

University VIENNA and
National Defense Academy VIENNA

Academic Studies for Officers

A Central European Perspective

(Presentations of the First International Conference in Vienna, 15 – 19 March
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Wolfgang GREISENEGGER

Welcome Address

Ladies and Gentlemen,

I am happy to have been invited to this conference, but it is very typical for Austria that its military and civilian institutions are not very close. Due to my age I was not liable for service with the Austrian Armed Forces [of the Second Republic]. There are many who did not serve and this holds the danger of University and National Defence Academy operating independently from each other. It is not only an economic question which leads us to join our efforts. I think we also have to live up to a democratic policy. A few weeks ago a very serious avalanche accident occurred. This made people aware of the acute shortage of suitable military helicopters in Austria. Everyone knew about this deficiency, and this issue was on the agenda of several budget meetings. Still, nothing happened. Now after the accident and a public outcry, the situation has changed in no time. No wonder there is consensus on requirements where national defence is just part of. Co-operation between the university and military training institutions might help resolve or cut short similar communication problems. I think the idea of a joint training programme and mutual recognition of studies would be a major step towards a democratic society that is aware of the importance of a well functioning national defence system. Our plans for joint training and graduation are just beginning to take shape, and I hope this conference will yield more ideas, of which I am sure they can also be integrated in our planning because our project is still in the making. I hope our plans will materialise shortly; I am repeating this for policy reasons.

Ernest KÖNIG

Welcome Address

It is my pleasure to welcome His Magnificence Professor Dr. Greisenegger and General Solaini, Commandant of the Italian *Center for High Defense Studies*, and you, ladies and gentlemen. Eight nations followed our invitation. At first we thought only five or six would respond. This signals general interest. I recall a similar meeting we had here some 2 1/2 years ago, when informal talks on the topic of this conference took place during a symposium on security policy. Today's event may be considered a "follow-up" to the conference of October 1997. Without jumping to any conclusion, I should think this seminar serves the following three purposes:

- to pass on information, in the first place;
- to make use of other nations' experiences, and
- to establish a common platform for further action.

Questions, such as the current situation and its consequences, our roles and subsequent actions to be taken, will vary from country to country. With respect to our problem, let me say the following:

- the question of training officers at university level is of socio-political relevance, because it is to be seen in connection with the status of the officer in society. Some groups are not at all interested in raising that status. Serious opposition, however, is within our own ranks. It is widely believed that training must concentrate on teaching the skills required to beat the enemy. Therefore, any academic training of officers would therefore be more than just counterproductive. So far the training of officers was excellent, and generally speaking, this narrowly focussed military training has been a lot better than civilian university training.
- Meanwhile, the overall situation has become more complex. The only certainty is the fact that many things are uncertain. The development which is to take place now and in the future will be dynamic and will increasingly require flexibility.

As the result of this development, an old and traditional profession will have to change. Today's tasks will only be a fraction of tomorrow's challenges. It will not be enough to think in purely military terms; we must understand the political, economic and other consequences of our actions and integrate these into our courses of action, which means that flexibility will be required. This may occur in missions, such as assistance operations along the border, where traditional military skills may not suffice. Many problems can only be dealt with an academic background and academic methods. The results also entail a socio-political aspect: Even if one tries to ignore this phenomenon, civilian and military tasks no longer remain strictly separated. Society is changing faster and faster, and the integration of the military in the civilian education system is an absolute must. Therefore:

- A new definition of our mission is needed. In Austria, some years ago, we still distinguished between comprehensive and military national defence. Today, when discussing comprehensive security we still talk about military defence. Nevertheless

it would be better to call this the military component of security policy with two main tasks:

- The first is to secure stability in the respective country. To do this we need a kind of security management. We always talk about crisis management, and this is not enough in this connection. National security management and a joint understanding of command and control are needed.
- The second objective results from the growing number of international missions. These missions are creative operations whereas in the past they were of a rather defensive nature.
- Finally, a set of values must be included. It rests on EU principles, the foundations of our democratic constitutions, human rights, democracy, and freedom.

The following measures may be taken:

I believe that university training is a must for military officers. The first step in this direction in Austria, i.e., college-level courses [Fachhochschule], will be discussed during this conference. Officer training must be based on three principles:

- 1) a scientific basis,
- 2) the exploitation of experiences, and
- 3) the encouragement of critical thinking. This is not always welcome in the military organisation, but it is required to handle the tasks of the future.

In this connection it is very important to link academic and military content. I think there is hardly any difference between a modern staff college and a military university. Still, and this was one conclusion of our last meeting, we should not aspire to a doctorate in military science. Where this has not yet been the case, I think we must thrive for the previously described academic training, because we need to make the officer profession more attractive. Why is this necessary? Considering the complexity of the task, only the very best should be in command and control. To achieve this, we need appropriately qualified instructors.

On the whole there are some requirements for our academies. They need a scientific basis, they must be accredited, and they must also be the centres of military training in their respective countries to ensure that their efforts remain focussed. In this context it is very important to maintain military professionalism. By taking this course of action, officers will be highly qualified, and this will be recognised by society. I am quite aware that the conditions will vary from country to country. Nevertheless, if we are successful, there will be a wider basis for recruitment which in turn is needed to make things happen. Officers will have the opportunity to change their jobs over the years as this is already the case in other countries, and to communicate these thoughts to society. This leads to a much higher acceptance, not only in academic circles, but also at the labour market. We are here today to work together and to further deepen our co-operation.

Gernot ALBRECHT

Opening Statement

People quite often consider the new and the unknown as a threat, and therefore reject it. Particularly officers with a conservative and traditional attitude tend to consider changes are dangerous, because they are afraid that this could be a threat to the ideals of the profession. The Austrian Armed Forces of the Second Republic as the successor organisation of the B-Gendarmerie, is undergoing socio-political changes in the field of military studies. The reason is that the Theresan Military Academy is now authorised to award its students the academic degree of Magister (Fachhochschule) [FH] after completing their studies. Since 1998, these studies have been conducted as Fachhochschulstudiengang [academic studies] in military leadership, supervised by the Fachhochschulrat [accrediting commission]. This clearly shows that officers consider their studies to be part of the Austrian and developing European higher education systems. Therefore, it was the Theresan Military Academy at Wiener Neustadt which gave reason for this conference. The National Defence Academy is now called upon to set up academic studies which are based on previous military education. There will be a demand for doctorate courses by the time the first officers graduate from the Military Academy as Magisters (FH). Therefore, we invited you to this international conference at the National Defence Academy in Vienna from 15 to 19 March 1999 next to other events, with the intent to look at academic education in neighbouring countries, to compare these as far as possible, and to draw conclusions.

The publication of these contributions to the conference is based on conference papers and presentations in German and in English. To analyse academic officer studies in neighbouring countries seems to be the beginning of a new research activity. It could have been a comprehensive one with the help of the Slovenian delegation who unfortunately were unable to attend. As far as Euro-Atlantic initiatives are concerned, the mutual recognition of studies is becoming more and more important.

Meanwhile - December 2000 - with support of the University of Vienna a new kind of academic studies for participants of the general staff course (duration six semesters) has been established: Individual Academic Studies "Senior Leadership". This Higher Education has a duration of eight semesters and completed 40 % at the University and 60 % at the National Defence Academy.

Armin A. STEINKAMM

The Bundeswehr University [UDBW]

First let me say how much I appreciate your initiative to organise this conference. As far as I know, and without quoting General König, this conference is the first of its kind in central Europe and also within NATO on the subject of academic officer training in and for the armed forces. This is quite astonishing, because in NATO we have had a strategic concept, a joint command structure, joint armament planning, and special commissions, but also a large number of committees not even insiders are fully aware of, for many years. Certainly we do not have any committees dealing exclusively with the academic training of soldiers or officers. Another matter to think about are multinational units. The German Bundeswehr is quite experienced in this field, because except for a number of territorial units and organisations, the entire German army is integrated in multinational units. These are the EUROCORPS, the German-Dutch Corps, the two U.S.-German Corps, the German-Belgian-Polish Corps which is being raised right now, and one more corps. These corps are doing very well. Co-operation is good, but there are also some problems which are quite often overlooked. We find out about them in reports by the parliamentary commissioner for the armed forces. These issues prompted the former Defence Minister, Mr Rühr, to ask the Advisory Council on Civic Education and Leadership to draft a recommendation concerning multi-nationality, civic education and leadership, and their legal implications. This made it necessary to look into different legal and particularly defence law systems as well as command structures of various military systems, and refers to, - as we Germans call it -, civic education and leadership, co-operation in multinational staffs, and particularly points arising when trying to clarify questions of control, or rules for individual participation and complaints, and several other matters. In the Advisory Council on Civic Education and Leadership we are confronted with the question of how to harmonise different national legal systems. Naturally, this is only possible if the legal systems of partners are known, and this has not been the case so far. This is why the Ministry of Defence has requested a study to compare the military legal systems of NATO and non-NATO states. We are dealing with different command structures and different service regulations, which, amongst others, should be harmonised. However, we are not dealing with questions of joint training, wherever this is possible or even desirable. In many cases we move on uncharted academic grounds. In comparison to the visions of the 1954 treaty on joint European defence about the creation of a European defence force, the current co-operation among EU members seems to be a humble beginning. Bearing this in mind, it is no surprise that our conference topic is something new at the international level and very new for the central and eastern European nations. Therefore it is of great interest for the German Bundeswehr, and its universities and command and staff colleges, to learn about officer training in other countries, the academic outlook, and how this training is organised. Let me shortly describe how the Bundeswehr universities came into being, why and how they are organised as is, and how we are faring.

In the late 60's recruitment problems of the Bundeswehr, which had been known for some time, became acute. There was a shortage of 26,000 NCOs, 3,500 lower ranks, and some 2,600 short service officers. This shortage resulted from a government ordered increase of the Bundeswehr manpower to 495,000 all ranks to strengthen the weak conventional NATO forces and thus to avoid the employment of nuclear weapons. Additional officers were needed, but it was impossible to reach the required numbers.

During the 60's the need for reforms had developed because of the rift between a Bundeswehr tied to long-standing traditions and a society with changed values in nearly every field after war and national socialism, particularly at government level and at the universities. These reforms were considered essential, particularly in the field of educational. Whoever is faintly familiar with German history will know about the student unrest of the 1960s. They will also remember the so-called 68s, a leftist movement, who were trying to reform the universities if not the entire state. In that situation, the then minister and later chancellor, Helmut Schmidt, set up an education committee tasked to develop a plan for the restructuring of the personnel of the Bundeswehr and in particular how to attract the required staff. This committee submitted proposals for new education and training programmes for the armed forces which largely contributed to the establishment of the Bundeswehr universities. For the German military this was a radical new approach. It was not just a matter of creating attractive officer careers to satisfy recruitment requirements. It was also a way of giving short term commission officers with appropriate training and education the chance to return to civilian professions after 12 years of service. The programmes which had been developed and turned into practice after 1963, led to the founding of the [Bundeswehr] universities in Hamburg and Munich.

In general, these Requirements are:

On the basis of a 12-year minimum contract, military training was not to exceed 40 per cent of the entire period of service, i.e., about 5 years. Assuming that 2 years would be needed for military and specialist training, about 3 years were left for other studies. As a large number of Bundeswehr officers are on short commissions, i.e., some 70 per cent, the study programme was designed to prepare for both the officer and a future civilian profession. Therefore, the military and the civilian university programmes had to be compatible. When selecting study programmes and contents, military requirements also had to be met, and therefore the recommended courses had to include pedagogical and sociological subjects. Pedagogical studies were to provide the students with an insight of pedagogical issues they might be faced with during their future career. Sociological studies were mainly linked to a future officer career. They were to add historic, political, ethnic, economic, legal and technical scientific dimensions to the future profession. In addition to the qualifications for a civilian profession and these pedagogical and sociological subjects, non-academic training and education were also provided, such as foreign language studies, advanced military training and, naturally, sports.

As civilian universities could not offer the required 3-year courses with the necessary pedagogical, sociological and specific military elements, and the Bundeswehr was not guaranteed an annual quota of some 1,500 military students, the defence minister decided in

1971 to establish Bundeswehr universities. Similar to Anglo-American institutions these universities were laid out as campus universities. In addition to spacious lecture halls and laboratories, they provide modern accommodation, sports grounds, libraries, dining halls and many other facilities on campus.

The Legal Status of the Bundeswehr Universities:

UDBWs, as they are called, are officially accredited education centres under the patronage of the defence minister. UDBWs are subject to the legal stipulations of the respective Land. For Munich, this is the Freistaat Bayern [Bavaria] and for Hamburg the Land Hamburg. These two Länder, together with the federal minister of defence exercise direct control. The reason is that educational and cultural affairs in Germany are matters of the Länder, and not of the federal administration. In officer cadet and officer training, the Bundeswehr universities support academic progress by research, education, and studies. The university statutes, as well as the rules for examinations, graduations, and the required qualifications of lecturers, must be approved by the respective culture minister of Hamburg or Bavaria. The minister of defence appoints the president and professors of the universities by following standard appointment procedures. It is important that appointments are approved by the respective minister of culture. In 1978 the Bundeswehr universities were given full university status. Later on I will discuss lessons learned.

Admission Requirements:

Only officers and officer cadets who passed the entry exam are admitted to UDBW. Students must also meet local admission requirements, i.e., the 'abitur' [high school leaving certificate] for science courses, and a technical 'abitur' for college-level courses offered in Munich in addition to the academic courses. According to their ambitions and provided they had received an appropriate recommendation for the selected course during the entry examination, students may freely choose among courses.

Course begin varies according to the three services. The army releases prospective students to the UDBW after completing their military training and several months of service as platoon leaders, whereas the navy and the air force send their staff immediately after passing the officer exam. At present, UDBWs offer 8 university courses in Hamburg, and 9 at Munich university. In Munich there are also three college-level courses available.

Organisation of Studies:

Courses are organised in 12 week semesters, i.e., three month lecture periods, because of the requirement to complete our courses as part of the five-year officer training within a period of 3 years. Normally, studies take 3 ¼ years, i.e., 10 semesters in total. The courses always begin on 1st October. The vacation period is from 1st July to 30th September, during which students undergo compulsory and practical training, perform military tasks, prepare for exams, and go on annual leave. Students must gain pre-diploma qualifications within two years, and this includes possible re-testing. The diploma must be obtained by the end of the fourth year, otherwise the student will be dismissed. In other words, students may fail only one exam,

otherwise they have to return to their units and leave the Bundeswehr prematurely after one or two years. The organisation of the university courses and training is very strict, but students are not obliged to attend lectures. In addition to lectures, workshops and exercises in small groups allow for intense studying. We talk about a small-group-concept. This means: My introductory lectures are normally attended by some 30 students, and indeed my faculty does not have many more. For main studies, some 10 or 12 students attend the lectures held by professors, as a rule. Certainly, working in such small groups is much more successful than working in large lecture halls with some 100 students. In comparison with other universities, this comprehensive course programme requires officer students to concentrate and have the will to learn. For this reason their finances are fully taken care of. This means they receive their full salary according to their rank while they are studying. They also have other benefits, such as free medical treatment and good standard accommodation on campus. A special UDBW institution is 'student care', a military element responsible for military training, accommodation and welfare of the students. Academically trained officers advise on studies and sometimes hold medium-level university appointments.

UDBW Capacities:

The annual intake of the two universities is around 1,500 students. In Hamburg there are 2,070 openings, and 2,500 in Munich, 585 of which are reserved for the Fachhochschule [college-type studies]. Altogether 4,570 students may be trained at the UDBW. There are about 290 professors, and an appropriate medium-level organisation to look after small student groups. Some 3,900 officers have been studying at the two universities by the end of last year. The number of students is expected to rise over the coming years because of larger staff recruitment, and this will leave no spare capacity.

Research:

UDBWs conduct their research work just like any other university. Research is conducted independently and without the ministry of defence specifying the topics. Many third-party research projects which are sponsored by institutions such as the Deutsche Forschungsgemeinschaft, Stiftung Volkswagenwerk or the EU, are also conducted at the universities. Naturally there is close co-operation with the MoD in military research and development as well as defence industries. Research results are published in periodical reports. The 1998 UDBW budget provided 21 million DEM for third-party research.

International Co-operation:

The UDBWs are in scientific contact with other universities all over the world. Proof of the growing international co-operation in research, lecturing and studying are the many teaching assignments and guest lectures given by professors of foreign universities at the UDBW and vice versa, and student exchanges.

For many years, the UDBWs have maintained particularly close economic and friendly relations with central and eastern European nations. This is just the beginning of fostering contacts and should be further expanded. Right now we are in the process of concluding a

partnership agreement with Miklos Zrinyi in Budapest. From the very beginning, the Bundeswehr universities have been open to officers from abroad who are sent to Germany. This is part of the so-called military training assistance, and international students who study in Germany come from as far as Indonesia or Brazil, but there are also Europeans and Africans. Currently, 63 students from 24 nations are studying at the Bundeswehr universities, and a further 25 international students are preparing at a college course for studying at the Bundeswehr universities.

University Statistics:

Since their foundation in 1973, some 33,000 officers have been studying at the Bundeswehr universities. 20,000 officers completed their studies successfully. LtCol Keller is one of them. You will note there is a relatively high drop-out rate. The majority of graduates have already left the Bundeswehr and successfully changed to civilian professions. Just to give one example: One of my former students was recently appointed head of a department of the Siemens company with a turnover of 3 thousand million DEM. This is really phantastic, and he got the job through a regular vacancy offer. This shows that industry is considering UDBW studies something special. Since the UDBWs have gained the right to graduate students and qualify lecturers in 1978 and 1980 respectively, the universities have successfully graduated some 1,000 students and qualified 50 lecturers.

Finally a few words about lessons learned by Bundeswehr universities with respect to course programmes and the condensed curriculum. Looking back over 25 years of teaching at UDBWs with some 20,000 successful students, one can say that not only the programmes which are part of officer training, but also the courses offered and studies as such are an absolute success. The semester arrangement, the small group concept, studying and living on the campus, excellent basic facilities, intense caring for the students by academic staff, as well as the student organisation, as well as the financially secure environment for the students made it possible to complete the courses within the standard time of 3 ¼ years, or 4 years at the most. The defence minister's goal to find an economic balance between officer training and service, was achieved. After the completion of their studies, all UDBW trained officers performed very well as military leaders, instructors, trainers and highly qualified specialists at all levels and in all organisations. Career analyses of UDBW graduates who already left the forces demonstrate that the university courses plus leadership qualifications acquired during active service provide a solid basis for a successful change to civilian professions. Earlier fears by academic staff that the semester system would not allow enough time for scientific research proved unfounded. Research grants and annual funding of UDBW universities by third parties worth millions are proof of the high quality of German university research work. By introducing pedagogical and sociological courses in addition to the technical courses, the universities had added quite early and at a rate of some 10 per cent, interdisciplinary subjects to the curriculum. In doing so, they took the lead in the German university system. Interdisciplinary subjects were only defined and mandated in the recent examination regulations issued by the conference of federal ministers. This happened only very recently, although interdisciplinary subjects had been demanded by scientific bodies and other

associations for many years. Compulsory foreign language training in addition to other studies serves to prepare officers for additional Bundeswehr operations and their future civilian role in an international environment. Some changes of the courses selected and of the studies as such also affected the UDBWs. During the last years, some changes have taken place. Whereas some 10 years ago about 58 per cent of students had chosen technical subjects, this figure decreased to 42 per cent, with 58 per cent of the students opting for humanities and economic subjects at an equal rate.

