

SOME ASPECTS OF THE TRAINING AT MILITARY ACADEMIES

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When the South African Defence Force established the Military Academy in 1950 in order to provide higher education for career officers, many eyebrows were raised at this innovative step. The Union Defence Force had, after all, just emerged as co-victors from World War II and managed quite well with an officers corps where degrees were conspicuous by their absence. There was, furthermore, a vague but widespread feeling that academical training was synonymous with pure 'theory', whilst war required 'practical' men with 'practical' experience. As many considered theory and practice to be mutually exclusive, dire predictions were made about the future efficiency of this 'army of professors'.

To many observers the past twenty-five years have produced sufficient evidence to prove that the establishment of the Military Academy was a wise step. Graduates contributed greatly to a higher standard of instruction at all levels of training in the South African Defence Force. Their ability to perform above the average on staff courses, etc was established beyond any doubt. Many of them were involved in the evaluation and introduction of sophisticated weapons systems where their academical background proved to be a great asset. They have also made a significant contribution to various management fields such as programme budgetting, personnel development, etc. It is therefore no surprise to find so many of the Academy's graduates in key posts of the middle and lower echelons of the South African Defence Force. Even the top posts are gradually being filled by the Academy's graduandi, and this despite the fact that its first students graduated barely a quarter of a century ago.

And yet one cannot escape the feeling that all is not well with our academical training scheme. If all were agreed upon the advantages of graduate training, one would have expected a significant and steady increase in student numbers with time. The graph below, on which graduate numbers are plotted

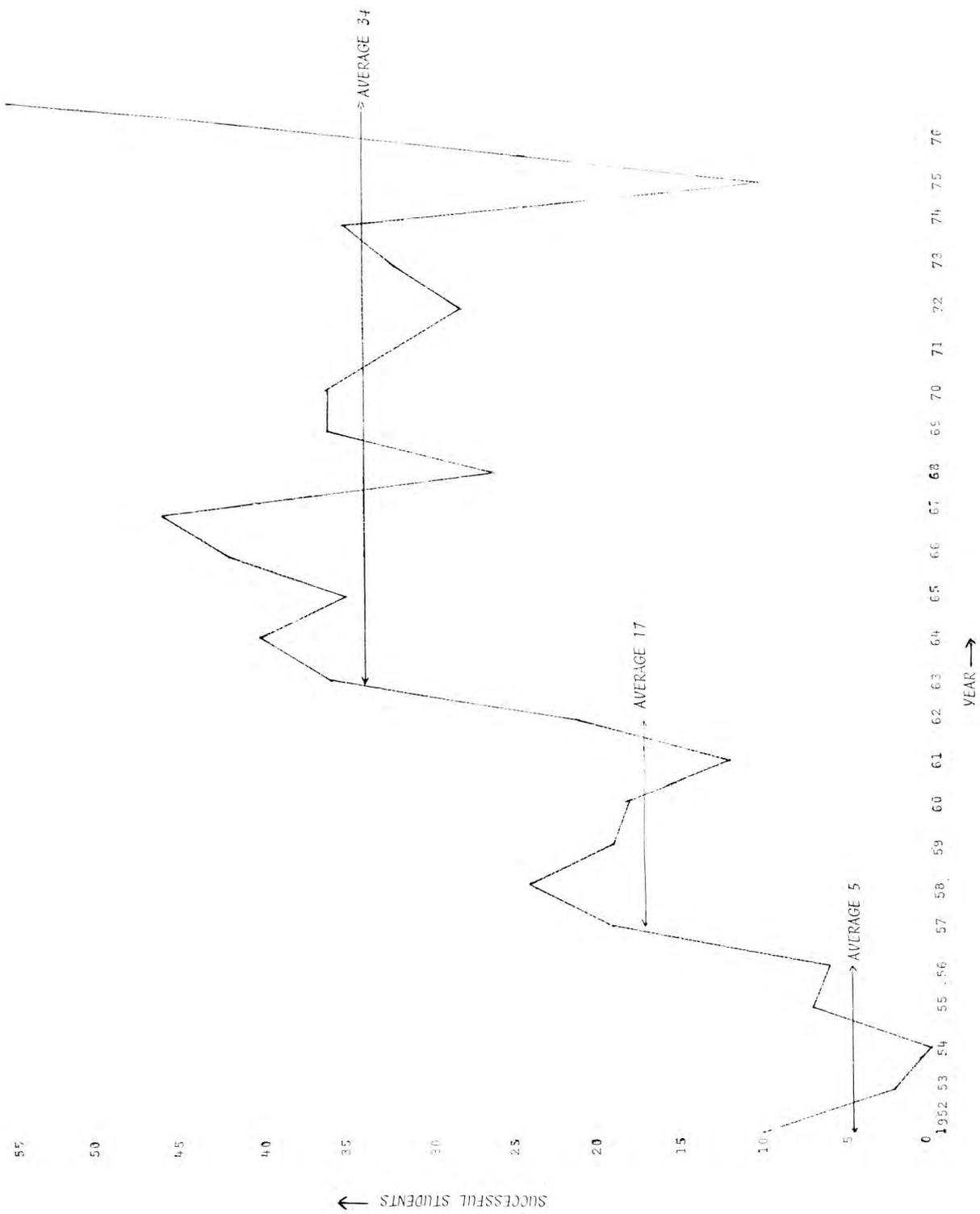
against time, does not reveal such a steady increase but shows, instead, three distinct levels of graduate output covering periods of 5,6 and 14 years respectively.

