

Physical Training of Conscripts in the Finnish Defence Forces (FDF)

Reform of conscript training

Under Section 2, Paragraph 5 a of the 1994 Act on the Defence Forces, it is one of the tasks of the Finnish Defence Forces (FDF) to support voluntary national defence training and to promote the will of the citizens to defend their country and the activity improving their physical condition. When drafting the act, it was realised that it is possible for the FDF, in its role as national Arm, to contribute to the physical condition of the citizens through the physical training provided to conscripts. The close interaction between sports and the citizens' will to defend their country can also be read in the text.

Conscripts, women doing their voluntary military service, personnel employed by the FDF and reservists fall within the sphere of physical education in the FDF. Some 30000 persons liable for military service enter service as conscripts. About 500 of these are women in voluntary service. About 82 per cent of the age group receive training.

The reform of conscript training was started on 1 July 1998. The reform changed the terms of service from 8 and 11 months to 6, 9 and 12 months. The training reform has also changed the leader training and physical training of conscripts to meet modern requirements. The experience of Finnish war veterans from the Second World War and our international experience from conflicts in recent years have been taken advantage of in the reform. The changes that have happened in society and the physical performance of young people have greatly influenced the measures taken.

The physical requirements of the battlefield

The requirements of the modern battlefield emphasise the significance of the combatant's and combat commander's physical performance. The combatant needs good oxygen up take, which according to studies is at least 50-55 ml/kg/min. He must also have good operational capability in combat of long duration or taking several days.

Based on this, the assessed objectives of the conscripts' physical performance, measured with current fitness tests, are as follows:

Endurance/stamina	12-minute running test	-> min. 2800 m
Muscle power:	fitness index of muscle power test	-> min. GOOD (index)

In addition to shooting skills, each combatant should also have good skills in moving in the terrain both in summer and in winter - that is good skills in skiing, orienteering and swimming.

The combatant must have an ability to operate with 25 kg of combat equipment and 35-40 kg of field equipment and to carry other equipment as well. Therefore, versatile strength, muscular balance and co-ordination capabilities are needed.

Speed, agility and anaerobic performance, endurance in strength and speed, are required of a soldier in urban warfare.

Observation of the battlefield requires operational capability which enables the combatant to make quick and sensible decisions even when tired.

According to international studies, the maintenance and development of a combatant's physical performance requires the use of at least eight hours for physical training exercises every week. The exercises must be many-sided and varying to their physical load. They must include elements developing endurance, speed and muscular fitness and co-ordination.

Physical condition and sport skills of young people

Since 1987, the physical condition of conscripts entering service has gradually weakened. The average of the 12-minute test was 2713 metre for conscripts who entered service in 1987, while in 2001, it was only 2468 metre. Within the same period, the number of men in excellent and good condition categories has fallen from 70 per cent to 40 per cent. Correspondingly, the number of men in satisfactory and poor condition has increased (in 1987 30% were satisfactory/poor and in 2001 60% were satisfactory/poor). The running test was included in the testing programme for conscripts in 1974.

The muscle power levels have also fallen significantly. In 1988, 68 per cent of the conscripts achieved at least a good muscle power index, while in 2000 only 39 per cent did the same. The muscle power tests consist of push-up, pull-up, sit-up, back muscle test and standing long-jump. The time to do one test is one minute, excluding standing long-jump and pull-up. This test was introduced in 1984.

There has been no polarisation of conscripts regarding their physical fitness into very good and very poor during this period. On the one hand, it is known that the number of those who do little of physical exercises or who neglect them totally has been growing. As persons with several problems, they have become dropouts regarding service in the FDF before the age of conscription. On the other hand, the lack of physical exercise will only start to weaken their health after the period of military service.

The soldier's operation on the battlefield requires good capacity to move in the terrain during all seasons and weather conditions. In important sports for soldiers, such as cross-country skiing, orienteering and swimming, the skills of the conscripts are insufficient.