For some time the UDBWs, too, have noted deficiencies in mathematics with new students. This resulted in a growing number of dropouts among beginners. Meanwhile, attempts are being made to improve mathematics standards through correspondence courses before enrolment and tutoring during the first semester. Finally a few words on future requirements and challenges the UDBWs will be faced with. The main goal of UDBWs must be the continued provision of high level, up-to-date academic training despite dwindling resources and staff reductions. Also in the future, UDBWs must prepare students for their job as career or short-term career officers in a permanently changing military world, as well as for a civilian profession in an increasingly global economy. Since their foundation in 1973, the universities have been supporting and putting into practice important academic reforms which have increasingly been the subject of public and political discussion and are partly reflected in the latest legislation on university training. These are, for example, the 3 ¼ years regular study period, the sanctions for exceeding the maximum study period, selection of officer candidates, and aptitude testing for the desired field of study, a compulsory interdisciplinary approach, or foreign language studies, all of which has been German university standard for some 25 years. In the past UDBW curricula have always been re-examined, improvements made, and obsolete items dropped. New and attractive courses were introduced, such as the *Wirtschaftsingenieur* [economic engineer], the interdisciplinary course for political and social science, the master's course in history, or courses in political science or forestry. In the technical field, disciplines like environmental technology, environmental compatibility and environmental protection have gained a decisive influence. Economic science courses increasingly deal with modern management, marketing, controlling and leadership. Decisions at faculty meetings and new examination regulations issued by the conference of ministers are quickly adopted. According to UDBW opinion, course programmes should concentrate more on fundamentals and methodology. At the same time the interdisciplinary approach is to be intensified to increase the share of compulsory interdisciplinary subjects in technical courses. This means that, studies have to be better integrated in an economic, cultural, social and technical context. Training and research on the international level must keep up with the global economy, and, if needed, new courses or programme combinations will have to be developed, which could also include linguistic and cultural elements to meet future technical, social and economic challenges.

Conclusion:

Considering the past 25 years, we can say with pride that the UDBWs have found a recognised place in the academic system of the Federal Republic of Germany. In the so-called

ranking lists where from time to time all German and international universities are compared and assessed according to their merits in teaching and research, the two Bundeswehr universities have for quite some time been among the best. Graduates have proved themselves to be efficient and sometimes critical officers, and performed very well in all fields and appointments. As the result of the successful match of officer training and technical studies, graduates who have left the Bundeswehr generally have found demanding civilian jobs. The course programmes and length of studies encourage officers not only to maintain, but also to improve professional qualifications, fostering the way to a future civilian job. UDBW studies and programmes are the main reason for attracting many to become officers and to take up an officer career. Thanks to the success of the Bundeswehr universities, the academically trained officer, be he a career or short-term career officer, has become a generally accepted reality.

Jörg E. P. KELLER

Academic Officer Training within and for the Armed Forces – a German Perspective

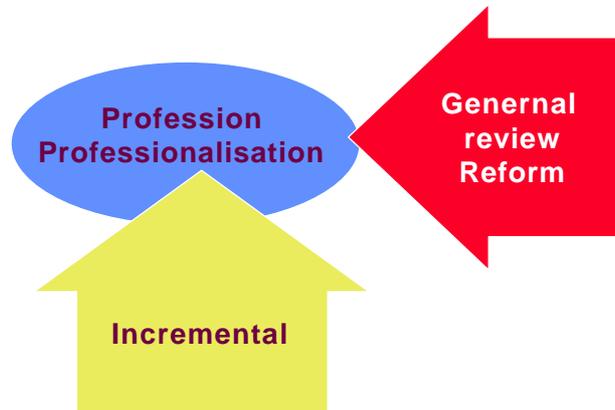
Introduction

For more than 150 years the argument has been going on in Germany whether officer training should be in part academic. During the first half of the 19th century, when industrialisation began to change the country's social fabric, the military profession underwent some changes, too. While in earlier days the birthright of nobility included the undisputed right to hold certain positions in society, professions developed which could only be filled and practised by having appropriate training, know-how and expertise. The 'ascribed status' had changed to an 'achieved status', and a process of professionalisation began in nearly every field. This was also true for the military and can be read in articles on Prussian and German army reforms. For German officer training it is of considerable significance that the Prussian nobility and officers who had the main say in the German military system, opposed education. Even today this delay in modernising and professionalising the military can be noted.

Professionalisation

With the help of the German dictionary for sociology I define professionalising as "specialisation and scientific approach of professions in the course of growing demands on technical knowledge which is needed for practising a profession". Together with this required level of knowledge, there must be a codification of training courses, as well as exam procedures, and a codification of ethic standards of professions. The professionalisation of officers can, in my opinion, be achieved in two ways:

Professionalisation of the Officer



- one option is an incremental optimisation of existing training programmes, in other words, continuity;
- the other option is a general review the existing system and a rational training scheme to meet future requirements.

The German Bundeswehr opted for a combination of the two, which I am going to discuss later.

Preliminary Remarks:

- By academic training in this context I understand university or technical studies with civilian curricula, and not the training at a military academy.
- I only want to speak about the German approach, because I am convinced there is no international panacea to handle this matter. Therefore my claim is to argue rationally, but this may not be valid outside Germany.
- As far as my position is concerned, I must admit I am convinced that officers should be academically trained. This will be the underlying basis of my presentation, even if I will try to be critical of my own point of view.

Two Approaches to Training

By quoting my former colleague, Ms Seifert, who wrote in her paper "Militär - Kultur - Identität" [Military - Culture – Identity],

"The military profession is a product of society. Its specific character depends on historical, cultural and national circumstances. Detailed patterns will follow the prevailing social and political environment (...). Because only in a given environment soldiers can develop a professional concept and identity. The status and self-understanding of a soldier are not just the result of so-called functional requirements",

I can offer you a good slide to explain the two approaches because they contain two different structures and two different mechanisms.

The Traditional Approach

Professionalisation of the Officer

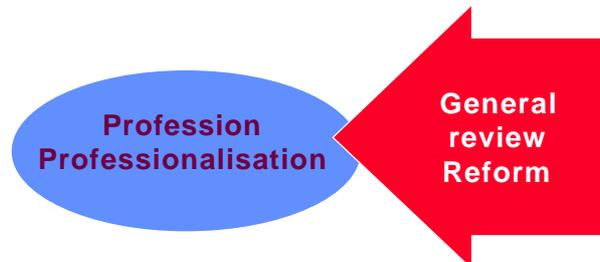


- The essence of Soldering is fighting and loyalty to the sovereign, accepting values like:
 - "service"
 - "performance of one`s duties"
 - "subordination"
 - "discipline"
 - "order"
 - "tradion", and
 - "obedience"

The traditional approach is retrospective. It is based on experiences made in the past, and is a continuation of tried and tested principles. For Germany this means that the image of soldiers persisted through many eras and several armies, and essentially remains the same. One main objective is to preserve this image against the trends of time. The essence of soldierly virtues is to fight and to remain loyal to the sovereign. By accepting "values such as >servicing<, >fulfilling one`s duty<, >willingness to subordinate<, >discipline<, >order<, >tradition< or >obedience<, all known as military virtues, the soldier is socialised in the army. The internationalisation of these values is considered to be the foundation of a functioning military. In this sense, traditional officer training must aim at handing down professional skills, and educating officers towards the accepted international values.

The Reformist Approach

Professionalisation of the Officer



- Which battle scenario will the soldier encounter?
- In which social environment does the soldier live?

The reformist approach is based on changes in society and stipulates that there are no lasting solutions. Each period has its own challenges and solutions.

Therefore one must ask:

- Which battle scenario will the soldier encounter?
- In which social environment does the soldier live?

Professional requirements may be formulated on the basis of these rational analyses, and result in a training programme. There is no need to re-invent the wheel because already existing and acceptable elements can be used; this is obvious from an economic point of view.

Assessment of the two Approaches

Professionalisation of the Officer

„Am I doing things right?“
„Am i doing the right things?“



The assessment of the two approaches is quite easy with the help of the theories of how organisations learn. Assuming that the theory developed by Argyris and Schön is academically sound, then the traditional “single loop learning” may be considered a simple adaptive learning process which makes sense only in a stable or almost stable environment. The reform approach in contrast adheres to the theory of “double loop learning”, in which the standards of the organisational are adapted to a changing environment. The two approaches to learning may be characterised by two questions:

Single loop: Am I doing things right?

Double loop: Am I doing the right things?

Should there be a significant environmental change for an organisation and it maintains its internal standards, it most likely will not meet its objective. An adaptation in the form of a double-loop process is needed.

As indicated before, these two approaches are applied differently in the Federal Republic of Germany.

In the early days of the Bundeswehr between 1950 and 1956, a theoretical military concept on the basis of the reform approach was chosen. This is the concept of INNERE FÜHRUNG [civic education and leadership] closely linked to Count Baudissin. When he developed that concept, his questions were unambiguous and can be found in literature. They match the required questions of the double loop process:

- In which society does the soldier act?
- What is the battle scenario like?

On the basis of the above questions he developed a concept of integration for the armed forces of the Federal Republic. Then, forces were raised with soldiers closely tied to traditional values. The concept had been approved by the government as an institutional basis. In

practice, however, and this also goes for training, very often traditional methods were applied. True learning based on the double loop process had hardly taken place because this would have required a change of the knowledge basis of the organisation which rests in the heads of its members.

Since then, a controversy has been going on with changing intensity between the so-called traditionalists and reformers in the Bundeswehr. In the early 70s, politically motivated reforms of the Bundeswehr training programme took place which were based on ideas which had already been drafted by Baudissin in 1950. Civilian subjects were added to the officer and NCO training programmes and this helped the reform ideas. In retrospect, I think that a complete integration has not take place.

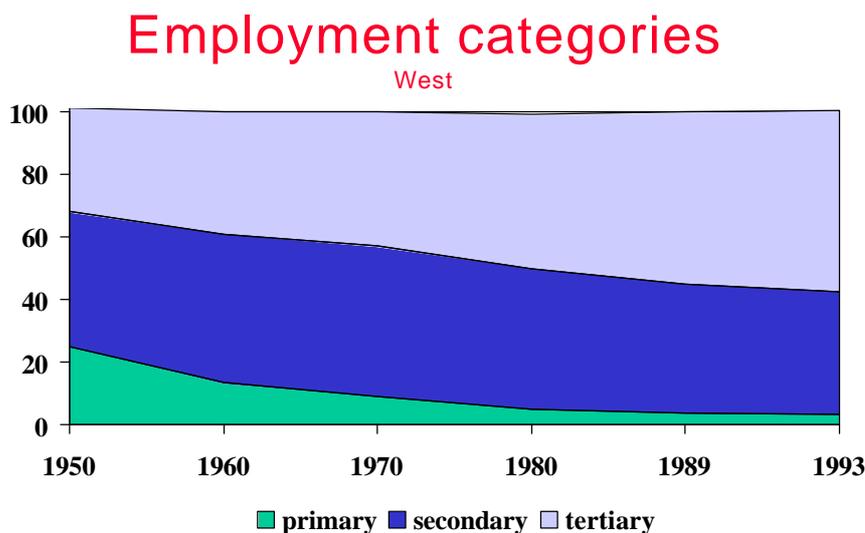
As I see it, the Bundeswehr took both approaches, which did not complement, but rather oppose each other. This resulted in a rift between reforms and the lack of consistency.

After discussing the two approaches to training, I would like to address the questions of modern society and war scenario, like Baudissin did. In other words, whether double-loop learning is essential for the military, to find an answer to the question of what kind of training is required to reach the training objectives of the organisation under changed conditions.

The Situation of the Armed Forces – Society and War Scenario

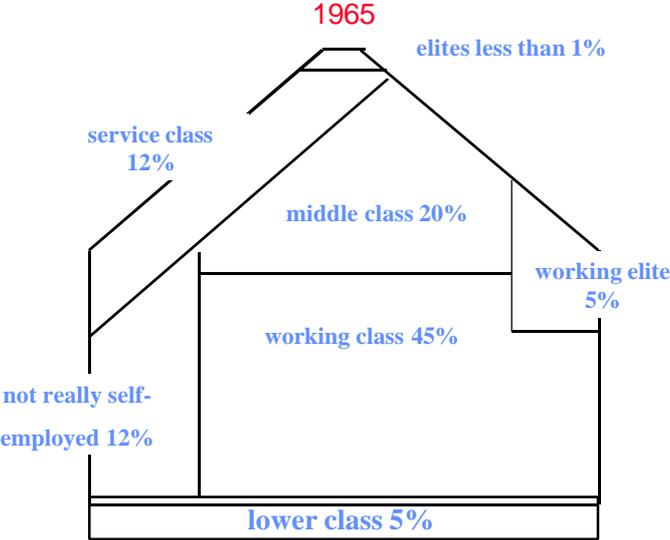
The German Society

German society has changed dramatically though not always noticed by us who are immediately concerned. After the war it regarded an industrialised society with a large number of workers, but in the meantime it has changed into a service oriented society. Let me illustrate this change with three slides.



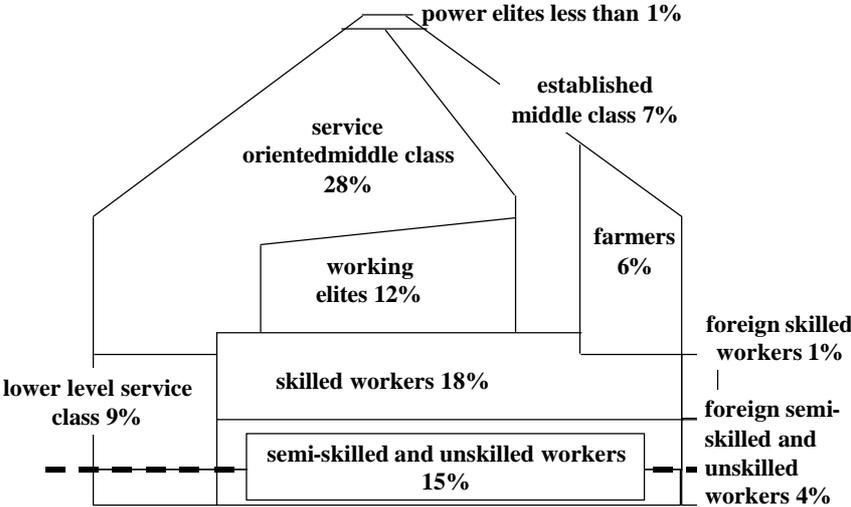
The first slide shows the changes of the employment structure in the areas of agriculture, industry, and services.

Industrialised Society



The second slide is an attempt to depict the industrialised society

Service-oriented Society

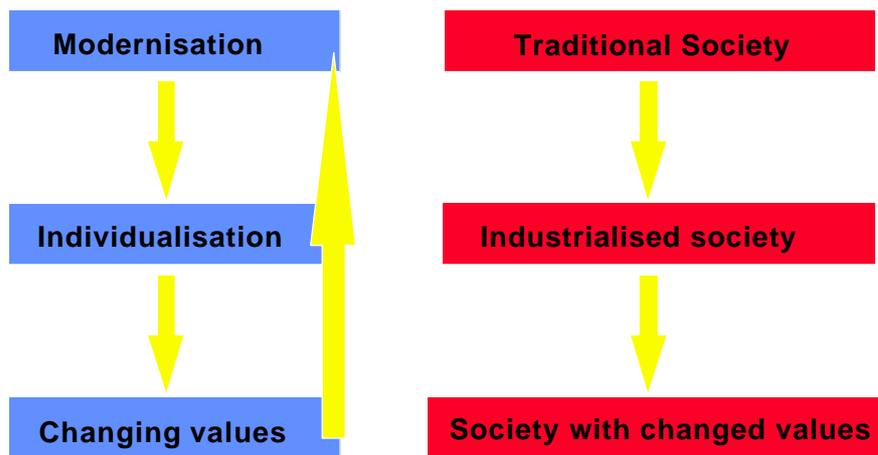


The third slide shows the German service-oriented society. The significant changes in the economic and employment sectors are not isolated events, but occurred concurrently with a change in living conditions through a modernisation of society. Referring to Gensicke I would like to explain its meaning. During enlightenment the options for human activities changed. The world became secularised and open to human creativity.

Gensicke said: *Modernisation means replacing the principle of tradition by the principle of innovation.* What does this mean for society and the individual?

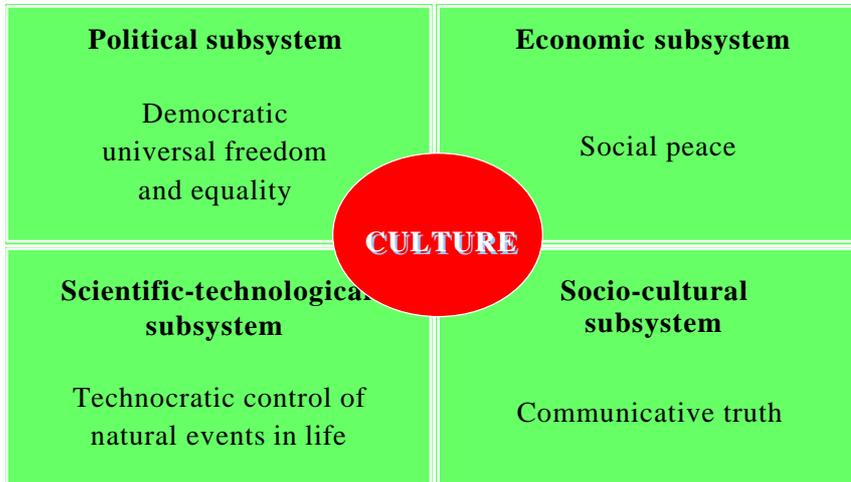
Modernising the system means for the individual to individualise his lifestyle, which in turn leads to a change of the value system and affects further modernisation.

The Model of Modernisation



When looking at society as a whole, we see the following development: As a result of overall modernisation, the traditional classes of society turned into an industrialised entity. Here, specific modernisation continued and eventually resulted in a society with changing values where traditional and community-oriented values give way to individual-oriented ones. One of my former colleagues, Dr Gerhard, linked the cultural standards which form the basis of modern life to four sub-systems of society:

Modern cultural standards



What does this mean for the military?

As the military has been defined as part of society by both the Constitution and the concept of civil education and leadership, the army cannot exclude itself from modernisation and changing values. Cultural standards must also be guidelines for the military. This means that traditional military action presupposes completely different leadership and training mechanisms.

I think that this brief look at the development of society suggests that the traditional approach described above will not work in Germany.

The War Scenario

The basis for an analysis of the war scenario is an understanding of how society and its political leadership handle the use of force in politics. Germany's constitution ties military force to the concept of peace, even though this may seem paradoxical. The constitution expressly prohibits armed attack, and any act that would disturb the peaceful co-existence is punishable. Therefore military force may legally only be used to secure and restore peace and this not only on German territory, but also inside areas of collective security alliances.

This results in the following mission for the Bundeswehr which consists of two parts:

- part 1. *national defence* and *defence of the alliance*, and
- part 2. so-called *extended missions*, including contributions to international crisis management, global peace support, and disaster relief.

Important is that the Bundeswehr always needs a legal basis for its action. This is the right of self-defence according to the UN Charter in defensive operations, and a UN or OSCE mandate for military operations in extended missions. For German soldiers, the above missions are possible only in an international framework.

If one considers possible war scenarios under different aspects, one finds a rather complex pattern:

- National and alliance defence must still be geared to the unlikely worst case scenario, which is a massive nuclear aggression and all-out war, which dominated the war scenario for the past 50 years.
- Other scenarios may be put under the heading of Military Operations Other Than War (MOOTW). This collective term, however, suggests a uniformity which in fact is not the case. It includes missions reaching from war-like peace enforcement to unarmed observing, or civil reconstruction, or disaster relief. In the German speaking world only few articles have been published that deal with these matters. The English speaking military community has been discussing MOOTW or LIC (Low-Intensity-Conflicts) for almost 10 years by now, particularly after the beginning of the conflict in the former Yugoslavia and the Somalia debacle. The relevant Internet sites are full of useful material on the subject.

Let me draw your attention to a Harvard University study, entitled *Learning Peace: Attitudes of Future Officers Toward the Security Requirements of the Post-Cold War World*.

In this study, the John M Olin Institute for Strategic Studies examined in 1997 whether the value system applied in West Point Academy education will be able to meet future demands. This led to the conclusion that the old “Male-Warrior-Paradigm” is not enough. The demands of Sarkesian et al. were confirmed:

1. to expand their analytical abilities to accommodate the increasing complexity of the strategic environment;
2. to train “beyond the battlefield”;
3. to learn manage diversity of race, gender, religion, culture, and “affectional preferences”;
4. to incorporate these challenges “into a professional ethos that nurtures professional competence with the values and norms of democratic society and its political character”.

In my opinion, the war scenario may be described by the slightly modified matrix taken from U.S. FM 100/100.