The first period covers the years 1952-1956, when an average of just less than 5 students graduated annually. In the second period, from 1957 to 1962, this figure was increased to about 17 students per annum, whilst the third period, covering the years 1963 to 1976, sees the figure increased to some 34 students. (The abnormally low and high figures for 1975 and 1976 can be partly ascribed to a change in the Army training system which caused some students to delay their enrollment for a year. These figures are therefore included in this period despite the fact that they do not appear to fit into the general pattern.)

Whilst many comments could be made about the apparently haphazard way in which the number of graduates varied over the years, I will confine myself to the fact that the last 14 years saw, on an average, no increase in student numbers. There was, if anything, a decline in numbers. One of the many factors contributing to this state of affairs must surely be the lack of encouragement given to prospective candidates by serving officers who are not convinced of the necessity of academical training for our future military leaders.

It would have been convenient to dismiss the latter point of view as bigoted, but since many of them have sincere and genuine reservations, such a course of action would be short-sighted. To mention just one argument propounded by this school of thought: it should be admitted that the three years required to obtain a bachelors degree does lead to a gap in the military experience of a young officer. In practical terms this means that the pilot graduating from the Academy finds himself with some 500 flying hours less than his fellow pupil pilot of three years

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ago. On the face of it, the proponents of this argument have a case, even if it is only valid in the short term.

The aim of this paper is not to argue all the pros and cons of graduate training for military officers all over again, since the subject is much too complex to be covered in a paper as short as this one. I would rather sketch some aspects of the origin and development of military institutions of higher education in the hope of discovering a pattern in the reasoning which led to their establishment and development. This could lead to a few guidelines for future thinking in this field.

Prussia was the first power to recognize that the increased complexity and scope of war necessitated institutions where its military officers could receive thorough and systematic preparation in the art of warfare.¹ The famous **Kriegsakademie** near Berlin was accordingly established by Scharnhorst in 1802, and was intended to be a military university for the advanced study of the science of war.

The Prussian reformers gave considerable thought to the contents of the courses, and eventually emphasized the desirability of both general and special education for their officers. Although intermingled at first, general and special education were separated later when it was decided to put even more emphasis on the importance of general education. The theory behind these reforms was summarised as follows: 'The military profession, like every other, requires a general school education intended generally to cultivate the mind, distinct from the subsequent special and professional education for which the former is the necessary ground work.'²

Amongst the many subjects offered were tactics, military history, science of arms, field and permanent fortifications, military and political administration and economy, mathematics, artillery, special geography and geology, staff duties, military jurisprudence, logic, physics, chemistry, literature, French, Russian — a clear indication of the wide field covered by this institution.