In winter 1997, the Defence Staff examined the skiing habits of more than a thousand conscripts in eleven brigade-level units. Half of them (53%) had their own cross-country skiing equipment and almost as many (48%) were owners of downhill skis. Half of the conscripts had not been skiing at all during the previous winter, and only 13 per cent had skied more than 100 km. A winter with small amounts of snow was probably the reason why a quarter of the conscripts had not skied at all during their term of service. Half of the conscripts were content with the skiing training they had received.

According to a study conducted by the Training Division of the Defence Staff, the share of those who could not swim a stroke was about 5 per cent in 2001. About 17 per cent could swim over 25 m but less than 200 m. The share of conscripts who could swim over 200 m was 78 per cent. The number of those who could swim varied somewhat from 56 to 90 per cent between the different brigade-level units.

The results from studies on orienteering skills have been alarming. Of conscripts that enter service, 70 per cent are beginners and only 30 per cent of them had at least satisfactory skills in orienteering.

The above results are confirmed by the feedback given by the instructors in the brigades. The conscripts' physical fitness and skills in moving and living in the woods have deteriorated in the course of the years.

The deteriorating physical fitness has been affected by the technical advancement in society, decreased physical activity in life and considerable lessening of physical exercises at all schools. The changes in the habits concerning physical exercise do not support the development of endurance and muscular fitness.

The physical training of conscripts

The reformed training system for conscripts has posed great challenges to the FDF. The training period of the ranks was shortened from 8 months to 6 months, which means that the same 8-month training is given in 6 months in a form that is harder and more efficient in quality. Physically harder training includes risks caused by the physical load. These risks are avoided through a follow-up of the total load.

The training has been made more effective by giving more of it in the terrain. The aim is to spend about 60 days in the field during the 6-month term. Training given in the barracks area, for instance the number of lesson hours, has been reduced considerably. The share of physical education is about 20 per cent and the total share of physical training takes approximately half of the training time.

The goal of the soldiers' physical training is to ensure that the combatant is capable of carrying out combat duty while in continuous combat contact for at least a two week period followed by demanding decisive battle over 3-4 days and nights.

Through conscript training, physical exercises and sports have been closely integrated into the production of combat-efficient troops. In spite of the technical advancement of warfare, the soldier's physical performance is of ever greater and more diverse significance. The central elements in physical training are physical education, marching training and combat training. The total load, progressiveness and security of service guide the planning of physical education on all levels. On company-level, the physical load of each exercise and day is marked in the conscripts' weekly service programme. The amount of physical training for the ranks serving 6 months totals about 470 hours.

The physical education of conscripts involves a new concept, fitness for training. There are measures to maintain and develop it before and after the term of conscript service. The focal point is, of course, in the activities carried out during the service. As part of physical training and especially in view of the importance of adjusting total loading, the follow-up and planning of marching training lies within the responsibility of the physical branch. From the very beginning, the emphasis of physical training has been on the training connected with recovery, recovery training, muscle care, maintenance of fluid and nutrition balance and adequate rest. Using these factors, the aim is to adjust the total strain of service to its optimum in regard to the development of physical performance.

Special attention is paid to the instruction and training of physical skills so that the conscript has adequate skills to continue with various forms of physical exercise in the reserve. Conscript leaders have improved readiness and practical experience in the leadership of physical education. The contents of the physical education programme have undergone great changes. Rifle gymnastics, ski football, military wrestling, stretching, indoor bandy, self-defence, wall-climbing and pole-walking are usual terms in today's weekly programme.

The starting levels of the conscripts' physical condition are based on the 12-min running test and the five-part muscular fitness test of the first fitness test. After this, physical education and physical training is carried out in fitness and skill groups. Those who are in poor condition receive, if necessary, a fitness programme that is as individual as possible

The physical training of women is carried out based on the same principles as that of men, and they attend training on equal terms.

Experience of the reform of conscript training

In the last two years, follow-up and inspection visits, led by the Chief of Personnel, FDF, have been made to almost all brigade-level units providing training for conscripts. Based on the feedback from these visits, the experience gained from the training reform has been very positive and encouraging.

The training level of conscripts has not been lowered compared to the previous situation, in spite of the fact that the term of service of the ranks has been shortened by two months. The conscripts regard their service as meaningful and motivating. They are interested in the training given in the field. Service in the barracks is not motivating. Training in wartime composition increases the commitment and motivation of the unit.