Range of Military Operations

States of the environment	Goal	Military Operations	Examples
WAR	Fight and Win	War	<ul style="list-style-type: none"> • Large-scale Combat • Defend
CONFLICT	Deter War and Resesolve Conflict	Other Than War	<ul style="list-style-type: none"> • Strikes and Raids • Peace Enforcement • Support to Insurgency • Anti-Terrorism • Peacekeeping • Non-Combat Evacuation Operation
PEACETIME	Promote Peace	Other Than War	<ul style="list-style-type: none"> • Disaster Relief • Civil Support • Peace Building • Nation Assitance

It is highly sophisticated and only in parts identical with the old war scenario. When looking at it from an organisational point of view I must say that even the organisational objective has changed in wide areas. The traditional objective of the organisation is to provide a maximum of physical force for political use. Considering military operations other than war (MOOTW), the objectives are quite different. in many areas.

Demands on professional military skills have risen dramatically. Ethical aspects, however, have not even been touched.

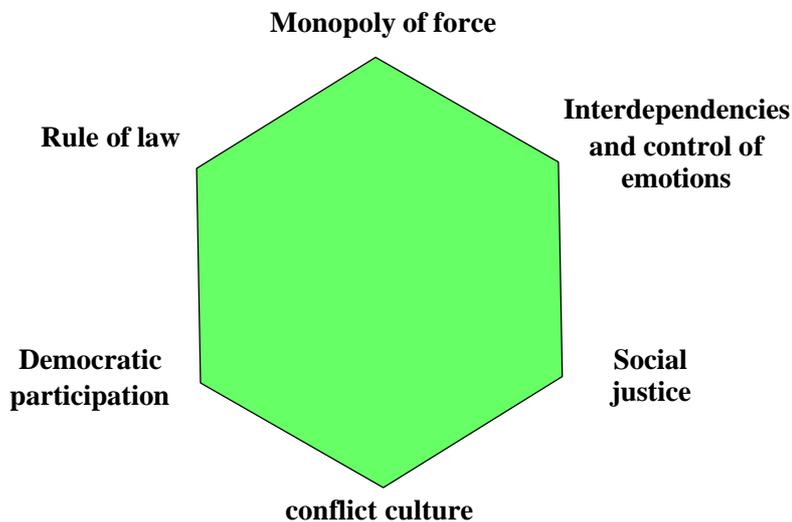
Summary of the Position of the Armed Forces

The German constitution envisages the social integration of the Bundeswehr and its personnel. Therefore, the army not only must work with soldiers coming from German society, it must also function according to the rules of that society. This means that the Bundeswehr must act in line with the social standards mentioned above. This involves the use of methods and control systems which are radically different from traditional military standards.

New tasks and different war scenarios require wider operational capabilities. On the one hand soldiering has already been civilised for Bundeswehr soldiers through a strong legal framework, on the other hand MOOTW require tasks which not only protect peace and civilisation, but also build them, and this nearly always happens on international or multinational level.

This leads to an extensive civilisation of military action. According to Senghaas, the soldier becomes integrated in the civilising hexagon and must enforce it in action.

Civilising Hexagon



For the military, changes of the organisational knowledge base are unavoidable. As these changes happen beyond the control of the members of the organisation, we must ask:

Which Qualifications Must an Officer Have?

Modern soldiering clearly exceeds traditional military skills which can be described with two short sentences: The nasty way: “To kill people and to break things”, or a little bit friendlier: “To fight and win the nation’s war”.

I think the extreme level of sophistication our profession has reached is exemplified in the MOOTW. There only remains the question of officer qualifications. An officer is still a leader and manager. In the old days he was only manager of extreme physical forces (and that's what I am as an artillery officer). For all other tasks I have to perform, a disproportionately large number of managerial capabilities have been added which cannot be trained in detail. This still leaves us with the question of what should be his qualifications?

Above all he must be a leader regardless of whether being in war or MOOTW. According to Reinhardt, this involves the **Developing, Steering** and **Forming** of systems.

These terms determine competence far remote from the military context. An officer must acquire key management qualifications, so that he can act in other than battle situations. These qualifications are mainly based

- ° on the capability to analyse complex situations, and this is very different from the military assessment of a situation and decision-making;
- ° on the ability to lead complex systems where action differs from what would be suggested by traditional military command and control patterns. At this point I would like to draw your attention to the studies of controlling non-trivial systems, and above all the study projects of St. Gallen and the Eidgenössische Technische Hochschule in Zurich (Probst, Malik, etc.).

These are the two top addresses for management science. I think the argument that these are civilian institutions is invalid after my previous statements, and

° on communication and management abilities across national borders because in the meantime the meaning of the term security has been widened and includes many others.

How Does One Teach This?

How does one teach this? I do not want to beat around the bush. Saying good-bye to traditional military education will be a requirement of the future. The approach must be through humanities, and the training of leaders in the spirit of Alexander Humboldt. An organisation learns in the heads of its members. This is where the theories of action and the public and private maps must change. This means no less than changing basic attitudes in that organisation.

We must educate and not train free human beings, able to achieve common goals with other free human beings of our societies. Compulsion is no leadership tool in modern society. It is rather the effort to reach common goals for mutual benefit. Conscripts are no underdogs, and the civilian population of Bosnia, Rwanda, Somalia and Cambodia are no underdogs, too. In most cases our mission is to find, agree and realise common goals with others as partners.

These are the requirements that civilian leaders have been subject to for a long time. Training must therefore be equivalent to that of civilian leaders. Looking at civilian training schemes, one finds that without specific career requirements they nearly always include academic training. Not technical knowledge is expected, but abilities at a higher level. Academic studies yield such abilities, like the ability to comprehend new fields of knowledge quickly and comprehensively;

° to comprehend highly complex matters with a set of instruments,

° to be able to conduct methodical analyses,

° to make judgements according to traceable criteria, and

° to be able to discuss matters in the awareness of one's own limitations.

Therefore, officer training must include academic training as an integral part. In this way, key and meta-qualifications, as well as technical skills are acquired, which are very useful in MOOTW. In addition, traditional military skills must be taught as well, because the old mission is still there, even if it has lost its dominant role.

The training objective are leadership qualifications which can handle both civilian and military tasks, and can do this by changing the attitudes of the members of the organisation.

The Bundeswehr Approach

Since 1973 civilian academic studies have been an integral part of officer training. Officers serve in the armed forces for 12 years or longer. The above studies must be undertaken prior to taking up an officer appointment, are normally conducted at one of the two Bundeswehr universities, and are completed within 3 ½ years. Courses follow exclusively civilian curricula and guidelines, leading to civilian academic ranks. After a less strict period of a few years, career officer candidates again must have completed their university studies (except for Air Force pilots and naval staff). In general, the Bundeswehr has gained positive experiences with

academically trained officers, and as we have just started with MOOTW, lessons learned in this connection will have to be analysed.

I think the introduction of civilian experience to daily Bundeswehr routine should be improved. We have added university training to the traditional officer training course, but a complete integration of the two is still pending. Unfortunately I still notice to this day traditional theories of action in some areas of the Bundeswehr and therefore must remind the organisation that learning is necessary.

Beat A. KÄCH

The Swiss Military College

A few years ago, when I was an executive of the largest Swiss retail firm, I visited Austria many times and came to appreciate the country and its people. Unfortunately this Swiss-Austrian enterprise had come to an end. The lost son, however, has returned in a different dress, and I am sure that our new co-operation will be a lasting one, because it deals with the exchange of knowledge and experience on the basis of comradeship.

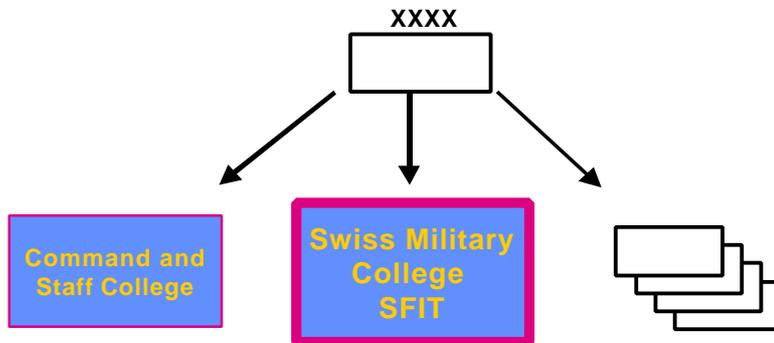
My presentation will include:

- Introduction
- One army / different training centres
- The Role of the Swiss Military College (SMC)
 - Organisation
 - Task sharing
 - Teaching and research
- The different training echelons of professional officers
 - The career of a professional officer
 - Basic training (BT)
 - Diploma studies
 - Diploma course
 - Advanced training (AT)
 - Supplementary training (ST)
- The future at a glance
- Summary

In my introduction I will talk about the various training centres of the Swiss Army, look into the role of the military college, explain the various training stages of Swiss career officers, the regular officer's career, basic training, advanced and additional training, future aspects, and conclude with a summary.

The purpose of my presentation is to give you an overview of the military college, its organisation, tasks and activities.

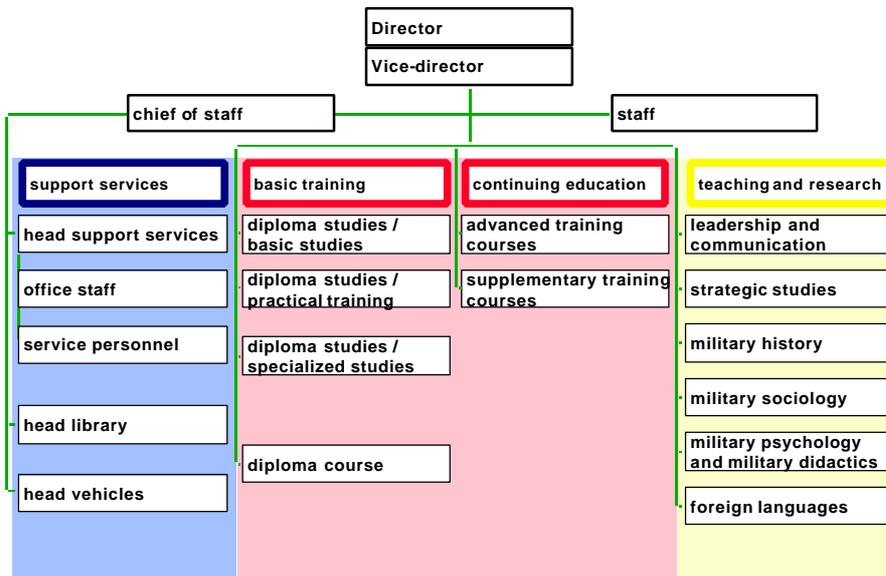
One army / different training centres



As you know Switzerland has a militia [reserve] army and no standing forces. Therefore our country has mainly militia officers and only about 800 career officers. The Stabs- und Kommandantenschule at Luzern is one of the two main training centres and responsible for the training of militia officers. The military college at the Eidgenössische Technische Hochschule (ETH) [Technical University] in Zurich is responsible for the training of career officers. The Swiss career officer is wearing two hats. At one stage he is a career officer and at another a militia officer. This is also the reason why I handed out my curriculum vitae, not to become famous, but to outline the typical career of a professional officer. As you can see that I first was a teacher, then career officer, then I worked for 10 years in industry, only to follow my avocation and return two years ago to the job of career officer. I finished my militia career and was company commander, general staff officer, battalion commander, and eventually became regimental commander. As a professional officer I am chief of staff and in charge of the highest course at the military college, and as a career and militia officer I am a regimental commander. From this you may gather that for promotion a militia career is a must. This means a that career officer must obtain the know-how for promotion at the Stabs- und Verwaltungsschule [staff and administration school] in Luzern. This is like a giant slalom, which for the Swiss was not so successful this winter. We let the Austrians win and are happy about your success. In my presentation I shall not discuss the Stabs- und Kommandantenschule where the general staff courses take place.

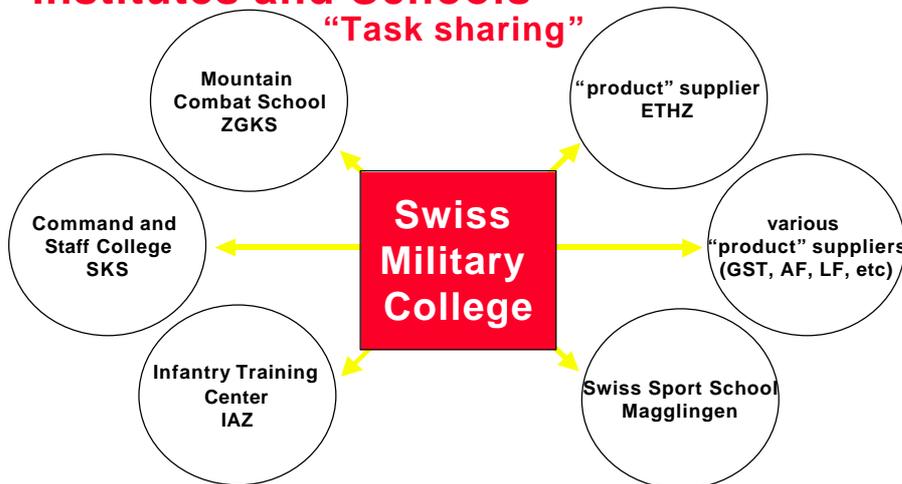
The main purpose of my presentation is to speak more in detail about the Swiss Military College which, in co-operation with the ETH in Zurich, prepares future career officers for their job and also provides further training.

How is our school organised?



The director, myself as the chief of staff, and the deputy director form the directorate. I am responsible for service and support, and additional training courses. The director takes care of the courses, and his deputy of teaching and research. The course commandants organise their course programmes in co-operation with other institutions. Later I will speak about the lecturers.

Co-operation with different Institutes and Schools



You see that there are many training institutions in Switzerland, especially for the militia. The Militrische Fhrungsschule [Military College] is the main contracting body, and certain course programmes are purposely outsourced. One of our main contractors is the ETH, where all science subjects are taught. We also run a course at the Zentrale Gebirgskampfschule

[central mountain infantry school], and at the staff and command centre in Luzern, as already mentioned, where we have simulators, and mainly perform command post exercises, and operations research. Then the infantry training centre, the eidgenössische Sportschule where career officers do their sports training, and a number of providers from the general staff, etc. Let us turn to doctrine and research. as mentioned before, this section is headed by Dr Schwaiger, who is a well-known personality, also in Austria and Germany. He covers personnel management and communication himself, then there is a department for strategic studies, military history, and military sociology. The department for military psychology and for military didactics is currently vacant, but will be staffed in the near future. There are also foreign languages which have an entirely different significance in Switzerland compared to other countries. In Switzerland, career officers must be bilingual; they must know a second official language [of Switzerland], and English comes third. And I must say this very openly, this has turned out to be wrong.

The requirements for a lecturer at the Military College are:

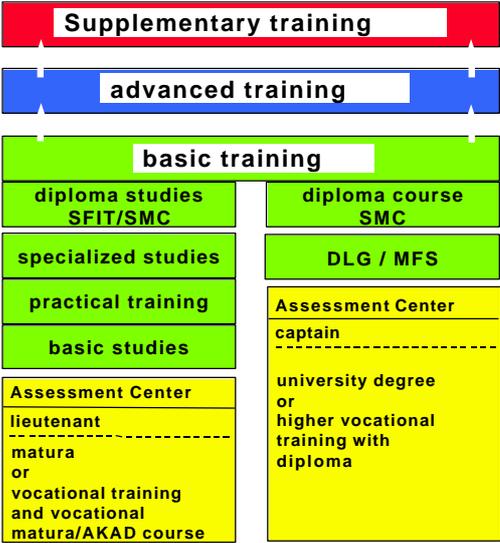
He must have completed his academic studies with a doctorate, be qualified to teach, and must have completed intensive research work on an international level, and he must also, and this is perhaps unique, have a military career and be a captain at least. The reason is that he would not be accepted otherwise in our own establishment. If a military sociologist were taught by a very civilian sociologist, then I need not add anything. One of our lecturers is a major, and he knows what he is talking about. Currently, our lecturers include one colonel of the general staff, one colonel, a former regimental commander, one lieutenant colonel, one major and one captain. For us it is much simpler to communicate with these colleagues, because we understand each other and speak the same language.

Training and assignment

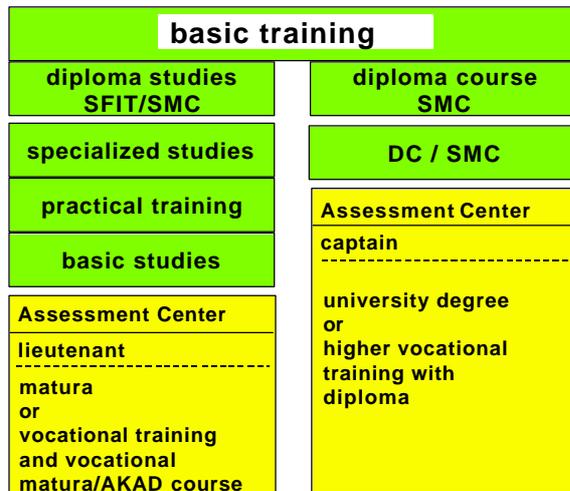


What does the career of a professional officer look like? You see that, after completing basic training, he undergoes an initial selection, i.e., a conscript-school or officer-school, then he

moves to a service school as a class instructor, looks after company commanders, and attends the first staff courses. After four or five years he returns to us for further training as professional officer to occupy project manager positions in the general staff or in the Air Force, or as an instructor at the Stabs- und Verwaltungsschule [staff and administration school] in Luzern, or to organise personnel for operations abroad. Or he returns to the conscript school as what we call an 'inner-officer', or as a trainer in the regions, or to the staff in other functions. He returns after further four to six years for further training where he is trained as leading officer in the general staff or the Air Force, or the Army, or as an attaché. Or he becomes a recruitment officer who selects conscripts, or commander of a region or district, or he joins the Army or the MoD in a higher function or as head of department.



The phases of training are: Basic training, further training, and additional training. First, we shall concentrate on basic training.



You can see that basic training is subdivided into diploma studies and the diploma course. Diploma studies last for three years, and the diploma course one year. I will later discuss the difference between the two. Diploma studies are subdivided into basic, practical and specialised studies. Each course is led by a colonel.

I already mentioned the basic training. Advanced training lasts for eight weeks and further training for 4 weeks.

The goals of the diploma studies are: To enable the student to act as a convincing commander, to lead efficiently and purposefully according to mission-oriented tactics. As a career officer, he should also be able to deal with non-military matters, teach adults as a didactically versatile and technically skilled trainer and instructor, and be a specialist in military science.

The admission requirements for the diploma studies are: Rank lieutenant or higher, and now you can see that the candidate passes conscript school, NCO school, militia officer school, and until then no-one talks about profession. He must have Swiss university entry qualifications type A, and he must pass a very difficult Assessment Centre. This takes 3 days, and there are approximately 30 observers in the rank of general and economic experts. For a period of three days, candidates are bombarded with various tasks and their personality and flexibility are tested. This Assessment Centre is selective, and the drop-out rate is between 15 and 20 per cent. Subsequently he is employed, but on a non-permanent basis only. He receives a monthly salary, medical treatment through the military, and he must attend classes.

first year	second year	third year
Winter term SFIT	Practical training SMC	Winter term SFIT
Inter-term course SMC	Practical training as coy cdr	Inter-term course SMC
Summer term SFIT	Practical training SMC	Summer term SFIT
Inter-term courses		Inter-term courses

SMC		SMC
Intermediate exams SFIT / SMC	Intermediate exams SMC	Final exams SFIT / SMC (incl. thesis)

Let us now look at these three years of basic studies: As you can see these are the terms at the ETH, and they include the so-called inter-term weeks, which take place when regular students have free time, or do seminar work. Then he comes to us and takes on additional tasks under the guidance of his course commander and in the presence of our resident or guest lecturer. The idea is to apply military training during that period. We purposely do not want to send students to university for three years and train them afterwards under great pains to become soldiers. This should go hand in hand, and is difficult. And I can tell you, after the winter term I taught these young people last week, and, as I see it, they were no longer officers, but had turned into students. And they have to be put back on track; this is possible, but takes more work. Each year there are interim exams which are also very selective. He then proceeds to the second year where the emphasis is on practical work. During that time candidates do not attend the ETH, they are with us, attend the sports school, alpine training, or something similar. Whoever has not yet performed his practical service as designated company commander will do this during that year, so that he can be a company commander upon completion of basic studies. During the third year he once again attends the ETH, in between he is with us, and he then takes a final exam and writes a thesis within seven weeks, applying scientific methods. There is a choice of topics and he can choose one. He may also choose the faculty where he wishes to write his thesis.