The results of the establishment of the **Kriegsakademie** were soon manifested in Europe. It was estimated that by 1859 some fifty per cent of the military literature of

Europe was produced in Germany. The results were not limited to the production of literature either, as witnessed by Lord Cardwell's remarks after the Franco-German war of 1870-1871: ' . . . if there is one lesson which we have learned from the late campaign, it is this — that the secret of the Prussian success has been more owing to the professional education of the officers than to any other cause to which it can be ascribed. Neither gallantry nor heroism will avail much without professional training.'³

France followed a little later when the **Ecole d'Application d'Etat-Major** was established at St Cyr in 1818. It was apparently not highly thought of and was never developed to a position of eminence in the French forces. There also appears to have been a lack of clarity concerning the form and role of such institutions in France for a long time, as a French military attaché in Berlin remarked in the 1860's that all French military educational institutions were only agricultural schools when compared to the **Kriegsakademie**.⁴ If Lord Cardwell's remarks referred to earlier are borne in mind, it comes as no surprise that French officers began organizing themselves informally for their own military self-education after their defeat in 1871. This led eventually to the establishment of the **Ecole Militaire Supérieure** in 1878, offering a two-year course for officers destined for higher command and staff positions.

In Great Britain the Royal Military Academy at Woolwich was founded in 1741 in order to instruct ' . . . people belonging to the Military Branch of this office in the several parts of Mathematics necessary to qualify them for the service of the Artillery . . .'⁵

Although the Royal Military Academy antedated the **Kriegsakademie** by several decades, its rather limited aim does not put it in the same category as the latter. However, at that time it was natural that young officers of the more technical arms should be considered to be in greater need of training than

1. S. P. Huntington: **The Soldier and the State**, (Cambridge Mass, 1957), p 48.
2. *Ibid*, p 40.
3. *Ibid*, p 47.
4. *Ibid*, p 49.
5. Brigadier Sir John Smyth: **Sandhurst** (London, 1961), p 28.



West Point, on the Hudson River.

those joining other regiments. By the end of that century, however, it became evident that British military inefficiency of the period sprang from the complete absence of any professional education for officers.⁶ The first step to correct this deficiency was the establishment of a Staff Training College or Royal Military Academy, Sandhurst as it was subsequently named. The curriculum consisted of the following subjects: geometry, plane trigonometry, theory of regimental and field fortifications, modern history, military drawing and the study of Eastern languages.

These British institutions did not, apparently, develop as desired, since as late as 1857 they were not considered on par with their Prussian counterpart.⁷ It took the impact of the Anglo-Boer War to convince the British authorities that the training of their officers had been to some extent on the wrong lines.⁸ A memorandum drawn up by the Adjutant-General expressed the belief that the great weakness in the system of education was the lack of enough practical work and training in the fighting duties of the soldier. A short while later the Akers-Douglas Committee was appointed to 'consider and report on certain matters connected with the preliminary education of Army candidates.'⁹

Like the Adjutant-General this committee also came to the conclusion that instruction should be confined to technical and professional subjects of a more practical nature. However, it stated quite clearly that this notion that cadets will already have completed their general education upon entrance to the College. In fact, great emphasis was placed on the requirement of English, mathematics, a modern language, Latin and general science as the basis of the qualifying examinations.

The requirement for a mix between military and academical subjects remained until the post World War II era. Since the amalgamation of Woolwich with Sandhurst after the Second World War the Royal Military Academy has provided a two year course for the training of regular officers, which devoted equal time to the military and academic. At first the two elements were mixed, but later the course was so arranged that a purely military term was succeeded by a full year of academic work with a military bias. This year was then followed by two terms of dominantly service training with an element of academic work. The whole system was

6. *Ibid*, p 46.

7. S. P. Huntington, *op cit*, p 50.

8. J. Smyth, *op cit*, p 124.

9. *Ibid*, p 125.

changed in 1972, when both military and academic training were drastically cut.

