## **GUEST LECTURE**

## Defence Strategies for the New Millenium Verdedigingstrategieë vir die Nuwe Millenium

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Twee belangrike, en in sommige gevalle opspraakwekkende en selfs kontroversiële gebeurtenisse het in die afgelope jaar of wat in Suid-Afrika plaasgevind en wat die kollig laat val het op die verdediging en veiligheid van ons land.

Die eerste was die optrede van die gekombineerde taakgroep **Operasie Boleas** in Lesotho, wat ten doel gehad het om vrede en stabiliteit in dié buurland te verseker, die interne situasie aldaar te stabiliseer, en om die grens met SA te beveilig.

Die tweede was die aankondiging op 18 November 1998 van die aanvaarding van die verslag van die Kabinet se subkomitee oor die Aanskaffingsprogram vir die SANVM. Die verslag het die aanskaf van militêre toerusting, die verdedigings- en nywerheidsdeelname, en die nasionale industriële deelnameprogram tot 'n totale bedrag van R29,77 miljard rand behels.

Ses van die sewe kategorieë waarin apparatuur aangeskaf sal word, is goedgekeur. Dit sluit in korvette, duikbote, maritieme helikopters, ligte gebruikshelikopters, ligte vegvliegtuie, en opleidingsvliegtuie.

The renewal programme is intended not only to upgrade the quality of outdated hardware for the SANDF, but also to give a much-needed injection in the South African economy. One gets the impression that it also takes cognisance of the shift away from the likelihood of violent conflict between nations as the weapons of the industrial age warfare have become more and more lethal, and such a conflict less and less of a possibility, to an ability to meet the demands of the modern resurgence of sub-national warfare and regional violence, unrest, and insurgencies.

The historian Martin van Creveld recently said: "The shift from conventional war to low-intensity conflict will cause many of today's weapons systems, including specifically those that are most powerful and most advanced, to be assigned to the scrap-heap." The end

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of the Cold War has already led to a loss of momentum in military innovation, especially among potential United States adversaries.

This has also happened in South Africa. We dismantled six nuclear bombs which were at our disposal, and the space programme has been shelved – all within the past five years.

The notion of a "military technical revolution" or a "revolution in military affairs" — both of which are terms that originated in the Soviet military thought — has become endemic in the literature of defence analysis internationally. In our own country the downscaling of research in military hardware and the downsizing of our defence staff numbers are examples of the shift in the new approach to defence matters.

Some military historians identify four revolutions in warfare in the 20<sup>th</sup> century, which have fundamentally altered military conflict:

Firstly: the period between 1900 and 1917 characterised by trench warfare and hand to hand combat. It is interesting to note that trench warfare was largely developed during the Anglo-Boer War, which celebrates its centenary next year, and perfected during World War I.

Secondly: in the period between 1917 and 1939 (i.e. the end of World War One and the beginning of World War Two), internal combustion engines, armoured vehicles, improved aircraft designs, and radio and radar were harnessed in new operational concepts and organisational structures to produce the blitzkrieg, carrier warfare at sea, and strategic aerial bombardment. Gone were the days of warfare in trenches of the Anglo Boer War and the First World War.

A third revolution in the 1950's was brought about by the incorporation of nuclear weapons, development of jet aircraft, ballistic missiles, and advances in electronics.

The 4<sup>th</sup> revolution began in the 1970's and 80's with the application of cruise missiles to theatre warfare, the use of satellites for reconnaissance, communications and global positioning information, stealthy aircraft and precision guided munitions. This revolution culminated in the Gulf War of 1991 where the enormous potential of the integration of weapons systems with information networks began to be realised.

The current, or pending, revolution in military affairs is predicated largely on the exploitation of new information technologies that promise an unprecedented degree of detailed and near-instantaneous data on battlefield conditions along with the ability to coordinate and execute battle plans with extraordinary precision and lethality. And, just over the horizon, according to the US Army, is yet another revolution based on advances in biotechnology and the development of non-lethal weapons.

Military analysts emphasise that a military technical revolution is not simply a matter of introducing advanced technology, but that it also requires an appropriate revision of military institutions and practices, and especially the training of professional soldiers. "In

1940" a recent US Army doctrine manual notes, "tanks, improved aircraft designs, and radios were available to both the French and the Germans. However, it was the Germans who adapted their organizations, procedures, and tactics to transform the trench warfare of WWI into the blitzkrieg".

Accordingly, the new Pentagon Revolution in Military Affairs (RMA) project has begun to examine how the US military services could be reformed to take advantage of new and emerging technologies.

Entirely new types of organisations (e.g. information warfare brigades) could replace multiple, redundant functions in the current force structure, potentially reducing troop requirements. Information technology developments (e.g. downlinking command information directly to the soldier on the battlefield) could also potentially enable layers of staff to be eliminated, thus flattening organisational structures. Advanced digital technology will enable forces at all levels to quickly receive orders, to exchange intelligence, to maintain electronic fixes on enemy and friendly forces, and to synchronise targeting. The efficient dissemination of information across the battlefield will maximise "situational awareness".

That the influence of this major shift in the approach to defence matters will also have a drastic influence on our own situation in South Africa, is clear to all. We are looking forward towards commissioning a whole array of new and modern hardware. We have experienced the downsizing of our military forces. The international scenario has all but eliminated the threat of an invasion of our territories by an unfriendly nation.