When looking at the workload for diploma studies, one finds that approximately 45 per cent are general military science courses, 45 per cent military specialised courses, including practical work, and approximately 10 per cent exams and thesis writing.

Another interesting aspect is the task sharing between the ministry and the Swiss Institute for Technology. At the ETH, political science, economics, sociology, engineering, science and humanities are taught.

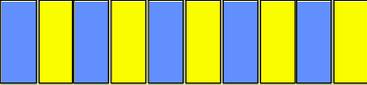
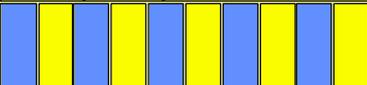
At the Militrische Fhrungsschule, the military staff college, applied military science, command and control, operational command, tactics, and other subjects are taught.

To be more precise, at the ETH there are departments for peace and conflict research, modern history, sociology, applied technology, presentation and discussion techniques, economy, international relations, society and the military, law, including the law of war, and computing.

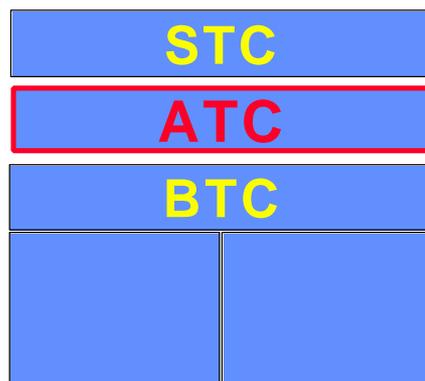
Our institute covers leadership, commanding, strategy, military history, training of exercise directors, basic combat course, NBC warfare, mountain combat training, and foreign languages. It finishes with a diploma, which is signed by the university's rector and the corps commander.

Let us look at the one-year diploma course after these three years of diploma studies. Here you can see the admission requirements: Participants must have completed university or Fachhochschul [college] -studies. They must be captains and have passed an Assessment Centre.

Methodological concept

DS	DC
	mission scenarios
command and control	tactics
tactics	ecology
mission scenarios	political economy
military history	foreign languages
	military didactics
military didactics	military technology
disciplinary code	leadership
qualifications	disciplinary code
command and training	qualifications
	security policy
	weapons
	intern. law of armed conflict
	combat training

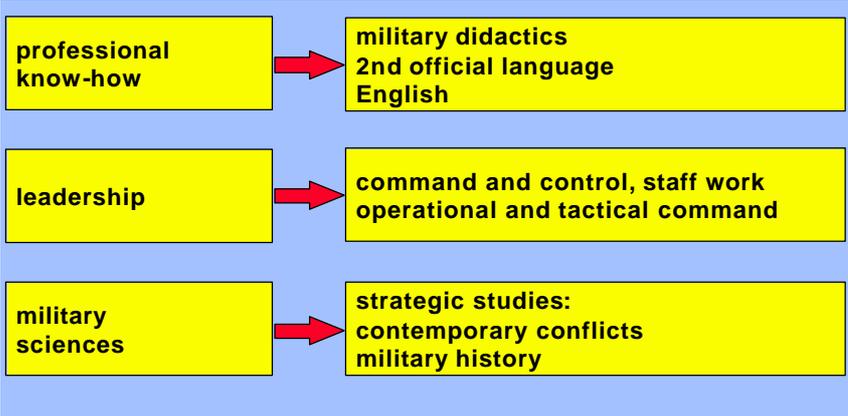
When you look at the concept and its stratification, you can see clearly that it concentrates on military scientific subjects. Together with the previous studies of a graduate, these are post-diploma studies in military science. This diploma course is open to international participants; will you please advertise this fact. German must be understood. This year, already for the second time, we have a Bundeswehr post-graduate, and in autumn we shall have one from Estonia.



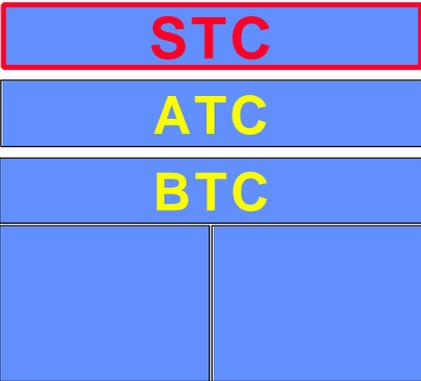
After basic studies, we have the second stage, which is further training. This involves the following goals: To provide these young officers with socio-political and political knowledge,

to widen their specific professional skills, and to train them to be instructors at general staff courses or leading officers in the army.

Main teaching points during ATC



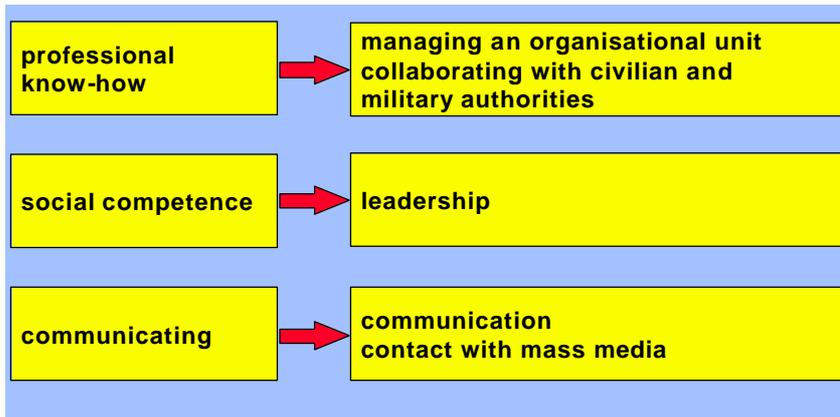
Let me highlight three major points: Professional skills, leadership, and military science, particularly military didactics, the improvement of the second official language, and the teaching of English, too. Leadership relates to command and control, staff work, as well as operational and tactical control. Strategic studies deal with current conflicts, but also with military history and the lessons learned.



Let's look at the final part of career officer training, - supplementary training. The aim is to familiarise graduates with the basics of personnel management as well as management of an

organisational unit. To improve communication, be it as platoon leader, section chief, in the general staff, in the air force, the army or the MoD.

Main teaching points during STC



Together with large Swiss enterprises, I am in charge of personnel management training, communication and media training with press, radio and TV experts.

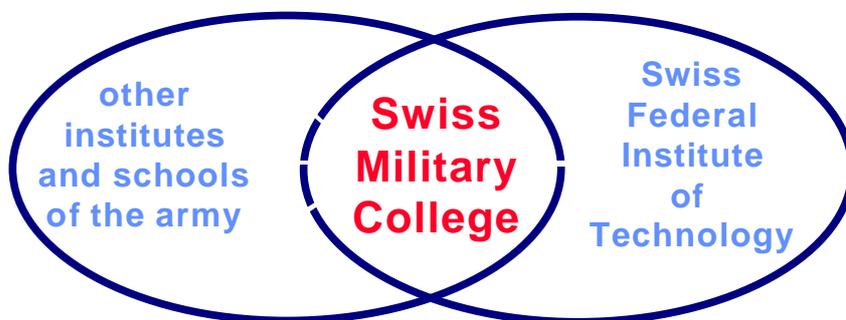
Let us look into the future: Switzerland and its armed forces will have to deal with the same kind of future challenges as the armed forces in your own countries. Still busy changing to army 95, we are already planning the next restructuring: Army 21.

This will deal with strategies of security through co-operation. This army will reflect a smaller defence budget. The army will shrink, down to less than 450,000 with a population of approximately 7 million. Since '94 we have halved the strength and we shall continue to shrink. The target is around 200,000 to 250,000. It will remain a militia army, but a highly professional one. One job is to strengthen police and border security forces. Recently we realised that we are lagging behind the [German] Bundesgrenzschutz, we don't have something like that. The army is called in immediately. But this is a militia army. At present, one infantry regiment is guarding embassies in Geneva and Bern. The people are not trained for that job. They are trained on the job; that's alright till the first round is fired. This we must change. Then we will need a higher technical level. At present we are under-equipped. I think part of the army must become more dynamic. We must work very hard on interoperability and the participation in multinational and international operations. At present we are not allowed to do so for constitutional reasons. Some years ago we had a referendum on this. We provide logistic support, cash, and observers. In the OSCE, and we have the Swiss Guard. We have observers in Georgia, Tajikistan, and Bosnia. And then we have the International Red Cross. So that no one can say Switzerland is not willing to contribute on the international level. We do a lot on the international level, but regrettably there is still this one political hurdle. But we do hope there will be changes in this context. Then there is neutrality. This must not be a topic

in the new army, otherwise our bill will not be passed in Parliament. We must not forget that more than 50 per cent of the people are senior citizens. They participate in referenda, young people don't. As long as this war generation has the majority, there is no chance to change neutrality, and we have problems with sending troops abroad. We will not have to redefine our neutrality, but will have to have the courage to learn how to use our freedom of action. We have by far not attempted to do so. At the beginning of the century we provided armed escorts for transports to Hungary. Today our blue helmets in Bosnia may not be armed because of our defence act. We are about to change our defence act within special provisions, so that our personnel may at least be permitted to carry weapons. This is a fundamental right of the soldier, otherwise he would be a member of a private security firm. And we shall also have to reconsider the duration of our national service obligation, because firms are not willing to leave a captain, for example, in the army for such a long period. Private firms wish that junior managers have completed their service obligations at the age of 32. Should we be in a political position to send troops abroad, then there must be appropriate rules. Whatever will be the result, there will be new tasks and challenges for our Military College.

Conclusio:

Task sharing



We have seen that the Military College awards contracts to some other schools and institutes. We have also seen that it plays a central role. There is close co-operation with the ETH as far as diploma studies are concerned.

I recall the stages of our career officer training: Basic training, 3 years of diploma studies, one year of advanced training, further and finally supplementary training. It is clear that officers conduct private studies in between, such as language studies, workshops, etc. The army also provides a wide range of study opportunities. For further information, please see our web-site at: <http://www.mfs.ethz.ch>.

Altero FASANO

The Academical Training of Officers in the Italian Armed Forces

Introduction

Over the last years significant changes have taken place with regard to the mode of employment of the armed forces. Officers` tasks have become increasingly complex; thus implying, not only the use of skills such as those acquired through professional training, but also those related to one`s cultural background. All this has resulted in a greater ability to use one`s sensitivity and flexibility in any situation possibly involved into.

Nowadays an officer should be able to manage a large number of situations: This entails that he may be confronted not only with military units but also with armed gangs, “civilian population”, humanitarian organisations and the media.

Therefore, the Italian armed forces have endeavoured to address coherently and effectively the new domestic and international challenges which have arisen so far, yet being aware that any reform in the field of strategy will necessarily have to consider the values and traditions which make up their prized heritage.

With this regard, this briefing intends to focus our attention on the soldier, who is and will remain the leading character in any future context; his cultural and professional skills, his moral qualities, his temper and motivations are as important as – and sometimes even more – the availability of high-tech weaponry and military crafts.

Thus, if a soldier is well trained and motivated, it is possible to develop around him the needed organisational framework. On the contrary, without taking into account the soldier`s ethics and his cultural and professional preparation, even the most advanced weaponry system may prove useless or worse, dangerous.

For these reasons the armed forces give relevance to the professional training of their personnel, who is the custodian of that given set of values of the national society, and – nowadays – of the international community as well.

Further on this briefing aims at outlining the university training programme of officers, who represent a small but extremely important part of the armed forces.

Training Activity In The Academies

Main Features

Since the end of the 80`s, each service of the Italian armed forces has updated the study programmes and the formative process of the officers in their respective academies, taking into account the experience of the operations over the last years, the cognitive needs of the officers as well as the growing educational level of the Italian population.

Some of the most relevant changes concerned:

- the definition, together with civil universities, of study programmes for all officer`s arms, corps and specialities.

- the adjustment of the specialisations to the new role of the officer and the commander.
- the incorporation and training of all career officers through the academy, which will result in the standardisation of training and in a better mutual acquaintance, thus promoting a stronger „esprit de corps“.

The aforementioned measures have been carried out in different moments in the three services, but nowadays, they are all under experiment.

At present, the results which have been achieved are positive and we can assume that we are following the right direction.

The only change which has not taken place yet is the incorporation into the academy of some categories of officers such as doctors, commissioners and harbour authority officers who are still selected among graduated civilians.

The ultimate goal of the academies is to train regular officers from all different fields, arms, corps and specialities.

To accomplish this task all these institutes have faculties, consisting of highly qualified and trained military teachers responsible for a part of the professional education.

Therefore, the university training is mainly entrusted to civilian teachers coming from the top universities located in the area of each academy.

Moreover, some military matters, in the need of a continuous updating, (for example the defence organisation, national interests and military policy, military doctrines and tactics, annual financial planning and budgeting, etc.) are taught by these officers that at the moment are responsible to work at the specific subject in each service staff or in the defence general staff.

The lectures are normally given in the morning (about four hours) while group discussions, exercises, laboratory, sport and military drills in the afternoons (about two hours).

The evening hours are usually dedicated by the cadets of the first and second year to compulsory study activity.

The direction of the courses entrusted to highly qualified and selected officers who can provide the students with the rules of internal life are seen as valid and positive examples.

At the moment, academies are open to students aged between seventeen and twenty-two years who are selected after a competitive examination with written and oral cultural tests, medical exams, and physical and psychological tests;

Also required is an apprenticeship during which the applicant cadet may experience life in the academy and tests the strength of his military vocation.

After the incorporation, cadets academy life is based on a great spirit of participation, dynamism, application in the studies and multiple interests.

The rational sequence of day activities allows to carry on all the planned programmes and teaches the cadets to optimise their own available time and energies as well as their habit to think structured and act directly as it is requested for a military commander.

During the first year the cadet is constantly followed and guided by senior colleagues and officers who help him to familiarise with the academical environment and to learn the new rules.

On the contrary, during the second year he is responsible to develop skills which enable him to manage his time and therefore to be engaged in the various military fields.

For the remaining years till the end of the courses in the academies applicants become more and more autonomous in choosing their activities, although they continue to follow the rules and the scheduled timetables.

This type of life organisation needs a constant surveillance, a tight discipline, self control and a true and strong motivation; but only following this way cadets will become good officers as well as responsible and capable commanders, able to operate in emergency cases and to take decisions that sometimes may concern the lives of subordinate personnel.

But at the end of the academic courses the educational process will be only initiated and the young officers are sent to their units or to technical centres for specific professional training that will continue, regarding their appointments and the needs of the armed forces, through the whole military career.

Moreover, after 6-8 years, in the rank of captain, they will join the respective war colleges to attend the junior staff course which is necessary to be promoted major.

Later on, after an assessment a part of them will attend the joint service senior staff course and, those that will be called to assume command appointments at a very high level, the course of the institute for advanced defence studies.

Military Academy

The military academy of Modena trains the permanent officers of the Italian army and, specifically, the „carabinieri“, the different arms (infantry, cavalry, artillery, engineers, signals, transport and logistical support), the administration and financial corps and healthcare and engineering corps.

The professional training of the applicant cadet follow four main guidelines:

- military ethics and command ability
- university studies that lead to the degree
- studies of military subjects
- practical and sport activities

The applicant cadet, through the study of military ethics and command ability, - including teachings of civic education and regulations – and through the everyday action and example of all the teaching staff, is constantly directed to the profession of officer and commander.

After two years of university programme in Modena, the cadet is appointed second lieutenant, and he will continue his studies at the training schools of Rome (carabinieri) and Turin (for the other arms), so that the cadets may take different degrees according to the arms and the corps they belong to.

These are specifically:

- a degree in law for „carabinieri“ (4 years)
- a degree in political science or business and economics for other combat arms, administration and financial corps (4 years)
- a degree in engineering, (with different specialisations) for the engineer corps (5-6 years)
- medical, veterinary, chemistry, pharmaceutical degrees for the healthcare corps (6 years)

As you have seen the length of the study period may vary from four up to six years according to the degree.

The aforementioned courses are integrated with a year programme of conferences and seminars dealing with economics, sociology, history and industrialisation.

Moreover, the continuous contacts with the university of Modena and with the social and economic context of the province and of the region they live, provide the cadets with experiences and knowledge from different realities of the area.

The technical and professional training includes the teaching of some merely military subjects, taught at a university level, like military art, topography; weaponry and shooting.

The programme is integrated by military and sport activities (shooting, parachuting, patrolling and peace support operation exercises). This training is meant to develop such characteristic qualities as self trust, courage, initiative, “esprit de corps”, and all those qualities which any officer must possess.

Naval Academy

The Naval Academy of Leghorn (Livorno) trains regular staff, naval weapons and engineering officers of the Italian navy.

As medical officers, the administration and the harbour control authority officers are still incorporated into the navy through a competitive examination, but they will be able to attend the academy beginning with the year 2000.

The courses provide the officers with a thorough preparation, enabling them to gather those managerial skills which are usually required to tackle efficiently the kinds of tasks which are associated with their future position. As a consequence, the formation is based on a wise balance of scientific, political, historical and technical culture.

The course for staff officers lasts five years; after the first two years the cadet is appointed applicant, and at the end of the third year he is appointed “Guardiamarina”.

At the end of the course, the students are appointed second lieutenant and take the degree in political science with an international specialisation. During the summers, students embark on the training sailing-ship “Amerigo Vespucci” and on other vessels of the Italian Navy.

The officers of the naval weapons must attend a four-year course at the naval academy, including military subjects as well as professional subjects, and matters from the course of telecommunication engineering with a specialisation in tele-bearing.

At the end of this course, the officers may enrol to the fourth year of the degree in telecommunication engineering at the renowned Pisa University, not far from Leghorn (Livorno).

The Officers who chose the naval engineering specialisation must take a four-year-long course at the naval academy, where military and professional subjects, as well as subjects of the naval engineering degree, are part of the curriculum.

At the end of the course, the officers may enrol to the fourth year of the universities of Genoa (Genua), Naples (Napoli) and Trieste, where it is possible to take a degree in naval engineering.

The Air-Force Academy

The Air Force Academy of Pozzuoli (Naples) is entitled with the training of officers on regular service, of pilots, navigators, administration and aeronautical engineering corps.

Beginning from 2001, students will be able to take courses for officers of the medical corps, nowadays still held at the air war college of Firenze, in the academy of Pozzuoli.

The cadet pilots, soon after the selections and the admission to the academy, must attend the flying school of Latina, in order to follow a course of basic flying and to achieve the pilot and navigator licenses.

The cadets who do not reach the required standards are declared unfit for flying and, as a consequence, they are dismissed from the academy.

Since 1995, the educational training for pilots, navigators and arms officers lasts four years. It includes a degree in political science, with an international specialisation, and “ad hoc” technical subjects like:

- Mathematical analysis
- Physics
- Aircraft aerodynamics
- Aircraft engineering

Among university subjects are included courses of direct military and aeronautical interest, such as: armed forces structure, military regulations, military criminal law, constitutional regulations on armed forces, NATO Organisation, principles on the use of air force, leadership, history of the air force.

At the end of each academic year, the applicant pilots continue their pilot training at the flying school of Latina. In the first three years they train on a SIAI SF-260 single-engined aircraft, practising the different kinds of acrobatic, instrumental and formation flight; on the last year of the course, the cadets are sent to the flying school of Lecce for a basic training on the Aermacchi MB-339 TET.

The study programme of the applicant commissioners and engineers is respectively aimed at taking the degree in law, the degree in engineering, and at attending a course in military culture.

The degree in law is four-year-long, whereas the degree in engineering spans in five or six academic years; the students attend the first two years in the academy and the last three years at the “Federico II” university in Naples; some subjects are still taught at the academy.

Engineers conclude their courses taking a degree in one of the several specialisations; specifically: the **aerospatial** field, the electronic field and the civil field.

The training program of the academy stresses the relevance of the English language. Between four to five weekly hours of English classes are scheduled each year. These are essential for all those pilots and navigators who will go on studying in the USA but is nevertheless of the same importance for all regular officers, commissioners and engineers who will have the possibility in the future to participate in international operations or to work in international staffs and commands.

The training program of the cadets also includes other activities such as sport and military drills.

Among the wide array of activities, we can highlight:

- Study tours at operative units of the air force or at aeronautical industries
- Survival courses on the mountains and in the sea
- Gliding courses

At the beginning of the fourth year, the cadets who previously passed all the subjects are appointed second lieutenant.