The first military academy in the USA was established at West Point on the Hudson river in 1802. Although its curriculum was developed in the context of discipline, athletics and professional traditionalism, it was way ahead of its time in offering first-rate engineering and mathematical education. Until 1835 it was, indeed, the only school of civil engineering in America, and it remained the leading centre of such instruction until the Civil War.¹⁰

After 1865, when other colleges were adding new courses and diversifying their interests, West Point felt that its objective — that of preparing junior officers for service — had not changed and that its curriculum did not require a change either. There was accordingly no adaption to the expansion of knowledge until the upheaval of World War I caused the Military Academy to look at its mission again. It was then realised that it had to 'provide a balanced liberal education in the arts and sciences, and to provide a broad basic military education'.¹¹ This aim remained valid until the post World War II

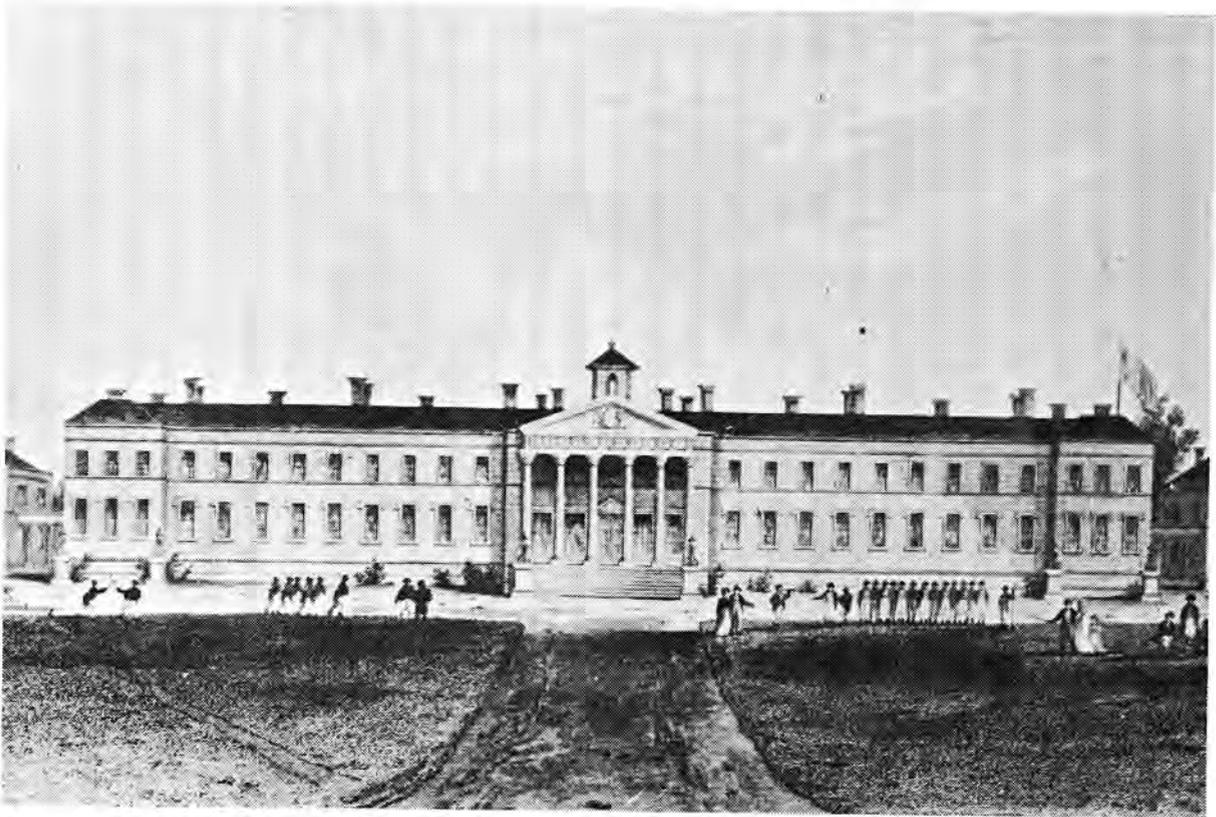
years when a Board of Consultants was appointed to examine the curriculum anew. With the exception of distinctly military courses, it was found that the curriculum closely resembled those of the larger technical schools. Approximately 40 percent of the curriculum was allotted to military training, whilst the academic training was divided on a 60 : 40 ratio between the natural sciences and the humanities. The Board was of the opinion that the course as a whole provided satisfactory balance between military training, the natural sciences and the humanities.

The US Naval Academy at Annapolis developed on more or less the same lines as West Point. Shortly after it was founded in 1845 it instituted a four year course in which academic work was heavily emphasised. All sea training was done during the summer recess periods. The quality of its work was recognised when the Paris Exposition of 1879 awarded it a diploma for 'The Best System of Education in the United States'.¹²

10. S. Forman: **West Point**, (New York, 1951), p 74.

11. *Ibid*, p 217.

