state monies and controlled items, such as weapons and ammunition. Needless to say the importance of logistics as a subject on staff courses cannot be emphasised enough, and consequently posts in the logistic staff compartments/agencies should be made attractive and sought-after by talented officers.

Experience in logistics is not gained quickly. Attendance of courses is important but commanders, logistical staff officers and quartermasters need years of experience to be effective in the command and management of self accounting units and formations. There are umpteen examples of the loss of efficiency due to an obsession with quick racial transformation in the whole South African public sector. Transformation will take place anyway since white South Africans are not likely to join the regular army in large numbers. By transforming slowly by a process of natural attrition, logistical and administrative efficiency can be maintained somewhat.

7. ACQUISITION AND CORRUPTION

The financial aspects of current SANDF operations and its acquisition of ships, aircraft and army equipment have already been mentioned. An aspect of acquisition which has received far greater media attention than its financing has been that of the corruption involved in the purchasing procedures. In spite of the attention corruption has received in the media, and in the South African Parliament, little has in fact come to trial in court.

To the credit of the military personnel involved in the acquisition procedures, very little was ever said about military officer involvement in corruption. That fact, and the candid logistic reporting in the DoD/SANDF Annual Reports and Strategic Business Plans, bode well for the future logistical management of the armed services. There is no doubt that corrupt practices can be extremely lucrative in the logistics involved in the military. Billions of rands and/or dollars are spent in the acquisition of ships, aircraft, weapons, communications, vehicles and ammunition, and to obviate corruption very formal procedures must be adopted to leave a clear 'paper trail'.

8. CONCLUSION

The DoD/SANDF has been candid in its reporting about the risks involved in its logistic function and capabilities in support of the armed services. It is unfortunate that the post-1994 reorganisation weakened the effective functioning of the logistic system, but the recognition of the need to adapt the logistic system to current requirements is a step in the right direction.

The acquisition programmes for new ships and aircraft which have been ongoing since 1998, and the acquisition of new army equipment, together form massive logistical projects requiring excellent logistic management. These projects are being managed while the SANDF deploys peacekeeping forces in various countries in Africa. The latter is in itself a major logistical operation.

The Parliamentary Defence Committee recognising the shortage of funds to successfully execute all the SANDF missions, has rightly called for an increase in the military budget. The motivation for the Committee to do so is based on the fact that the army needs to update

its equipment, that the air force needs to increase its flying hours to maintain high standards of pilot training, that the services of skilled professionals must be retained, and that the SANDF's buildings and facilities need better maintenance than is currently being carried out.²⁷⁾

Other than finance, the SANDF needs to inculcate a logistic awareness in all its personnel. Maintenance of, and respect for military equipment in itself ensures operational preparedness and saves money. Training to achieve this starts from the bottom, as early as basic training.

There is a strong contradiction in the obsession to transform the armed services to the national racial proportions quickly, in contrast to the need to keep the services of experienced skilled personnel from racial minorities. In fact if racial minorities are not encouraged to join the technical services, it will be difficult to man the aircraft and ships effectively, particularly in the short term.

REFERENCES

1. Republic of South Africa, Department of Defence, *Strategic Business Plan 2007 (MTEF FY 2007/08 – FY 2009/10)*, p 3.
2. *Ibid*, p 4.
3. *Ibid*.
4. "Military Logistics", *Wikipedia*. http://en.wikipedia.org/wiki/Military_logistics, accessed 23 January 2008.
5. "Gateway to Logistics", Air War College Gateway to the Internet. <http://www.au.af.mil/au/awc/awcgate/awc-logi.htm>, accessed 23 January 2008.
6. Nicholas, J D, Picket, G B and W O Sears, *The Joint and Combined Staff Officers Manual*, The Stackpole Company, Pennsylvania, 1959, p 203.
7. "Military Logistics: A Brief History", http://www.rikard.karoo.net/articles/concepts_logistics.html, PA, 22 August 2001, accessed 23 January 2008.
8. Republic of South Africa, Department of Defence, *Strategic Business Plan 2007, op cit*, p 74.
9. Republic of South Africa, Department of Defence, *Annual Report FY 2006-2007*, p 115.
10. *The Military Balance 2006*, The International Institute for Strategic Studies, Routledge Taylor and Francis Group, London, 2006, p 350.
11. Republic of South Africa, Department of Defence, *Annual Report FY 2007-2007, op cit*, p 115.
12. *Ibid*, pp 115-116.
13. Republic of South Africa, Department of Defence, *Strategic Business Plan*

- 2007, *op cit*, p 74.
14. Republic of South Africa, Department of Defence, *Annual Report FY 2007-2007, op cit*, p 117.
 15. *The Military Balance 2007*, The International Institute for Strategic Studies, Routledge Taylor and Francis Group, London, 2007, p 258.
 16. *Ibid*.
 17. *The Military Balance 2006, op cit*, pp 350-351.
 18. *Beeld* (Pretoria), 2 February 2008.
 19. Republic of South Africa, Department of Defence, *Strategic Business Plan 2007, op cit*, pp 53-54.
 20. *Ibid*, p 65.
 21. *Ibid*, p 59.
 22. *Beeld* (Pretoria), 11 March 2005.
 23. Republic of South Africa, Department of Defence, *Strategic Business Plan 2007, op cit*, pp 44-45.
 24. *Beeld* (Pretoria), 8 February 2008.
 25. Republic of South Africa, Department of Defence, *Annual Report FY 2007-2007, op cit*, p 115.
 26. *Cape Times* (Cape Town), 20 July 2007.
 27. *News24.com*, "Call for More Military Budget", <http://www.news24.com/>, accessed 1 February 2008.

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