Conclusions

The officers educational process renovation inside the academies has started in the late eighties when the reorganisation plan of the whole department of defence with a joint service principle was not yet expected.

Nevertheless, although there was no official co-ordination among both the institutes and the respective staffs, each of them has felt the following needs:

- The opportunity to incorporate all the permanent service officers through the academic courses to achieve these aims:
 - to carry out a standard educational process
 - to train the cadets together in the same military environment, teaching them the sense of discipline, the traditions and the cultural heritage as well as the ideals of the armed forces
 - to know better each other, teaching them to overcome the difficulties and building up a high esprit de corps
- The achievement of the degree in political science for all arm and staff officers, considering it more complete and suitable to give to those who are destined to be commanders the necessary cultural and professional basis;
- The achievement of the degree in the respective specialisation for officers of the engineering, administration and financial as well as healthcare corps;
- The integration of all the university courses with both technical and specific military matters (for example: military culture, problem solving methodology, defence organisation, resources management in a military environment, history), considered essential to complete the officer education and to prepare the basic knowledge to train the future leaders of the armed forces.

Considering all these needs, the academies, in the full observance of the differences and peculiarities of each service, have to elaborate study programs which are similar with their conceptual lines.

In fact, only through such training young cadets may become well coached and motivated officers who are aware of the values and the traditions of the armed forces, and endowed with those skills needed to start working in the military units.

Jirí GAJDOŠÍK

Officers Academic Education of the Armed Forces of the Czech Republic

This article is oriented to make you acquainted with the system of officers academic education of the Armed Forces and to explain the system of military universities in the Czech republic. In details it makes you acquainted with the structure of the Military Academy in Brno, its main goals and study programmes and its demands concerning study of university type. Further it contains a few words about the structure of the top military education of the Czech officers at the Command and Staff Faculty of the Military Academy in Brno. A short supplement to the introduction. University education in the Czech republic is defined by law No 111/1998. This law is also binding for military universities. Therefore chancellors (rectors) and deans of faculties of the military universities are elected by the academic senates comparable to civilian universities. Military universities are excepted from this particular law in fields concerning control and legal personality.

There are 3 military universities in the Czech republic :

- Military university of Ground Forces at Vyškov,
- Military Academy in Brno,
- Military Medical Academy in Hradec Králové.

In the future the military authorities consider to reduce the military schools and to establish a military university and a military college of university type. Each of the military universities in the Czech republic prepares new officers with university education for the Czech Army; The military university in Brno provides also officers next education in system of their career. After a few words concerning the history of the Military Academy I will refer to the academic education on the military Academy in Brno. The Military Technical Academy was founded in Brno on 15 August 1951. Since its beginning, it has been a fully fledged technical university aimed, primarily towards the education of technical specialists for the Armed Forces and of civilian engineers for our defence industry. The Academy was endowed with highly qualified staff that came from the Eduard Benes College of Advanced Technology in Brno as well as from other civilian universities. Thanks to this, the Military Academy acquired world-wide renown within a short period of time and the diplomas which its graduates are awarded have been validated abroad with out any difficulty. In 1958 the Military Technical Academy was integrated with the Military Academy in Prague a school for the education of top ranking military officers and granted the name of Military Academy. Since that time it has also been training commanders along with technical specialists. It has become a school with numerous branches which - thanks to the co-operation with specialists in technology and defence management - has continued to increase its importance and scope. The changes which took place after November 1989 were a fundamental turning point in the life of the Military Academy. The School was consequently integrated, as far as supervision at the level of

education and organisation of internal life are concerned, into the new University Law. After the split of Czechoslovakia into two independent countries and the subsequent transformation of the Czech Armed Forces, the Military Academy enlarged the number of courses by adding those that had been studied in Slovakia until that time. This meant in particular the branches of aviation and air defence. Nowadays, the Military Academy in Brno is the most important pedagogical and scientific-research centre of the Armed Forces of the Czech Republic. It provides the education for military professionals for the Ground Forces, the Air Force and Air Defence, technicians, senior commanders and specialists for the defence industry. It also instructs officials of state administration, political infrastructure and mass-media in issues of defence policy. Thousands of Czech officers and plenty of foreign students graduated from the Military Academy in Brno. The organisational structure of this school has been changing many times since its establishment. The school is controlled by the chancellor and commander with his vice-chancellors and his deputy for military activity. The Academy has three faculties, three separate institutes and other facilities.

Organisational structure of the Military Academy



516 university teachers
including 126 associate professors and 23 full professors

There are more than 500 teachers including more than 120 assistant professors and 23 professors. The quality of the pedagogical staff is an essential condition to keep university education in accordance with the demands of the university law. Military Academy in Brno provides university education in accordance with the above mentioned law in a 3 year **bachelor of sciences** study program, in a 5 year **master of sciences** study program and in a 3 year **post-graduate** program for about 30 branches according to the demands of the MoD.

Degree programs at the Military Academy

UNIVERSITY STUDY in accordance with paragraph 2 Law No. 111/98

- /// BACHELOR OF SCIENCES - 3 - year program
- /// MASTER OF SCIENCES - 5 - year program
 - „military students“ - training for the Czech Armed Forces
 - „civilian students“ - training for industry
- /// 3-YEAR POST-GRADUATE PROGRAM (PhD)
 - professional development of Military Academy scientific and teaching staff

COURSES

- /// SHORT-TERM COURSES (1 week - 5 months)
- /// COMMAND-LEVEL COURSES (battalion level to General Staff level - 10 months)
- /// STAFF COURSES (3 - 5 months)
- /// ADVANCED SECURITY POLICY AND DEFENCE MANAGEMENT COURSE (7 weeks)

This education is provided by the faculties.

The Command and Staff Faculty educates higher ranking officers and staff officers. Later more about that. The Faculty of Military Technology and the Air Force and Air Defence Faculty teach technical specialists for logistics, Air Force and as well as civilian experts for the military industry.

Features of the Faculties

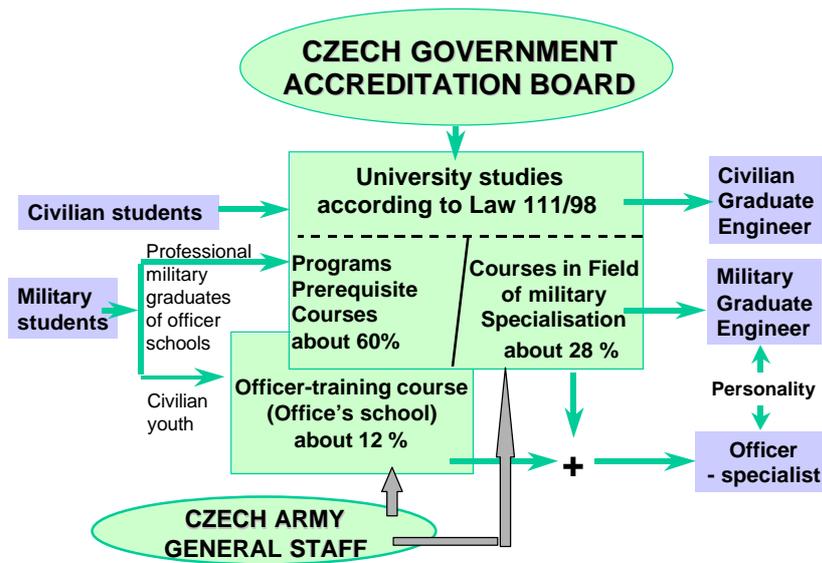
COMMAND AND STAFF FACULTY	FACULTY OF MILITARY TECHNOLOGY	AIR FORCE AND AIR DEFENCE FACULTY
<ul style="list-style-type: none"> • is the highest-level educational institution for the training of higher-ranking officers and staff officers • prepares career soldiers through university-level education and practical experience in units • expands knowledge in the military sciences • 9 departments • 104 teachers 	<ul style="list-style-type: none"> • provides university-level military technical education to meet the needs of the Army of the Czech Republic and industry in the Czech Republic • primarily trains young civilians and graduates of military high schools • expands scientific knowledge in the fields of engineering, geodesy and cartography, and the construction industry in order to satisfy the needs of the military and the defence industry • 10 departments • 156 teachers 	<ul style="list-style-type: none"> • expands scientific knowledge in the fields of electrical engineering and engineering in order to satisfy the needs of the military and the defence industry • 10 departments • 182 teachers
		

The Faculty of Military Technology prepares specialists and gathers scientific knowledge in the fields of engineering, geodesy and cartography and the construction industry. The Air

Force and the Air Defence Faculty gathers scientific knowledge in the fields of electrical engineering and engineering to satisfy the needs of the Air Force.

The faculties prepare both soldiers and civilian experts who are not conscripts. The preparation of the next generation of officers is affected by the requirements of the Czech Government Accreditation Board and the Czech Army General Staff.

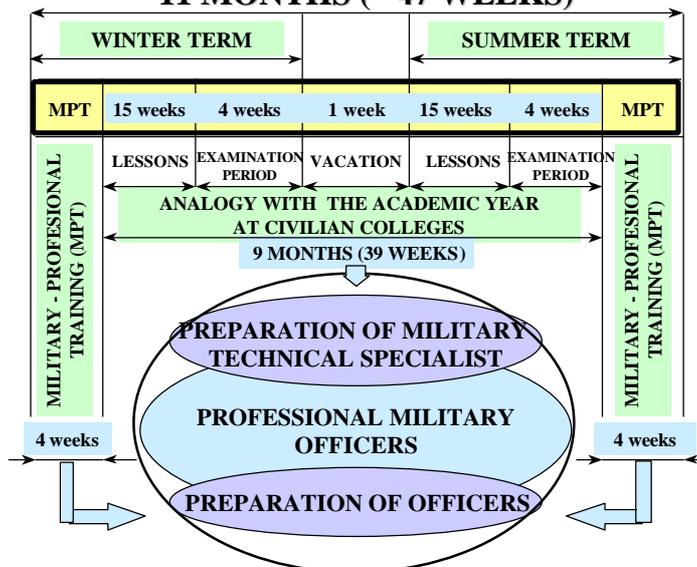
EDUCATION SYSTEM OF THE STUDENTS



University education represents about 60% and military training about 40% of all lessons.

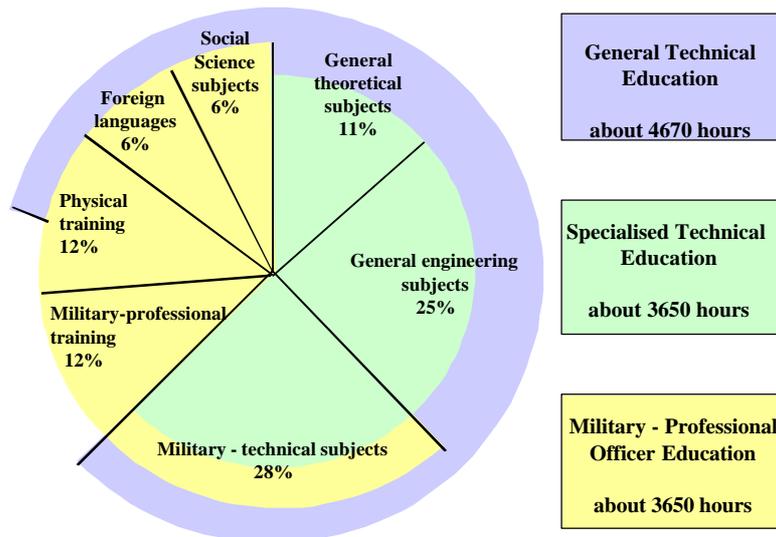
The academic year is harder than at civilian universities as military training and “special preparation” are not taught at these schools.

MILITARY ACADEMY ACADEMIC YEAR - 11 MONTHS (~ 47 WEEKS)



Unlike students of civilian universities students of the military universities have military-professional training at the beginning of the winter term and at the end of summer term. The distribution of lessons concerning the university education of the officers is shown on the picture.

SUBJECT AREAS TAUGHT AT THE MILITARY ACADEMY



General technical education during 5 years represents almost 4.700 hours, specialised technical education and military-professional training represent 7.300 hours (each of them 3.650 hours). Naturally the preparation of our officers contains physical training, foreign languages (mainly English) and social science subjects.

After finishing the studies at the Military Academy the student is promoted lieutenant and he starts his professional career at the Armed Forces.

The **Command and Staff Faculty** of the Military Academy in Brno is the highest educational institution of the Army of the Czech Republic for **preparing higher level commanders and staff officers**. It is linked to the tradition established by earlier schools with similar purposes. Those schools include The War School and The College of War of pre-war Czechoslovakia and of the post-war period, the Military Academy in Prague. After the closing of the Military Academy in 1958, the training of these officers was moved to the Military Academy of Antonín Zápotocký in Brno. The Faculty's` title and its specific educational goals have changed several times. The Faculty has had its current title and location since 1 February 1991.

Departments

- **Department of National Defence Management**
- **Department of Tactics, Command and Staff Service**
- **Department of Military Intelligence and Electronic Warfare**
- **Department of Social Sciences**
- **Department of Operational and Combat Employment of Artillery**
- **Department of Operational Employment of Engineer Corps and Engineer Support**
- **Department of Operational Employment of Chemical Corps and Chemical Support**
- **Department of Military Logistics**
- **Department of Communication Systems Control**

Command and Staff Faculty includes 9 departments which are focused on teaching military problem-solution and developing military sciences in its different areas. The structure of the department tries to reflect the organisation of the general staff sections. Corresponding departments keep very close contacts with this section. The department of Social Sciences is an exception to the rule but subjects which are taught by this department are essential for the whole preparation of the military professionals. The Faculty provides master and bachelor studies in selected fields, a 3 year post-graduate study program in selected fields like the theory of country defence, control and employment of troops, military logistics and NBC weapons and NBC protections.

Field of Study

MASTER AND BACHELOR STUDIES

- **Management of Country Defence**

COURSES

- **Management of Country Defence**
- **Military Logistics**

POST-GRADUATE STUDY

- **Theory of Country Defence**
- **Military Logistics**
- **Control and Employment of Troops**
- **NBC Weapons and NBC Projection**

I have to state that the most important courses provided by the faculty for our officers are courses which solve problems in the fields of management of country defence and military logistics. Further education is up to the different departments. This is not subject to the university law and its seniors are the Czech army general staff. It involves advanced security policy and management courses, three levels of command courses, three levels of staff courses and a broad offer of special and other short-term courses. Our top course is the Advanced Security Policy and Defence Management Course. Courses take 7 weeks and were prepared for the framework of the project Tempus Phare with the Centre of Defence Study in Aberdeen (UK) and with the Centre for Europe Security Study in Groningen (Netherlands). This is the top level course within the CR MoD and it is a part of the system of education and professional training. The course prepares higher ranked officers and MoD personnel who are involved into national security issues and who participate in the development of concepts of the defensive policy, planning, defence resources allocation and management. Further, it prepares higher personnel of other Ministries who deal with the national security problems and the CR defence support; it prepares the members or assistants of the members of Parliament and media workers. To prepare the participants of the courses to gain the control of positions in the Departments and institutions engaged in the security policy and defence management and in the missions of the CR within the European security organisations.

The course structure contains four thematic blocks:

STRUCTURE OF THE ADVANCED SECURITY POLICY AND DEFENCE MANAGEMENT COURSE

Block 1	18 hours
Introduction to the security policy and defence management	

Block 2	48 hours	Block 3	48 hours
Global Europe and security problems		Control and allocation of the defence resources	

Block 4	57 hours
Defence management of the Czech republic	

introduction into the security policy and the defence management,

- global, European and national security problems,
- control and allocation of the defence resources,
- Czech Republic defence management

The most important part of the faculty tuition is represented by three level command courses.

COMMAND COURSES

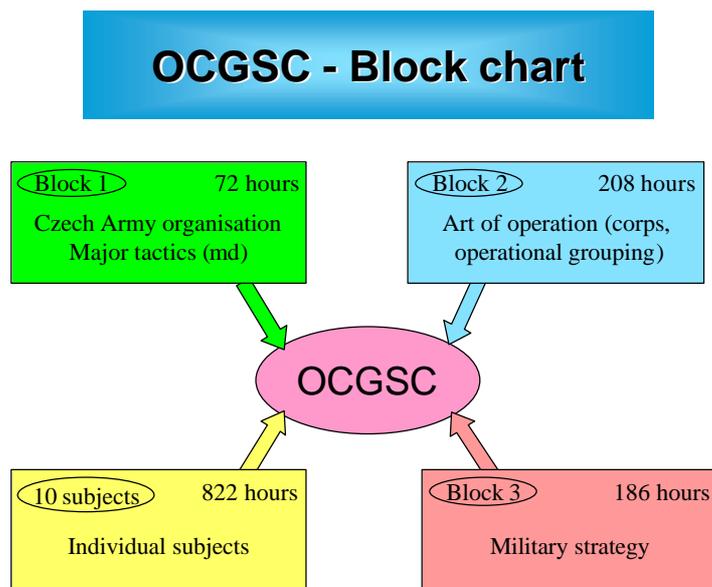


All of them (for appropriate command levels) take ten months (two semesters). The officers follow them when they passed from three to five years of practice at appropriate level. The courses are selective and predetermined for specific functions (ranks). They are determined for

about 20 % of the officers. We can call these courses as carrier courses. It means that passing them successfully is the basic condition for officers' promotion in rank and function.

Now a word or two concerning the Operational General Staff Command course. This course is predetermined for officers' preparation for the rank of a general. Each year ten to fifteen Czech officers and some foreign officers from NATO countries and other countries follow this course. The operational General Staff Command course is the highest level of education within the Army of the Czech Republic. This course prepares the officers to acquire command and management positions at army level, ACR GS (MoD) level.

The course trains both the commanders and staff officers of ground forces and logistic officers as well as ACR air force commanders and staff officers. This study is common to student-officers of all army branches. It connects the education the officers acquired in the Brigade Commander course and the experience from the brigade level assignments (at appropriate comparable positions). The course is intended for the preparation of student-officers to a creative command, operational, strategic thinking, to a capability of leading and controlling the subordinate collectives and to orient themselves in the current social and military environment. The Operational General Staff Command course contains three thematic blocks:

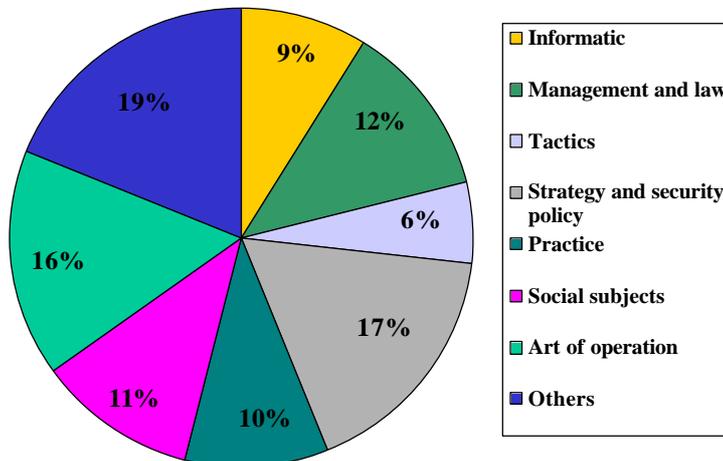


the Czech armed forces organisation, tactical doctrine of mechanised division,

- operational art (corps, JTFS),
- military strategy

and other ten separate subjects. The subject composition is shown on the scheme.

OCGSC - subject areas taught at this course



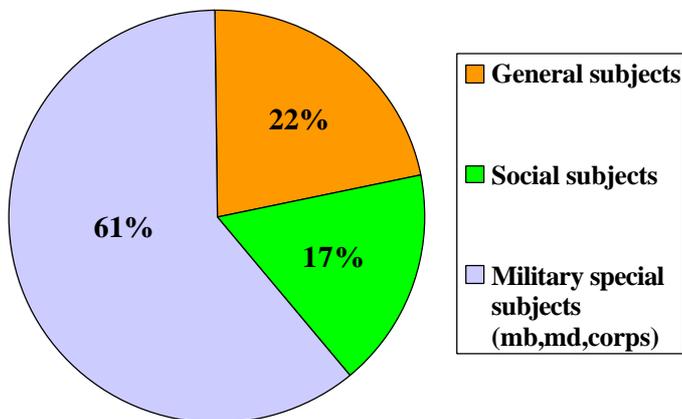
It is logical that the largest volume of lessons is prescribed to the strategy, security policy and corps level or joint operations.