12. **Annapolis: Unofficial Directory and Guide**, (San Diego, 1974), p 9.



Sandhurst, the Royal Military College c.1830.

The Naval Academy of today continues the tradition of excellency which it established a century ago. Since Congress authorised it in 1933 to confer a Bachelor of Science degree on its graduates, it has become much more than an excellent professional training establishment. It is an academic institution of higher learning providing both a broad education and in-depth study in selected subjects. The former is achieved by insisting that each midshipman satisfies certain minimum requirements in the humanities and natural sciences. The latter is attained by majoring in one of 27 subjects, some of which are: engineering (general, aerospace, marine, mechanical, electrical, etc), mathematics, analytical management, operations analysis, economics, history, European studies, Latin-American studies, Soviet studies, etc.

The South African Military Academy was established in 1950. Some of the objectives aimed at with its establishment were the following: to put officers' training on an equal footing with the training of professional men in civilian occupations; to cope with ever more complex defence apparatus and weapons; to raise military training in South Africa to the same level as that of overseas military establishments; and finally, to carry out research in military and related fields.¹³ Since these objectives demanded a high academic standard, the Academy was affiliated to the University of Pretoria at first.

It was later brought under the aegis of the University of Stellenbosch and eventually became that university's Faculty of Military Science, based at Saldanha.

Right from its inception the military authorities insisted that the courses offered should have a military bias where possible. The first courses to be 'militarised' were history, geography and law, but very soon physics and economics were added to this list. Gradual expansion has brought the Military Academy to the stage where it now offers, in addition to the courses mentioned above, the following: political science, mathematics and special mathematics, public administration, aeronautics, nautical science, accountancy, auditing, business economics and computer science.

This short sketch of the development of some

military academies and of the subjects included in their curricula, calls for a few comments. The first is the fact that all these institutions have insisted or are still insisting on some general education for their students.

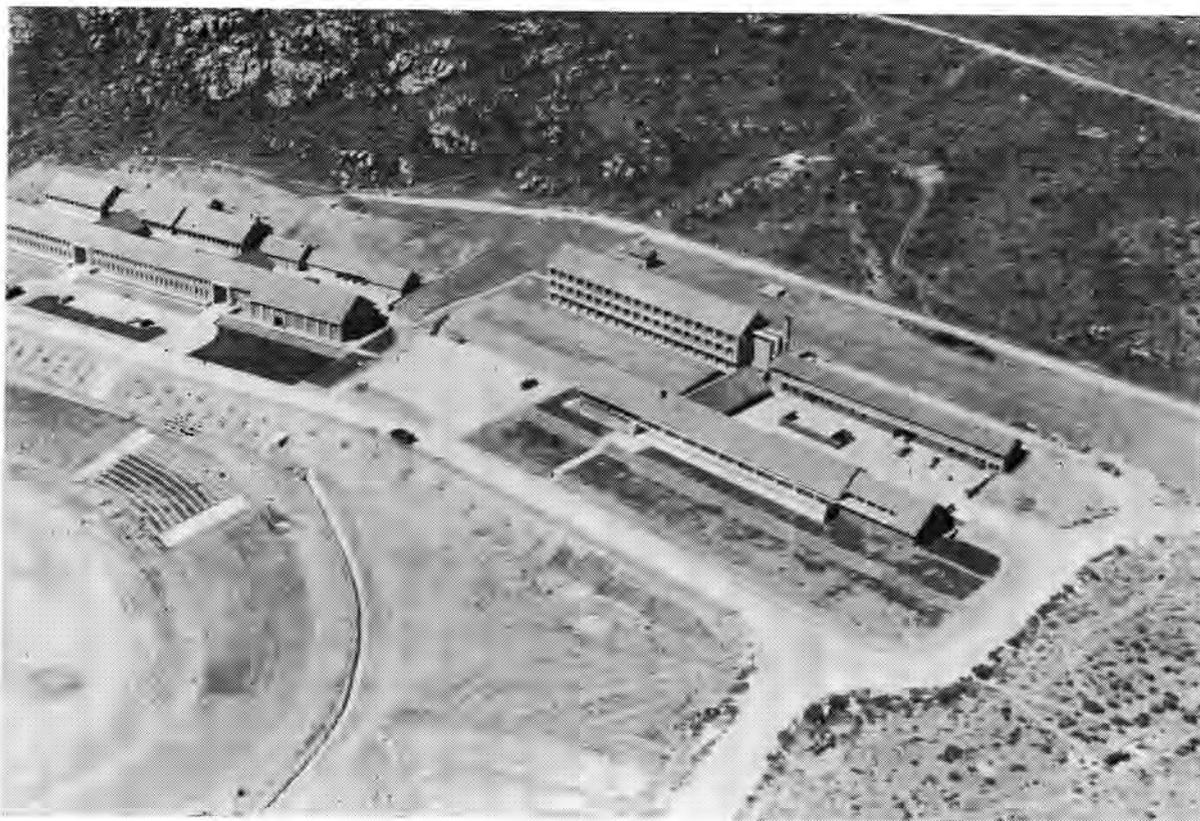
The geology offered by the **Kriegsakademie**, the Latin specified for the entrance examination to Sandhurst at the turn of the century, the study of the peoples and cultures of the Far East at Annapolis today — none of these fields of study have a direct bearing on the profession of arms. On the face of it, the study of these subjects by a professional officer could appear to be a waste of time. Closer investigation, however, will reveal many valid reasons for the teaching of such subjects at military academies. I mention only one very briefly.