But with a smaller defence force, it is necessary to have a smarter defence force. Greater emphasis is going to be placed on leadership roles and the provision of a capable, well trained and well educated officer corps, capable of adapting to the complex social and the ever-changing complex security environment of the post-Cold War era.

Today's conflicts are more likely to be rooted in political, psychological, social and economic causes, than merely military considerations. From this it follows that military personnel should have a sound, basic knowledge of a variety of disciplines, that will enable military leaders and those under their command to think "beyond the battlefield".

I personally am convinced when I look at this scenario objectively, that the role of the Military Academy is going to be of far greater importance in the decades to come, than it had ever been in the past. Great demands are going to be made on you to deliver the high level and calibre of manpower needed to meet the challenges of the foreseeable future. In agreement with the tendency world wide, higher education has become part and parcel of the training and education of the modern military officer and strategist.

In this regard I quote Toffler, who said that "the new military needs soldiers who use their brains, can deal with a diversity of people and cultures, who can tolerate ambiguity, take initiative, and ask questions, even to the point of questioning authority". Toffler goes on to claim that "advanced education today, is more common in the military than in the highest level of business". The changed nature of war has meant that most advanced military forces

have placed an increasing value on **education** and **expertise**, and have become less reliant on brute force and traditional approaches as criteria for ensuring the national security and safety.

The changing nature of military missions and the increasing participation in peacekeeping and humanitarian aid missions has also meant that military leaders must be able to shift cognitively between applying coercive force and employing restricted force, between securing the interests of the nation and the interests of the international community. **Education** prepares officers to **lead** armed forces in such ambiguous situations.

The military officer of the future will have to acquire a broader perspective and increased sensitivity to the larger implications of politico-military policy-making. They will require a capacity for *independent thought*, contrary to the traditional military training that encourages a high degree of conformity. The shift will be from the **training** of officers (as had been done in the past), focused mainly on following orders, to the **education** of officers which will enable them to *think critically* and *holistically*, to resolve problems of human conflict, to be adaptive in today's complex strategic security environment, where many of the intangibles are no longer clearly defined and no longer according to the rule book.

Dertig jaar gelede het ek 'n konferensie op Stellenbosch bygwoon oor die "Opleiding van Ingenieurs". Die verwelkomingsrede was gelewer deur deur Universiteit van Stellenbosch se destydse rektor, prof HB Thom. Daarin het hy daarop gewys dat die tema van die kongres verkeerd was: dit gaan nie oor die opleiding van ingenieurs nie, dit gaan oor die opvoeding van ingenieurs aan universiteit. Hy het voortgegaan om die verskil te verduidelik – 'n beklemtoning wat my tot vandag nog bybly. Netso glo ek dat dit by die Militêre Akademie, vir die uitdagings wat die 21ste eeu aan u afgestudeerdes gaan bied, ook die geval sal wees. Dat die klem val op die **opvoeding** van offisiere vir die Suid-Afrikaanse Verdedigingsmag, in teenstelling met die **opleiding** van offisiere soos wat dit in die verlede gedoen was. Verdediging het 'n **wetenskap** geword (en daarmee bedoel ek nie slegs 'n natuurwetenskap nie, maar die woord "wetenskap" in sy breë betekenis). Dit sal u taak wees om wetenskaplikes te lewer op die terrein van die krygskunde vir die behoeftes van Suid-Afrika vir die eeuwenteling wat kom.

It was President Abraham Lincoln who said: "An investment in knowledge always pays the best dividends". As former Vice-Rector (Operations) of the University of Stellenbosch I have a clear idea what the annual cost amounts to of running a Faculty of Military Science. Quite frankly, given the total Defence budget, this expenditure is a minute fraction thereof, and I can think of no better financial investment to make in the future defence security of our country. But it is an investment that is not only justified because of the dividends it delivers, but because I believe that there is no alternative: it has to be done.

The education which the B.Mil degree provides is not only necessary because of the general academic development and intellectual foundation it provides, but also because it ensures that the behaviour of soldiers are governed by an inculcated set of *ethics* and *values* that orientates them towards societal interests, rather than personal or organisational self-interest. I foresee that the education being provided by this institution is going to be of increasing importance and value to our country and our people, and I wish you well in

meeting these challenges. This is underlined by the motto of the Military Academy: "DISCENDO ARMEMUS" - ARM YOURSELF THROUGH STUDY.

Die ou Romeine het 'n afskeidsgroet gehad wat ek graag ook wil gebruik as my afskeidsgroet van die Fakulteit Krygskunde en die Militêre Akademie:

"Si tu vales, ego quoque valeo" - wat dikwels gereduseer is tot "si vales, quoque valeo":

Letterlik beteken dit: "As jy gesond is, dan is ek ook gesond". Die vryer betekenis is: "As dit met jou goed gaan, dan gaan dit met my ook goed".

Meneer die Bevelvoerder, meneer die Dekaan, aan die Militêre Akademie sê ek dus: "Si vales, quoque valeo": laat dit met jou goed gaan, want as dit met jou goed gaan, gaan dit met my goed, dan gaan dit met ons land goed, en dan is dit goed.