The Brigade Command Courses represent the second level of command courses. This course is completed by officers usually with the rank lieutenant-colonel. The course prepares officers to acquire command positions at the brigade (base) level and some staff and special management positions at the large unit level. It is a link up with the knowledge obtained in the Battalion Commanders course and experience from positions at the unit level (comparable corresponding positions).

The graduate is theoretically prepared to perform the assigned command and staff positions at peace and war at the large unit level and staff positions at the army level. Within the study, the student-officer will extend his professional, social science knowledge and language proficiency.

About 61 % of the lessons is dedicated to the military-special subjects. It means to the mechanised brigade and division tactics and corps operations. The social subjects represent 17 % and general subjects represent 22 % of the lessons.

SUBJECT AREAS TAUGHT AT THE BRIGADE COMMANDER'S COURSE



The brigade courses are prepared in different ways for army, air forces and for military logistics officers.

The lowest level of command courses is presented by Battalion Command Courses. These courses are predetermined for the fewest experienced officers who were company commanders or who worked as battalion staff officers and who have the rank of captain or major.

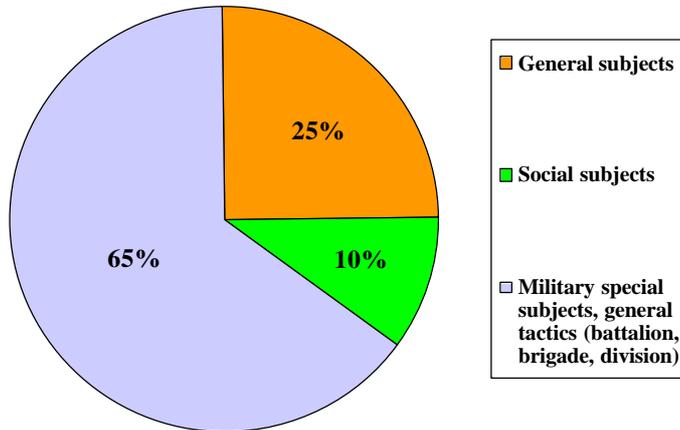
The course prepares officers for the assumption of command (management) positions at the battalion (squadron) level to execute staff and specialised management positions at the brigade (base) level. The study links up with the university-level and military professional education, experience in troops and ACR facilities and employs formerly obtained theoretical knowledge and experience. The acquired level of education is a precondition for the studies at the advanced command or staff course, abroad or for a PhD degree study.

The graduate will acquire a military education which prepares him to assume the position of a battalion commander, brigade chief of staff and brigade deputy chief of staff and some assignments at the operational command level at peace and war. The graduate will obtain new general, social science, combined arms and professional knowledge, consolidate his physical fitness and mental capabilities, perfect his proficiency in English.

65% of lessons are predetermined to military special subjects as general theory of tactics, staff service, mechanised battalion and brigade tactics, and the basic elements of division tactics. The special preparation for each branch is done in this course only. We have special blocs of lessons for them.

Almost a quarter of lessons is reserved for general subjects, the social sciences amount to 10 %.

SUBJECT AREAS TAUGHT AT THE BATTALION COMMANDER'S COURSE



These courses are prepared differently for army, reconnaissance and electronic warfare, communication, air forces, air defence, logistics specialisation and others.

The Command and Staff Faculty also organises the staff courses:

- three month Battalion Staff Course,
- four month Brigade Staff Course and
- five month Operational Staff Course.

These courses are dedicated to the staff officers, they are shorter and oriented more practically. The officers take part in courses in accordance with the needs of their commanders. In these courses the military special subjects, staff service and the use of personal computers represent the main part of preparation.

Finally a few word about our international co-operation. The Command and Staff Faculty keeps the extensive co-operation with the range of command and staff colleges and institutions. The most important contacts are with our neighbours from the Military Academy from VIENNA, the Military Academy from HAMBURG and WARSAW. We also have a very good co-operation with the National Defence College from RIJSWIJK, the Centre of Defence Studies from ABERDEN. In addition we have also good relations with staff and war colleges in Belgium, France and Italy. We are accelerating our mutual relations with the Slovak Republic, Slovenia, Hungary, Lithuania and Latvia.

Especially I would like to underline our uncommonly extensive and successful co-operation with the Military Academy in VIENNA. Now we are already preparing together the third common staff exercise which is planned in Austria in this year. We are planning to use of simulation technologies during this exercise.

We want to keep close relations with other foreign military schools in the future too.

Military education in the Czech Republic passes through dynamic changes. In the next future we expect the certain integration and application of all NATO standards in this area.

Vilmos SÁNDOR

The Hungarian Academical Training for Officers

I am a Deputy President of educational affairs in our University. I am going to tell you about some major changes in the features of the structure and teaching material of the Hungarian Military Higher Education. We tried and have been trying to build up an education system in which the military and the civilian education are connected. During the past decade there have been fundamental political, economic and social changes in the Republic of Hungary. Naturally they have had a direct impact on the Armed Forces, Hungarian Defence Forces, Border Guards as well as on every armed and law enforcement agency. The higher education of Hungary was greatly affected too. From the point of view of our conference two basic processes must be taken to a closer look:

- One of them is the transformation of the Defence Forces and
- the other one is development of higher education.

Our university, the Miklós Zrínyi National Defence University with its new system and structure of disciplines was established in these two processes and the contents of subjects and training has also changed accordingly. Prior to the determination of the present situation let us have a brief overview of those changes in the security and military circumstances which made the transformation justified and necessary. These are factors which were generating the transformation of training system and contents of education. Appearance and escalation of new sources of danger posing a direct threat for our country too like international organised crime, illegal migration, new crisis centres, armed conflicts and so on. The next factor is a dramatic reduction of the personnel of the Defence Forces triggering cutbacks in the quantity of Officer Training, quality change and improvement of the education. The next important factor is a clearly articulated intention of the Republic of Hungary to join the Organization of NATO. As you know it has just succeeded. The willingness to transform the Armed Forces as well as the goals, structure and curriculum of Officer Training. The next one is a clear intention to join the European Union. Democratisation of Hungarian Society, public administration system, legislature and law enforcement. Reorganisation of the educational system of the higher education according to Western European standards, radical integration of institutions of higher education. And the well known factor is restriction of the financial capacities, the necessity of a stabilization of situation and improving final conditions and other factors. The short listing of these major factors rather well indicates the difficulties and hardness of transition. The direct legal background and framework of transformation of military and law enforcement higher education are determined by new laws.

A new constitution, new act on home defence, new act on higher education, act on legal standing of instructors and students of military and law enforcement higher education as well as the decrease on the execution of the above mentioned and so on. The establishing and development of integration setting organizational and operational structure of our institution has been accomplished on this basis. The National Defence University was established by

integrating the former Military College, Air Force College and Military Academy and this process it is still since of the 1st of September 1997 in progress. Its mission is to prepare young officers for the Hungarian Defence Forces, the Border Guard and other law enforcement agencies, civil experts, future civil servants and public employees for the security and defence sector, and also senior military and law enforcement leaders by cultivating the adequate disciplines and branches. For example: military science, command and control organization, technical sciences and so on. The main mission for us is to applying the results of research. It clearly indicates that our university is not just a simple military institute of higher education. It is rather a complex establishment preparing experts and conducting research for all military and non-military institutions, which is assigned for the defence for the Republic of Hungary on the basis of complex security. The most important goal of integration is to create a new quality in the organization and a new mentality, function and the contains of training. By combining the advantageous features of the previous mainly practical college training of officers and the academic, mainly theoretical senior officer training. We also meet the requirements of law enforcement and civil agencies. The transformation was supported by two determinative factors. These are the follows:

- Military Science as an independent branch classified and integrated by the Hungarian Academy of Sciences.
- The Military Science provides the theoretical basis of a university.

Presently there are more than 700 military scientists in Hungary and recently we have had 150 PhD Students at our university. The other factor is that according to the degree of the Hungarian Accreditation Committee in one form of training only one degree can be earned. Although on the long run this eliminates the opportunity of earning a so-called double degree. Officer and engineer, officer and economist and so on. However the professional military or border guard leaders may receive singular respects to other independent intellectual jobs like teachers, medical doctors, engineers and others. At this point several questions can be put about the advantages and disadvantages of all this for the prospective officers. About the curriculum affected by the new training system, about the build-in possibilities of career modification, about earning a second degree and the whole system of career. Presentation on the training structure and the different branches of study and the teaching and learning material of the particular branches can provide the answer to all these questions.

Our university conducts training at two university faculties:

- One of them is the **Faculty of Military Science**,
- the other one is **Management and Organization Faculty**.

And we have six university tree college branches. These are the follows:

- the military leadership, border guard and border protection,
- security and defence policy (it is an absolutely civilian branch),
- civil engineering,
- military logistics, military technology management,
- defence administration branch,
- mechanical engineering and electrical engineering.

A further deeper examination of the military leadership training at college level can give proper answer for all previous questions. First of all what is the structure of the academic subjects at this branch of studies. In the previous training systems the college training provided opportunity to obtain two specifications during the three or four year long training period. Due to the rigid almost rear system which ordained on extremely long daily training time. The graduates were awarded one military and one civil degree in one institute within one period. It is needless to emphasize however that it was rather difficult to earn two degrees of equal value in such a short period of time. Hardly did the training system give the students any opportunities for individual studies. It was impossible to attend lectures out of timetable neither within the institute nor in other institutes. Extremely few opportunities were provided for inquiring general knowledge or getting general military education. In brief these are the follows: The young prospective officers should possess profound general knowledge both of national and European range. They should also have scientifically based general military knowledge, and they also have skills and abilities including such as NATO compatible military knowledge. That can be used for training their subordinates and for commanding their subunits in multinational units. And the next one is: They should have an appropriate command of foreign languages which ensures the fluent appropriate use of technical language in joint NATO operations and also serve as a sound ground for further individual language self development. The technical knowledge and abilities should ensure performing professional tasks and duties and after a short practice period the independent leading of their subordinates. The knowledge should provide a safe basis for further professional development and further specialisation the men. They should be ready for postgraduate training on the basis of their convertible knowledge as well as for creating the conditions and background of a plan on forced career modification. The contents and examination requirements of military leadership training are determined by the so called verification requirements of the government degree. The same qualification requirements set the proportion of theory and praxis which is in accordance with the overall features of the Hungarian higher education. The overall intellectual preparation is served for by human arts and natural sciences. The features and requirements of these academic subjects ensure the intellectual status for the professional officers and to build the backbone for executing both basic and professional officer training. It also answers the question of attending other branches both within and outside the university. Changing branches or profiles and also in service officers participating and post-graduate training and earning a second degree in other branches of the civil higher education. The quantity of classes and the examination requirements of the particular academic subjects ensure the possibility of changing branches until the fourth semester or attending other universities simultaneously. It also happens that students can earn a second degree upon graduation mainly in human and management branches. The next block is the basic officer training which is ensured by the so-called professional primary subjects. These are as follows: The last block of subjects marks first mainly practical stage of preparation of the prospective officers carried out by the Centre for Basic and Advanced Military Training in the first semester. The successful preparation is the basis of the further studies and practical training. The contents of professional basic subjects were compiled in accordance with the most up to date national and NATO

compatible military scientific principles. Considering the expectable employment of the prospective officers. The transformation and modernization of our training system is indicated by the material design schedule validity to the year of 2002. The concrete preparation of the students for the first officer assignment is done with the special subjects. Representing these different directions commanding tactics, military technology, shooting or firing preparation, logistic, professional skills. After the fourth semester these academic subjects have significantly different contents depending on the student's specialization - mechanized infantry, artillery - and prepare them the first officer assignment. Besides theory of course professional practice has a significant role in the training carried out by students at the troops after passing their examination. The total length of practises is fourteen academic week. The successful completion belongs to the preconditions of taking the final examination. The subjects below serve for the high level physical and language training as well as requiring special skills necessary for officer career. The training structure list and contains of academic subjects outline above relate to the college level of military leadership branch. Although the proportion of overall intellectual education are nearly identical there may be some major necessity based differences between the basic professional subjects and the special training in the other branches of the military science department. The university training as it has already been mentioned has a higher proportion of theoretical elements. As far as the requirements of the general intellectual training are concerned of the Faculty of Management and Organization, these are identical with those of the Hungarian technical higher education. The structure of the subjects and the course material is also in accordance with them and insures opportunity of attending other courses for the undergraduates and earning a second degree for officer graduates. The material of the academic subjects serving for basic officer training partly, special subjects preparing for the first assignment entirely reflect the military specification requested. These specifications are requested by the Military Higher Command. The changes in the course material are determined by results of the university researches and the requests of the organization sending their trainees to us. Research activity in the field of military science, done by the departments and institutes of the university is the basis of the existence of our university. After sufficient public control these researches are integrated into the course materials of the various academic subjects. The general staff of the army, the authorized directories of the ministry of the interior and other organs, sending trainees to our university, indicate the points in the system of training which should be worked out for the increased efficiency effectiveness of their organization. This provides us with a regular feedback concerning the standards of our training system.

My own intention was to give you an outline on the factors generating the transformation of the Hungarian Military Higher Education, introduce the curricula affecting this reorganisation, the changes in the training system, the structure of the subjects and the course material. The essence and advantages of these changes were represented by examining particular branches in detail. Naturally you could not get a full picture of our university. However it might have been understandable that the transformation of our institution along with preserving the traditions of Hungarian Military Science. Serves for the formation of such a training system and structure of subjects which is able to meet the international requirements and challenges

to ensure the long-term preparation of the staff of officers and civil servants. It ensures the unity of convertible knowledge and practical skills necessary for every day tasks and duties. Meanwhile with the system of modules a further postgraduate education, flexibility, earning a second degree. Attending institutes of civil higher education has also been made possible depending on individual career plans.

Miroslav LIŠKA

The Slovakian Academic Training, Part I

The Military Academy in Liptovský Mikuláš is the top educational establishment of the Armed Forces of the Slovak Republic. Through different forms of studies it prepares officers for their functions ranging from the rank of Lieutenant to the rank of General.

The Military Academy campus is situated on the periphery of the town Liptovský Mikuláš. The construction of the campus was finished in 1980. The Military Academy has been fulfilling its present function since 1993 as the Slovak Republic became an sovereign state. In accordance with the National Council of the Slovak Republic, ACE Number 185, the Military Academy provides university education for all officers except Air Force pilots and other qualifications, and guarantees career life education of graduates after their studies at the Military Academy. This is realised through a series of academic and specialised courses for all qualifications.

The Military Academy combines contents and forms of civilian university education with those of military education. Therefore, the Military Academy, in accordance with the University Law of the Slovak Republic, employs both military and civilian academics and officials.

The head of the Military Academy is a Rector, who is a military superintendent as well. He is appointed for a three-year-period by the president of the Slovak Republic. In accordance with the Academic University Law, academic bodies comprise Academic Senate and Academic Council. The Rector is substituted and supported in particular fields by Vice-rectors, who are nominated for three-year-periods. The academy is created by four faculties according to their professional specialisation. The Faculties possess legal personality and are authorised to award degrees of Bachelor, Magister or Engineer forms to their students. They provide rigorous exams and dissertations in doctorate studies and award scientific and academic titles. Moreover, they are responsible for the process of habilitation (PhD) and the appointment of Professors.

The Academy purposefully supports compatibility of military education with educational programmes of developed countries and takes part in international activities within the programmes Partnership For Peace and MIL TO MIL. Students of the Academy participate in international military exercises aimed to support peace and humanitarian activities. Mutual exchanges of students of surrounding states are successfully developed. Students of foreign military academies take part in professional and scientific tasks. Furthermore, there are exchanges of university teachers.

Studies at university (four or five years) are available for all secondary (high) school graduates. Women are accepted in limited numbers for certain specialisation.

The studies begin with the basic military training, which lasts one month. It is equal to the training of all soldiers of the Slovak Republic and ends with the military oath. The basic training is followed by the advanced one and culminates in the field training and exercise in a terrain.

The university education follows the teaching plans and the curriculum of individual faculties. The lectures alternate with seminars, where emphasis is put on self-employed work by each student. Professional subjects are included in higher classes. Moreover, the students work with military weapon systems and equipment is for further scheduled military practice. The physical fitness is stressed, which can be compared to a certain extent to top professional sports.

In addition to regular physical education and other sports activities, the students are provided with some summer and winter sport concentration campuses. These help them to lead and organise similar sports activities for army personnel. Parallel with professional subjects, the students deepen their knowledge in the English language and some other foreign languages according to their choice.

At the end of their studies, the students pass state exams, defend their diploma work and graduate. Thereafter they are given the rank of Lieutenant. This is followed by a graduation ceremony where the degrees of Bachelor, Magister or Engineer are conferred on the students according to their studies.

Further education of officers starts by reaching the rank of Captain. Then they attend specialised courses to gain the rank of Major. Later they study at courses for the not yet introduced rank of Lieutenant Colonel and Colonel. The last stage is a higher academic course for the General Staff concerning the ranks of Colonel and General.

Particular stages of military education together with individual studies create a whole life educational system for officers in the Slovak Army. Thus, the Military Academy becomes an essential part of life for Slovak officers.

Štefan GÁNOČZY

Academic Training of Officers in Slovakia, Part II

Right at the start of my presentation I would like to ask the following questions:

- What role should the officer play in military routine?
- Should he be a fighter, protector and rescuer, or organiser and administrator?
- Is he only a trainer and educator of his soldiers?

It is true, hardly any other professional career is as complex as the officer's. We certainly have to discuss the more complicated questions. The proper answers – solutions – depend very much on outlooks and comprise several aspects and factors, such as economic, political, social, military and others. The true and befitting answers, however, are very significant and important. We all aim for target-oriented officer education. As you know, our Austrian colleagues at the Theresian Military Academy have been implementing the new officer training programme 2000 under the heading “*armis and litteris*” since early in 1998. Therefore it is very interesting and important for me to take part in this conference on officer training.

Yesterday prorector Colonel Liska spoke to you on specific views and lessons learned by the military academy of the Slovak Republic. Today I would like to be more specific on the following subjects:

- **The aim of academic officer training,**
- **Duration, organisation and structure of academic officer training,**
- **Professional requirements for academic officer training.**

The Aim of Academic Officer Training

Aristotle already considered the individual as “*zoon politikon*”, a social being. On its own it is not self-sufficient. Only in society it is capable of developing its potential. And again it is the restless, motivated, active, planning and creative individual who makes inventions, gathers experience, initiates exchanges, adapts himself or shows resistance. The behaviour of man as an individual, however, is influenced by society with its standards, obligations and institutions, which themselves are determined and changed by human beings. This not only provides the basis for changing social values and standards, it also becomes clear that it takes a creative, inventive, resisting or adaptive individual to develop society. More and more people are needed to set standards, develop ideas, and have visions to provide guidance, in other words - leaders. Leadership and leaders are increasingly in demand. The way to become efficient leaders is through education. The main objectives of the revised training programme in the course of our military restructuring are:

- to increase the pedagogic training of officers,
- to adapt officer training to the changed tasks of the Army of the Slovak Republic, and
- to introduce an internationally compatible officer training programme.

Duration, Organisation and Structure of Academic Officer Training

At present all faculties of the military academy run a university course entitled “Management of Military Systems”. Students who complete the course (10 terms in total) are commissioned to the rank of second lieutenant and graduated to the degree of Master of Science or Master of Arts. At the end of each term, students are required to take 3 to 5 exams.

Specific Professional Requirements for Officer Training

Since its foundation in September 1973, our military academy has been promoting scientifically sound professional military training. Earlier – up to 1993 [sic] – this academy was a technical college for air and air defence and was run like any other civilian technical college. Its students were taking official exams and were defending their theses. The main task of officers continues to be **military leadership**. Above all, **military leadership means leading people**, considering the needs of soldiers in a military environment. An officer’s **leadership abilities** are based on sound knowledge and high professional qualifications. An officer’s **leadership performance** must flexibly match his personality and considers the well-being for the soldiers under his care in his decisions and actions. The officer must show a positive attitude towards his soldiers. Because of his professional and social standing, an officer is expected to have a global outlook, yet still preserve his Slovak identity. As I have already said: The field officer is the most highly qualified military leader. In his professional work he must perform mainly operational and routine tasks.