Professional officers are exposed to much more than strictly military matters. A glance at the role of the armed forces on the campuses of American universities in the sixties, or in Northern Ireland, or even in South West Africa at this very moment, will confirm that the horizons of professional officers extend to the broader realms of social, economic and even political issues. Even very junior officers may find themselves in situations calling for tact and understanding instead of a recourse to arms. By summarily dismissing as irrelevant all subjects which do not have a strictly military application, we admit that we do not understand the role of the military officer in modern society.

A second point that emerges from this sketch is the importance attached to the natural sciences such as mathematics and physics. These subjects may not be directly applicable to the science of war as such, but they are certainly applicable to the tools of war. Furthermore, as sophisticated weapons are becoming more widely used by the introduction of light-weight ground-air and anti-tank missiles, the necessity of a thorough grounding in these subjects will be more widely felt. Instead of rejecting them because they may not be required every day by the military officer, much more emphasis will have to be put on the teaching of these subjects in future.

We should look, finally, at the study of war itself. Most of the institutions mentioned

13. *Military Academy 1950-1975*, p 2.



The Military Academy, Saldanha.

offer some form of military history, war studies or strategic studies. Despite some traditional military conservatism towards the value of academic study, the military accept generally the fact that a theoretical study of war will provide officers with a clearer understanding of the nature of conflict and their profession of arms. Those who do not subscribe to this point of view forget that military officers, unlike other professional men, cannot practice their profession except in time of war. They also ignore the fact that theory is not a lot of irrelevant knowledge, but is actually a collection of practical experience further developed by man's ability to reason. I submit, therefore, that there is more than ample justification for the theoretical study of war itself at these institutions.

It was stated earlier that the aim of this paper was not to argue all the pros and cons of academic education for the military officer all over again, but rather to paint a picture of the development of military academies in the hope that it would reveal some guidelines for future thinking. I must not, therefore, fall into the trap of going outside this framework by arguing the case for

academic training. However, since the need for better education for military officers was first recognised nearly two centuries ago, technological advances have made the art of war infinitely more complex. It follows logically that today, more than ever before, a very sound basic knowledge of a variety of disciplines is required if a military officer is to have a thorough grasp of his profession. Basic scientific knowledge, as opposed to applied knowledge, can never be career directed. In the short term, therefore, the gathering of basic scientific knowledge may appear to be a waste of time and effort to the officer struggling with practical problems of the day. In the long term, however, it is found to be indispensable for the scientific analysis of problems, the evaluation of complex equipment, the managing of acquisition programmes and budgets — in short, basic knowledge becomes indispensable for the efficient running of a complex military organisation. We should, therefore, never make the mistake of jeopardising our long term aims by satisfying our short term needs. Only when this point is understood, will the vital role of military academies become clear.