From the professional needs, the following general qualifications of an officer may be deducted:

- Society expects professionalism from military leaders, which includes technical competence, pedagogic and didactic abilities, as well as social and organisational talents.
- Military leadership rests on a reflection of values and standards, thus creating the preconditions for motivation, engagement and readiness for action.
- Leadership must be credible and match the situation. To achieve this the officer must be impeccable in character, provide a shining example, and have an outstanding ability to communicate.
- The officer’s abilities as a leader are primarily determined by his ability to think analytically and systematically, to plan integrally combined with clear decision making, purposefulness, and the ability to enforce his decisions.
- Military leadership techniques means to take decisions and to act in accordance with the intent of the superior by applying various methods to solve problems.

Rudi VRABIC

Officer Training in the Slovenian Army

General Statements

First, let me point out two important factors that have influenced the set-up of our military training system.

The first is the declaration of independence of the Slovenian Republic in 1991. This resulted in the need to establish our own military training system, which did not exist before the disintegration of Yugoslavia.

The second factor is the large number of requirements which the few officers of the Slovenian Army must fulfil.

As we see it, an officer should be highly educated, have a high level of knowledge about society and science, and possess the required military competence on top of it. If he meets all the above requirements, he will be able to perform all his duties in a satisfactory way. His knowledge should enable him to continue his personal development, so that he can meet the challenges of the future.

Officers' training is conducted in close co-operation with civilian educational bodies, like universities and other institutions of higher learning. This fact has a very strong influence on the organisation of the military training of specialist officers and officers on higher levels of command.

Other factors, too, have a bearing on our military training system. The overriding one is the goal of our country to join NATO. It governs the current reorganisation of the Slovenian Army, which is to be completed by 2010, and the adaptation of the military training system of officers' training, because we aim at maximum compatibility with NATO.

The Development of Officers' Training in the Slovenian Army

The roots of officers' training in the Slovenian Army date back to 1992, when the Officers' School was founded as part of the then training centre of the MoD of the Republic of Slovenia.

Today, the training of officer cadres, basic officers' training, and the further training of officers, as well as specialised military training is conducted in the military training centre of the Slovenian Army with the Officers' School and in the Command, Control and Staff School of the Slovenian Army.

- The Officers' School is responsible for basic officers' training of both career and reserve officer aspirants, up to the level of company commander. Basic officers' training is open to officer aspirants who have finished their civilian studies and are not older than 23 or 24 years. To be admitted, officer aspirants who want to become career officers, must first complete their national service of 7 months, and then enter into a 10 year working contract with the MoD. Their total training consists of national service and basic officers' training of 52 weeks, with a total of 2,035 teaching units.

- During the initial phase of training, the objective is to turn a civilian into a soldier and officer aspirant. Basic military training of officer aspirants is designed to impart general military skills in the respective speciality, organisation, the planning of training, and leadership up to platoon level in a company, both in peacetime and in wartime. The arms-specific training is conducted at the respective weapons or technical school. The final phase includes weapons specific and platoon leader training, together with information concerning leadership on company level. Once he has completed his basic officers' training, the career officer aspirant is promoted Second Lieutenant and transferred to a posting of platoon leader with the forces.
- The further military training of officers is handled by the Command and Staff school, and is conducted in increments after some time of service with the forces or in a headquarter. Further military training is intended to provide officers with the required knowledge and skills for postings on higher echelons of command, and also establishes the basis for promotion and advancements. Further training is augmented with various specialised courses.
- The first part of further military training addresses First Lieutenants and is conducted three to five years after graduation and service with the forces. It is the four-month staff course, in which tactics and leadership on company and battalion levels, including staff duties on battalion level, are covered. To be promoted Captain, officers must have passed this course.
- The second part of military further training, addressing Captains, is conducted after further three to four years of service with the forces. It is the higher staff course, and covers tactics and leadership on regiment/brigade levels, as well as international staff duties on brigade level. To be promoted Major, officers must have passed this five-month course.
- An additional requirement is a six-month course at the faculty of social sciences, leading to the title of "expert".
- The third and highest level of training addresses Majors and Lieutenant Colonels, with further three to four years of service with the forces or in a headquarter, and is the general staff course. It covers operation, national and international security, the administration of resources and an introduction into strategy. To be promoted Colonel, officers must have passed this course.

A further kind of training of officers is the training of specific functions, augmenting basic and further officers' training in special fields, as required for specific functions in the Slovenian Army. This is conducted in courses of up to 30 days, and includes courses for company commanders, for brigade and regimental commanders, technical courses, language courses, training methodology, management, EDP, human resources, etc.

This is the present state of affairs in the Slovenian Army, but it will change by 2010, when the current reorganisation will be concluded. Changes are underway, and the goals are

- to meet the personnel requirements of the Slovenian Army in the long term, and
- to assure the level of competence of military cadres to grant national security. At the same time, the Slovenian army is to be integrated into multinational forces. Slovenia is to be integrated into the system of European security, particularly NATO.

In doing so, there is need to make more use of the public (civilian) system of education for professional officers, and to increase officer training at foreign military training institutions.

Veselko GABRICEVIC and Igor FISTONIC

Croatian University Training for Officers

Compared with my colleagues from other armies, we are a young army which is in the process of setting up a training system. In 1991, we still had nothing and you will soon realise what has happened till now. At the beginning of the 1991 war of liberation we noticed that we were practically without any command and control structure, but it was much easier to acquire weapons. Therefore we started with officer courses already in December that year. These were mainly short courses for platoon leaders, company and battalion commanders.

In December 1991 our leadership decided to set up an officer training centre, and we started with the preparations already in February 1992. Between 1992 and 1997, three training centres had been established; one army, one navy and one air force training centre. In addition some independent schools were founded.

In 1997 decision was made to put all these training establishments under one command, so that at present all training centres and schools have a unified command.

Since the beginning these first purpose-structured training courses and now, we have trained more than 13,000 officers.

The current organisation of the Croatian military training centre is as follows: A headquarters on top, and this controls the following elements:

- The school of national security,
- The national defence academy,
- The staff college,
- The army training centre, and
- The territorial army school for officers and NCOs.

The naval school comprises

- one officer school, and
- one NCO school.

The air force has:

- one pilot school,
- one officer school, and
- one NCO school, and in addition
- a foreign language institute.

The national defence academy is the youngest training establishment. It opened last year. It offers top level officer training for brigadiers and generals of all services and branches. Training focuses on strategy and tactics with 6 hours of lectures per day. At the end of the training course a thesis must be submitted. Lecturers include the highest generals, MoD staff and guest lecturers, and also the President of State and supreme commander of the armed forces, as well as the Prime Minister and other government members have been lecturing.

Brigade commander courses and courses for commanders with appointments of equal ranking are held at the staff college. The training lasts for one year or three terms with 6 hours of lectures per day. These courses also end with a thesis that focuses on tactics.

Commanders at squad, platoon, company and battalion level are trained at the army training centre. Basic training for squad and company commanders lasts for four, and training for battalion commanders for six months.

Officer and NCO training courses of only six months with additional training courses for another six months are a speciality of the navy school. Training is also for six hours per day, but practical training may last for 8 to 12 hours or even longer.

The goal of the air force training headquarters and particularly of the officer and NCO training courses is to train the majority of lower air force ranks, officers and NCOs.

The Integration of Civilian and Military Education Systems

Let me draw your attention on how we train our pilots.

Pilot training courses are advertised. Applicants who meet the requirements and are admitted, begin their studies at the faculty of traffic science. They are at the same time students doing their regular studies and military cadets training for military tasks. After the first year of training they go to the air force centre for further selection. At that time they receive a student grant from the MoD and the respective university.

They continue their university studies during their second and third years, and during the fourth and fifth they receive comprehensive flying training. They complete university studies with a university diploma and are therefore academic engineers or aviation engineers with a military training and appointment. The CiC of the air force staff commissions them to the rank of lieutenant and the commander of this air force training centre hands them the diploma of military pilot.

We started with this type of pilot training when the war in our region was at its height, with the first graduates commissioned in 1997. We are planning similar programmes for other officer training courses and the other two services! We want a uniform integrated military training system.

The Introduction of New Training Programmes

We added new subjects to the new training programmes. In contrast to the past we teach the following subjects in all training courses: Management, resource handling, leadership, and operational security, and more. We have also adopted NATO standards for tactical training.

Economic Aspects

The Croatian officer training system is based on comprehensive civil and military training. There are two ways to become an officer.

Options to Train for Officer

1. First Option

An officer candidate with university entry qualifications goes to university. For naval officer he studies at the naval faculty, for pilot he studies traffic science, and for artillery officer mechanical engineering for four years, or eight terms. During that period he attends a number of military courses. After completing his studies, the officer candidate is commissioned. After

the first and second year he undergoes field training. These two months of field training are equivalent to the basic training of ordinary soldiers. After the third year he undergoes two months of field training. This period of field training is different for all three services. After its completion he will be moving to one of these three training centres. There he receives his special military training to become platoon leader or for an equivalent posting in the navy or in the air force. Then he will serve in the field. Upon completion of all courses he is going to be commissioned second lieutenant and sign a service contract with the armed forces which makes him a career soldier. For this, he must prove that he has completed his studies and meets all military requirements to be commissioned second lieutenant.

2. Second Option

The second option to become an officer is through diploma studies. Those who have completed their diploma studies may apply for officer training. They may choose among a regular, militia or reserve officer status. Upon completion of their studies they may do basic national service at any of these training centres. There they undergo initial or basic training and accompanying training for 4 months. Those cadets the MoD is interested in will be awarded a contract which makes them regular officers. Those who are not interested in a regular officer career will be available for reserve duty. Their career depends on the training system. Basic officer training is linked to leading a platoon which means taking up an appointment as platoon leader in the rank of cadet officer or second lieutenant. The next step is training for company or battalion commander in the rank of first lieutenant or captain. These then attend the next higher course, i.e., training for battalion commander or staff officer at brigade level. A small number of officers will continue at the staff colleges. By that time they will be major or lieutenant colonel, and will be trained to become brigade commanders or higher staff officers. The top of officer training is the general staff course at the national defence academy or war school. All three services have the same training system. One or the other candidate may study at the school of national security.

Andreas PERNSTEINER

“Armis et Litteris” Officer Training 2000 at the Theresan Military Academy

For quite a few years efforts had been made to convert officer training at the Theresan Military Academy into an FH-course of studies, and finally were successful when the accreditation authority, the “Fachhochschulrat” (FH-Council), granted recognition.

This means that the following goals of the training reform of the Austrian Armed Forces will be achieved:

- Adaptation of officer training to the changed tasks of the Armed Forces;
- Emphasis on pedagogical training of officers;
- Entrenching officer training into Austria’s post-secondary educational system;
- Austrian officer training will meet international standards.

The Training Objective

The training of career officers aims at providing a *highly qualified military leader*. Within our democratic society he is in a position to accomplish his tasks in a professional manner both in times of peace and war because of the well-founded academic training he has received. Above all, this concerns the tasks of a platoon leader, a technical service officer, or a deputy company commander. While being trained, the future officer will have to learn that military leadership may also mean to make decisions in dangerous situations and still be fully responsible for them. In most cases, such decisions will influence also the lives of the soldiers under his care. It goes without saying that the profession of an officer requires *behavioural patterns* which the candidate must understand and digest in the course of training.

Training will also have to lay the foundation for the entire professional spectrum of the future officer in his role as a *leader* and an *expert*. This means also training for *service in international operations* including the necessary training of foreign languages.

On the whole, also in the future, officer training at the Theresan Military Academy will be conducted with a focus on military-technical subjects. In this way we meet the demand for the officer to assume responsibility as a leader in our armed forces right after his commission.

Military training on the basis of academic findings is the core of the new training system. “Armis et litteris” was the motto of Austrian officer training also in the past. And this slogan shall be the motto also for “Officer Training 2000”.

The Core Task: Leadership

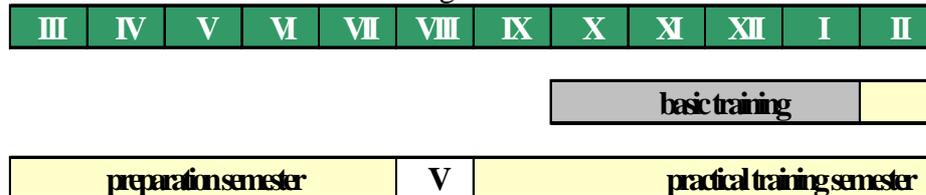
In his first assignment the following tasks are waiting for the young officer:

As the leader of a platoon of his branch he will normally command about 40 soldiers; as a technical service officer or staff member he will be the head of a special branch; as a deputy company commander he will be given co-ordinating jobs but also leadership tasks for about 150 to 200 soldiers.

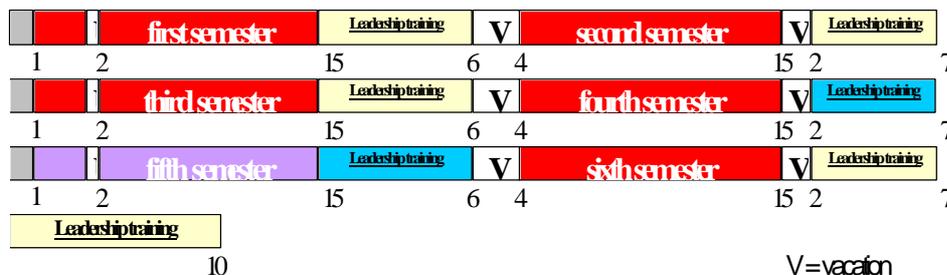
Therefore, the graduate of a FH-course of studies “Military Leadership” will have to deal with tasks like “training of recruits” and “establishing operational readiness of soldiers and serviceability of weapons and equipment” of the unit under his command.

Training Length, Organization, Structure

The course of studies for line officers consists of *six semesters of military-scientific studies* and *practical military leadership training*. It starts with a summer semester at the beginning of the month of March immediately after the end of the selection process, which consists of a preparatory semester and a practical training semester. The entire course of studies takes place under the auspices of the Theresan Military Academy, which also makes use of training facilities of branch schools and regiments.



FH-Course of Studies "Military Leadership"



The first, second, third, and sixth semester (red in the chart above) plus the ensuing periods of „practical military leadership training“ as well as the fourth semester (also red in the chart) are conducted *by and at the Theresan Military Academy*. The fifth semester (violet in the chart) and the preceding and the ensuing periods „practical military leadership training“ are conducted at the respective branch schools in order to provide branch-specific training.

Therefore, the *FH-course of studies* itself consists of the „red“ blocks and the „violet“ block. Beyond that, the line officer training as a whole includes also the preparatory semester and the practical training semester as the entrance requirement as well as the „orange“ and the „blue“ blocks. On an average, the academic load is about *50 hours per week* in any academic year.

FH-Course of Studies “Military Leadership”

This course of studies for military leaders is based on previous training for non-commissioned officers but is open also for persons who are not civil servants or do not aspire to become military officers, provided they have met the military entrance requirements as mentioned in the chart overleaf and the requirements of university entrance.

It is the *objective of the course of studies* to provide the students with practice-oriented training based on scientific findings. Instruction is designed to enable the graduate to accomplish his tasks as a military leader or expert in his chosen field. This objective is to be achieved by:

- Teaching the required technical knowledge in the areas of military leadership, defense pedagogics, and defense law, taking into account the current state-of-the-art;
- Encouraging independent analysis of problems to arrive at sound logical solutions, making use of all knowledge accumulated;
- Teaching communicative and organizational skills required for problem solving in a team;
- Teaching knowledge and skills necessary for computer-assisted problem solving;
- Teaching a foreign language to the level which enables the graduate to communicate orally and in writing and to read the relevant technical literature;
- Encouraging students to use their practical skills thitherto acquired.

Length of Study, Phases of Study

Study lasts six semesters, starts at the beginning of the summer semester in March, and is broken down into two phases.

Each semester lasts 15 weeks of 30 hours each. The first phase of study lasts four, the second phase two semesters.

For the *first phase of study* (four semesters) the student must enrol 30 hours per week. In the first, second and third semester all 30 hours per week must be spent on compulsory subjects, in the fourth semester 26 hours on compulsory subjects and 4 hours on electives.

The compulsory practical work of twelve weeks at the end of the third semester must be covered at a time when there are hours per week. In the first, second and third semester all 30 hours per week must be spent on compulsory subjects, in the fourth semester 26 hours on compulsory subjects and 4 hours on electives.

The compulsory practical work of twelve weeks at the end of the third semester must be covered at a time when there are phase (i.e. fifth semester) is dedicated to an elective in-depth subject, for which the student has to enrol 30 hours per week. Since during the second semester of the second phase (i.e. the sixth semester) the thesis also has to be completed, the student must enrol only 18 hours of compulsory subjects and 2 hours of electives per week. Therefore, the total number of hours to be enrolled in the second phase is 50 hours per week.

Lessons/Examinations:

Lessons are offered as

- Lectures;
- Practical studies;
- Proseminars; and
- Seminars

Knowledge of German is a prerequisite since this language is the working language of the entire training program.

Participation in the lessons is compulsory. They are concluded by examinations, which may be repeated only twice.

Any second re-examination must be taken before a board of examiners, and must be held publicly.

Failure of the second re-examination results in expulsion from study.

Subject Area	Subject	1st Sem HWS	2nd Sem HWS	3rd Sem HWS	4th Sem HWS	5th Sem HWS	6th Sem HWS	Total
Leadership	Leadership and Organizations	6						6
	C3 Systems		2	2			1	5
	Business Administration				3		1	4
	Tactics	2	3	6	4		3	18
	Arms and Services and their Principles	7	8	5	2			22
	Disaster Relief Operations						2	2
	Micellanous Military Subjects			2	2			4
	Defense Technology	2						2
	Environmental Protection	1						1
Military Geography	2						2	
Defense Pedagogics	Training Planning			3	3		2	8
	Physical Training				3			3
	Essentials of Pedagogics	6	6	3	5		1	21
Politics	Political Science		4	2			1	7
	Military History		2					2
	Contemporary History		1	1				2
	Defense Ethics						1	1
	Communications Science			2				2
	Economics						1	1
Law	Constitutional Law		2					2
	Procedural Law						1	1
	International Law				2			2
	National Defense Law			2				2
	Service Regulations						1	1
For. Languages	Language Training f. Special Mil. Purposes	4	2	2	2		2	12
Dipl. Seminar							1	1
Sum Total of Hours per Week per Semester	Total of Compulsory Subjects (HWS)	30	30	30	26	30	18	164
	Total of Electives (HWS)				4		2	36
	Total HWS (1st to 6th. Sem)	30	30	30	30	30	20	170

HWS stands for the number of hours per week devoted to one subject. One semester consists of 15 weeks of 30 hours each. Therefore, the sum total of the entire course of studies is 2,550 hours. This sum does not include the required compulsory practical work and others.

Completion of Studies/Diploma Examination

The diploma examination marks the conclusion of training. By passing the exam, the student will prove his scientifically well-founded knowledge and skills relevant to his future profession. The diploma exam is a comprehensive examination and is the prerequisite for obtaining the academic degree. The academic degree of “Magister für militärische Führung (FH)” is awarded by the accreditation authority „Fachhochschulrat“ (hereinafter referred to as “FH-Council”).

The diploma examination consists of

- a thesis and
- an examination before a board of examiners.

The thesis is to be sponsored and evaluated by a lecturer from among the faculty. The topic of the thesis must be relevant to the military spectrum, must cover several subjects, and is to be approved by the Director of Studies. If the thesis does not satisfy the examiner, i.e. the sponsor, the thesis must be revised within one month. Approbation of the thesis and successful completion of the second phase of study are the prerequisites for admission to the *diploma examination before the board of examiners*.

This part of the examination has to be taken before an examination senate from among the ranks of the examination board. It comprises the presentation and defense of the thesis, and a discussion which relates to the connections of the thesis to the other subjects of the curriculum.

If the candidate fails before the board, the exam may be taken again *once* after four weeks. If he then fails again, the *entire* diploma examination may be taken again after six months. In such a case also a *new thesis* has to be written.

Practical Military Leadership Training

A line officer must be able to lead his unit in the course of exercises and in combat also under conditions of own physical and psychological stresses and strains. Therefore, this period of training comprises mainly long-term- transfers to training areas and field exercises.

Since officer training had to be changed profoundly, the subject “practical military leadership” also had to be adapted. Practical military leadership stands for those training modules which are dedicated mainly to hands-on training in the field of practical leadership in combat situations.

It is the learning objective of officer training to command and control a platoon-size unit, or do the job of a technical service officer, and to act as the deputy commander of a company- size unit. The core element of these training modules are transfers to training facilities and long-term field exercises.

The cadets will have to work long hours in order to obtain a realistic picture of what life in a combat environment is like. However, the curriculum provides that the 50 hours per academic week during officer training as ordered by the Ministry of Defense are not exceeded during an average academic year.

However, those periods spent at the Theresan Military Academy at the end of the first, second, third, and sixth semester include the following additional subjects apart from practical training to lead some 40 soldiers of an infantry platoon:

- Training to become an Army High Alpinist, or Army Sports Trainer, or to attain any other specialty;
- Training for international assignments, including the necessary language training;
- Preparation for his first assignment after graduation (practical work), augmented by practice-oriented training on disciplinary regulations;
- Training at a foreign military academy with the aim of widening the military horizon of the student and to provide him with training which is not available in Austria. (Conversely, foreign cadets receive training in Austria under the auspices of the Theresan Military Academy - at the moment mainly alpine training).

Also time for examinations, preparation for examinations, work on various projects, and “familiarization travels” in Austria is set aside.

The period at the end of the fourth and fifth semesters is dedicated to specialized training at the branch schools or technical service schools. The basic knowledge and skills pertaining to the chosen assignment of the student are taught there.

Platoon Leader Courses

The core of practical leadership training consists of four platoon leader courses. Together with the period “practical work” they form an integral part for the achievement of the training objective. Practical work is done in the framework of field exercises, and after the end of the sixth semester.

The Common Basis:

Platoon Leader Courses #1 through #3

Basic infantry training provided in the platoon leader courses 1 through 3 must not be mistaken for the proper training of an infantry platoon leader. Rather that knowledge and those skills are taught which *every* military leader, regardless of his branch, must know and be able to perform *at any rate*.

In this context, it is very important to organize practical training in such a way that knowledge of previous training periods is taken for granted and that connection to the theoretical training of the previous semester is established. In addition, the cadet must be given ample opportunity to gather experience as a leader.

The cadet must also experience what the modern battle field and what work on the next-higher echelon are like. The traditional “Field Exercises of the Theresan Military Academy” make an important contribution to this end because in the course of the Exercises the state of training of the cadets can be evaluated in a greater context under down-to-earth battlefield conditions. For the cadets in the third semester and above participation in the Field Exercises counts as Practical Work. Since also regular troops take part in the Exercises, exchange of experiences and a comparison between theory and practice are facilitated. Therefore, also in the future the Field Exercises should be the highlight of practical leadership training of each summer semester.

On the way to “First Assignment”: The Platoon Leader Course #4

The platoon leader course #4 is closely linked to the study of the in-depth subject which has preceded it. In this course those practical skills are taught which the leader of a unit of his own branch requires. On-the-job training in the framework of the field exercises provide valuable practical experience.

It is obvious that in this way the young cadet is made more and more familiar with his job waiting for him on his “first assignment” as a line officer.

The ensuing 8-week practical work gives him the last opportunity to find out where he stands before he finally plunges into the life of an army officer.

Among the great number of skills which a career officer has to acquire, the “ability to lead” ranks prominently.

This aspect has to be considered in the course of practical leadership training. In order to train “the right thing” one must first define the term “leadership” and then choose the proper training strategy. An important question is whether for combat situations and for peacetime “daily” routine service and training the same or other properties are relevant.

For the accomplishment of combat-oriented tasks the “core dimensions” necessary for the “ability to lead” can be described. In doing so, the most important situational criteria must be taken into account, namely

- the time available,
- the complexity of the task,
- the professional and psychological maturity of the team-mates,
- and the psychological and physical situation of the team in general.

Requirements for Admission

In general, the basic requirement for admission is the General Certificate of Education (GCE) or some pertinent professional qualification. In addition, a number of supplementary exams for university entrance are recognized.

According to section 4, para 2 of the Law on Fachhochschul Studies, the basic requirement for admission to the FH-course of studies “Military Leadership” is the *General Certificate of Education* or some *pertinent professional qualification*. Such supplementary exams for university entrance like on “pedagogics”, “psychology”, “sociology”, “political science”, “science of communication”, “electrical engineering”, “mechanical engineering”, and “geodesy” are recognized. For candidates with pertinent professional qualification, i.e. graduates of the Non-Commissioned Officer Academy in Enns, another type of *supplementary exam* is provided. From the point of view of the Civil Servants Act, for admission to officer training the GCE or the civil servants advancement examination are required.

Therefore, the following entrance qualifications for the FH-course of studies “Military Leadership” are recognized:

Candidates who *do not wish* to become military officers, e.g. civil servants from the MoD, require the GCE, or anything like the civil servants advancement exam;

2. Candidates who *wish* to become military officers, which is the “normal case”, require the GCE or the civil servants advancement exam (which is a substitute for the GCE), and must go through EF-training (i.e. one year volunteers), the preparatory semester, and the practical training semester;

3. Other candidates who *wish* to become military officers must have spent at least 36 months in the Forces, must not exceed 24 years of age, must have passed the Military High School for Employed People, and must also go through the preparatory semester and the practical training semester.

The candidates as to 1. can graduate from the FH-course of studies with the academic degree “Magister (FH)” but cannot become professional officers of the Austrian Armed Forces. The candidates as to 2. and 3. graduate from the FH-course of studies with the academic degree of Magister (FH) and the rank of second lieutenant.

So far, the Civil Servants Act does not provide for admission to EF-training via supplementary university entrance exam, and to the preparatory semester via service as non-commissioned officer including supplementary exam. But the Theresan Military Academy has already submitted a request to that effect, which is being looked into.

Admission

Candidates must submit a *written application* to the Director of Studies of the FH-course of studies “Military Leadership” by July 15 of the year preceding the desired entrance year. The annual intake of students is 90. If on July 15 there are more applicants than vacancies available, an assessment will be held which includes observation and evaluation of the personality of the **The Selection Criteria are:**

- Pertinent professional qualification and experience;
- Practical training experience;
- Physical fitness;
- Power of psychological endurance;
- Leadership potential;
- Adherence to democratic values;
- Knowledge of foreign languages.

candidate, and written, oral, and practical tests.

The assessment process results in a ranking of candidates, and there is an exchange of ideas with each candidate. If a candidate resigns, the candidates ranked behind him will move up. There is *no waiting list* for candidates who do not qualify.

Preparatory Course

Once the Civil Servants Act has been changed, a preparatory course will be initiated to prepare NCOs for the supplementary exam. It will be geared for the supplementary exam for university entrance and will comprise the compulsory subjects German, English, geography, economy, history, and sociology, and one subject from the electives mathematics, descriptive geometry, physics, chemistry, biology, and ecology.

Subsequent Graduation

So far, for subsequent graduation no guidelines are available. However, it is highly unlikely that subsequent graduations will be possible before the year 2000 when the first regular students of the FH-course of studies will graduate. Efforts are being made to find a model which will enable officers who graduated from the Theresan Military Academy before the FH-course of studies was accredited to obtain the academic degree of “Magister (FH)”. The minimum requirement will be to write a thesis and to sit for a diploma examination. Requirements beyond those mentioned can be assessed only after the FH-Council has passed pertinent guidelines.

A brief glossary of frequently used Austrian terms which may sound awkward in an English translation.

„*Armis et Litteris*“ [Latin; i. e.: “with arms and studies”]

Einjährig-Freiwillige (EF) One-year volunteers

Fachhochschule (FH) [i. e.: extra-university institution in higher education]

Fachhochschulrat (FHR) FH-Council

Fachhochschulstudiengang Fachhochschul-course of studies

„*Militärische Führung*“ “Military Leadership”

Leutnant Second lieutenant

Magister (FH) für militärische Führung Master of Arts in Military Leadership

Offiziersausbildung 2000 Officer Training (Program) 2000

Offiziersleitbild Officer “Leitbild”, i. e. officer performance characteristic

Theresianische Militärakademie Theresan Military Academy

Truppenoffiziersausbildung Course of studies for line officers

Truppenoffizierslehrgang (Practical military) leadership training (for officers) (LST)

Vertiefungsgebiete In-depth subjects

Lectures (L) are given before a major group of students. The important feature is systematic presentation of a special field by the lecturer.

Exercises (EX) serve the in-depth study and the practical application of knowledge acquired either from lectures or by own research. They may also be used for the discussion of problemsolving attempts by the students themselves.

Proseminars (PS) are used to guide students in the preparation and presentation of problem analyses and problem solutions and the discussion thereof, taking into account the current state-of-the-art.

Seminars (SE) are used for the presentation and discussion of major problem analyses and problem solutions, worked out to a large degree by the students themselves, taking into account the current state-of-the-art.

Gernot ALBRECHT

Higher Officer Training Considering Academic/University Principles

The representative of the Theresan Military Academy will speak about the development, the present situation, and the perspectives of the pending college course. As the majority of officers eligible for higher officer training will undergo this type of training, it is advisable to look at the options of further training on the basis of academic/university principles.

Officers of the higher technical, medical, quartermaster and military services as well as military chaplains have undergone university training. They receive their specialised and military scientific training at the National Defence Academy in Vienna. The courses last for one or two semesters. There are some graduates of the Theresan Military Academy among the army chaplains, surgeons, veterinarians, chemists and technicians.

Let's look at the large group who receive their military scientific training at the National Defence Academy and other supporting training facilities. Before going into detail about the current discussion and intentions, here is a brief overview of past developments. Already in the early sixties attempts were made to get officer training recognised by universities. A number of important courses at the Theresan Military Academy as well as the National Defence Academy have been held by university professors and lecturers.

I wish to recall the 7th general staff course which took place between 1972 and 1974, in which seven university professors lectured for a total of 13 hours per week per semester in several subjects. These included law, applied economics, information science and modern history. The obvious idea was that certain subjects must be taught by specially qualified personnel. Now let me comment on the changed situation. Over the past years, the spectrum of risks, and with it the military operational scenario have expanded and become much more complex.

Governments are entitled to establish appropriate organisations to provide domestic and external security, and to counter this wide spectrum of risks. These organisations have a protective function to handle new tasks and challenges. To do so, both the military deployment and the political, civilian and international implications must be assessed, resulting in a new weighting within the possible range of operations. Therefore, we must abandon the traditional ways of thinking, and also to drop deep rooted experience and search for new solutions. Consequently, the profession of an officer eventually must become an academic profession. Therefore the traditional training, which is largely based on experience, must give way to a new approach. This involves understanding, knowledge-based training, and traceable procedures. The way to reach that goal is academic training based on scientific research. Such training on a scientific basis considers experience, trains critical thinking and could be the best asset to prepare a career officer to cope with unknown future developments. Moreover, the delineation between military and civil aspects of military operations will become rather fuzzy, requiring comprehensive co-operation not only on a domestic and inter-cultural, but also on an international level.

As far as the changing values within European armies are concerned, a conference with working groups was organised at the National Defence Academy in October 1994. Colonel

Mag Udo Rumerskirch, who now is the head of the Institute for Defence Pedagogics, then, inter alia, befittingly pointed out a problem, and I quote:

“The combat mission of armed forces is only justified as a defensive one;

- Military action against a peace-breaker is only permissible in accordance with the United Nations Charter;
- The purpose of military doctrines is not to destroy an enemy and plenty armed forces, but to employ the minimum of military means with respect to the desired political goal;
- A present-day soldier must be able to carry out a number of functions equally well;
- This in terms means that one has to deal with different value systems; and
- Today’s political decisions must increasingly consider with respect to the effects on the people [sic].”

To the last statement I should add that decisions made at the military strategic level always should be judged by the effects they have on national and international communities.

Also the remarks made by the Austrian federal president, Dr Thomas Klestil, at the opening of the ORF [Austrian Broadcasting Corporation] symposium on “The Future of Research” in Vienna on 20 January 1999 should be taken as hint. The president then said,

“In the long run we must ask the same fundamental questions – and the ‘we’ includes science and research, trade and politics – in fact all of us:

- How far do our economic structures match modern demands and the growing speed with which new knowledge is developed and utilised?
- What is the status of the necessary networking among academic disciplines, research and economy, and between theory and practice?
- To which degree do we really promote creativity and the desire to learn among students and teachers?
- How do our current standards influence traditions, bureaucracies and authorities the free flow of ideas?”

Groups and workshops at the National Defence Academy addressed the question how to design higher officer training after the college course [Fachhochschulstudiengänge] at the Theresan Military Academy. College courses are academic courses for vocational training on a scientific basis.

In co-operation with the academies and in the light of future requirements, the MoD department responsible for military training established the criteria for a training system for cadres, including advanced and further training. The system must be operation, function and target oriented. Traceable and measurable achievements, also of reserve soldiers, are highly important. Training efforts should be cost effective, and emphasis should be put on character forming and pedagogic training, and particularly on the training of future leaders.

Mandatory further training within a “life-long learning system” is being introduced for all. A crucial point is the integration into the general training system, not just the Austrian system, but the system in the European Union. Certain [military] training programmes, also for higher officers, are already compatible with the Austrian civilian training system.

As far as adapting to European standards is concerned, I wish to refer to the joint declaration by the French, British, Italian and German ministers of education of 15 May 1998 (Sorbonne-Declaration). This declaration calls for the harmonisation of European academic structures.

Courses and curricula should be academically sound and stand up to evaluation. Instructors qualified in the appropriate fields should be employed. Modern adult teaching and training methods should be applied. Students must not be overburdened or bombarded with lectures, because this would only encourage superficiality.

The mutual recognition of compatible military and civilian sections of training is intended to ensure professional flexibility. In this way, joining or leaving the military would be facilitated.

Military subjects should be geared to multinational UN and NATO operations. In Austria this is largely the case in training programmes under the Partnership for Peace programme.

Now a few words on official options of further training offered to college [Fachhochschule] graduates. College graduates hold the academic degree of Magister (Fachhochschule). They are entitled to study for a doctor's degree at a university. Subject to application, the programme and courses for such studies may be approved by the Gesamtstudienkommission [accrediting commission] in conjunction with the Fachhochschulrat [education council]. Without such approval studies cannot be taken up. In all cases an individual application must be submitted. Doctoral studies require additional 2 semesters and last for a total of 6 semesters. Following the assessment of the college curriculum of the Theresan Military Academy. Subsequent studies a for doctor's degree in pedagogy, foreign languages, and political science seem possible, because the college curricula provide the basis for studies in these subject, both with respect to quantity and content. With regard to university studies this might prove an ideal solution for our students at the general staff course, which lasts for exactly 6 semesters. This would involve some 18 to 20 hours of lectures per week and term and the writing of a dissertation.

In my opinion, this option should not just be open to the six semester general staff course students, but also to all students attending long courses. The [National Defence] Academy could ease the difficulties of enrolling at a university. I am thinking of the commander course which lasts for 2 semesters. In this context a good deal of private initiative is required when personal career planning points in that direction.

The motivation to change is a result of the growing complexity of social and military systems on the one hand, and the awareness of the increasing number of highly trained staff officers in Europe and the United States. In view of this development it seems necessary to amend the Defence Act, to determine the required training levels for individuals and organisations.

As it is the case with the ministry for science, the principles of evaluation should be issued by the MoD. Evaluation is something quite personal, particularly of the efficiency of teachers. It takes be unified rules and a cautious approach.

The combination of research and doctrine is the basis of scientific work in the military. It should be possible to put into question and to prove whatever is taught. Another principle would be to concentrate on the military scientific essence of a task, whereby a vast amount of information would be replaced by a deepening of knowledge and at the same time activate the

motivation of the individual. Learning on one's own as a principle, - higher officers are mature people, after all, - is an important contribution to success and continued future application. Since 1991, students of the general staff course at the National Defence Academy have been attending lectures in political science and taking exams at the University of Vienna. The purpose is to familiarise them with university procedures, to have them compete with other students, and to encourage them to complete university studies. Among the students of the general staff course are some who are attending just a few courses, whereas others are about to complete their diploma studies. On average, 33 credit hours are taken. The first diploma exam, which requires some 60 credit hours, shows how far students in the general staff course have progressed in their studies.

For future courses at the National Defence Academy, the following points have been considered:

- International scientific standards in research and doctrine must be adopted and maintained to remain competitive and to facilitate the exchange of research results and students.
- A national goal should be the integration of military science into the scientific community on an equal footing.
- In talks with the Science Ministry we tried to gain acceptance of military science as a branch of study of its own, but the idea was turned down immediately. They want to reduce the number of academic branches and disciplines. Nevertheless, military science should be defined and made equal with other branches of science.
- Demands and standards expected by society should be maintained, particularly the integration of the armed forces.
- Organisational aspects of courses and research should be improved. Curricula and examination regulations should be issued for academic courses.
- This is intended to improve planning in view of diminishing funds.

Till that goal is reached, namely offering a course for a doctor's degree based on completed college-type [Fachhochschul] studies, which will require a decision once the first graduates will enrol at the National Defence Academy in 2006, the following interim options are considered:

1. A university course in the form of extra-ordinary studies involving 40 to 70 hours. No credit to be gained.
2. Irregular studies [irregulare] as a complete academic course with some 120 credit hours. This is an interdisciplinary approach that seems to make sense from a scientific point of view.
3. Political science as a major, which should include some 15 per cent of military science in the second part. This idea is further pursued following discussions with the head of the political science institute of the University of Vienna.
4. A university-type course as an interim measure with internal and external effects, which would improve the image and adapt internal procedures, would be the best solution.

These are extra-ordinary studies, organised similar to a university course. The Academy itself organises the course without any outside involvement. As to the scientific content, the

responsibility for curricula would remain with university lecturers. No credit would be gained for full-time university studies.

The academic title for the shorter solution of 40 credit hours would be “academically trained”. This, however, appears to be rather unimportant. The degree for this kind of university-type course must be approved by the Ministry of Science. Considering both comprehensive and interim solutions, we now can deal with the problems identified by now:

For the university-type course as an interim solution the following is needed:

1. to determine the course title, lectures and lecturers, mandatory and elective subjects, etc., and to set up an appropriate contract with Vienna University,
2. to decide where to start with such a university-type course, i.e., which kind of course this should be,
3. internal and external information work.

What action is to be taken or has already been taken to meet the target?

1. The current military science paper will become a diploma thesis. Both the academic advisors and the students will be instructed by the pedagogical institute of the University of Vienna. This will improve quality, which will at least match college-type level.
2. Adequate publications in the field of military science.
3. The Minister of Defence was requested to set up an advisory board to further develop the system, to deal with appeals, curricula, and provide general advice. This board (the University of Vienna has already been notified) should include university representatives both from at home and abroad, representatives of the Federal Ministry of Science (and Transportation), the Academy of Sciences, and other educational institutions.
4. The course curriculum should follow academic principles. Sections 1 through 9 of the National Defence Academy mission have already been submitted to the ministry. The most important point of that part is the devolution of ministerial tasks to the Academy, making it - at least partly - an independent institution (sections 10 through 26).

The suggested content distribution could be:

- 40 per cent military leadership
- 12 per cent military technology
- 16 per cent foreign language (military terminology)
- 10 per cent each military pedagogy and economy, and
- 12 per cent defence law.

With this distribution we believe we can meet the educational and professional training requirements of future general staff officers and commanders. This sheds some light on the problems which the National Defence Academy will have to deal with as a result of changed social training and educational conditions in the military. To remain static and think that everything is fine and has worked out alright, and that everyone is well educated and trained is not enough. It must be possible to re-evaluate contents, and scientific methods must be adapted to international standards.

With a view of quality assurance, each training activity must be traceable, and teaching contents must also be traceable, too. Moreover, the qualification requirements for teaching will have to be evaluated in line with academic requirements.

The aim of this presentation is to provide insight into the current state of higher officer training based on academic principles. I think the time is ripe, with respect to domestic, foreign, and education policy - to put the military training system on a sound legal basis, as it is the case with the Fachhochschullehrgang [college-type course] at the Theresan Military Academy. To observe university standards means improved quality, options for re-structuring, traceability, and better methodology without lowering practical qualities. By doing so, open-minded, professional and better educated, cosmopolitan officers can be provided to both society and the armed forces.

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