Total plans for physical training are drawn up in the company-level units, and the total load of physical training is considered when charting the weekly programmes. With more efficient planning, the conscript's physical load increases in a more progressive way than previously. The load of the training is at its highest towards the end of the service. The body recovery level of those in training is paid more attention to in the planning.

The physical performance (endurance and muscle power) improves during the service, e.g. the average of the 12-minute running test has improved by about 200 - 250 m. During service, muscle power index also improves from an average of satisfactory to good. Endurance and muscle power properties have developed almost 10 per cent compared to the starting level. The development of the result during 4-5 months can probably be regarded as satisfactory at the least.

The aim of physical education is to create a permanent interest in sports and physical exercises among conscripts mustering out. Training that at the initial stage is too hard and quickly develops the performance promotes the risk of overloading and has a negative effect on the conscripts' sports motivation. Although physical training has been more efficient, stress injuries have not increased, but diseases of the locomotor system as a reason of interrupting service have increased in number.

At the end of the conscript service, the conscripts fill out a nation-wide questionnaire. Contingent 1/2000 was the first group of conscripts of whom a survey of this kind was made. Even in the future, this survey will be conducted of each age group mustering out. The final survey also includes questions of physical training and physical education.

The survey of contingent 1/2000 was answered by 8111 conscripts (over 5000 of ranks and almost 3000 conscript leaders). In the survey, 76 per cent of those who answered thought that conscript service had not been too hard. Of those who answered, 31 per cent were of the opinion that the physical load of the service had been progressive, and 44 per cent disagreed. The emphasis of the physical load is still perhaps too much centred on the initial stage of the term of service. It must be remembered, however, that the conscripts' physical performance develops most at the beginning of service. After this period, the body quickly adapts itself to the load of military training.

In the reform of physical education, the main point has been to develop versatile physical skills. Many forms of sport currently popular among young people have been included in the programme. Of the conscripts, 34 per cent said that the training had been many-sided, while 45 per cent had been expecting to receive more versatile training. Unfortunately, conscripts are not interested in forms of physical exercise that by tradition have been important for soldiers, such as skiing, orienteering, swimming and marching. By the reform, the instruction methods of the above sports have been modernised. The practical implementation of the new physical education programme has not yet been fully successful. A few more years will be required to adopt and implement this demanding task in the brigade-level units.

Some 36 per cent think that factors connected with body recovery have been paid adequate attention to after exercises of great physical strain. Of those who answered, 41 per cent were of the opposite opinion. The opinion of 32 per cent is that the individual differences (physical condition and physical skills) of those to be trained have been considered, while 41 per cent disagree. There is all reason to increase know-how in the regulation and recovery of loading in the instructor training. The adaptation and transfer of this important matter to practical training will still take a few years. It is, however, positive that 60 per cent of the conscripts believe that they will be in good command of the knowledge and skills connected with the soldier's physical performance when mustering out.

Based on the survey, 32 per cent of the conscripts thought that during their term of service they had got an interest in sports and physical exercises for life. This result can be regarded as feedback strongly supporting the training reform. As a rough estimate it could be said that a third of those who have done their military service are persons interested in physical activities on a regular basis.

Based on the follow-up surveys, the conscripts are most interested in indoor bandy, ball games in general, combat sports and sports involving physical strength.

Successful physical projects

The "Manual on Physical Education" was introduced in spring 1999. The manual includes detailed information on the instruction of various physical activities, incl. a CD on relaxation in mental coaching and an instruction video on obstacle course and skiing training. The 3rd volume of the manual, "Orienteering and Map-reading Training" was published in spring 2000.

Street basketball was started in 1999 in co-operation with the Finnish Basketball Association. In the last three years, about 30000 conscripts have participated in official street basketball activities.

The skiing training programme was reformed in 1998. In the new programme, skiing training is provided in modern skiing areas, and in the terrain. The instruction package (3 x 3 hours) includes versatile instruction in skiing skills, ski football and maintenance of skiing equipment. Ski waxing is taught by using the FDF's "own every man's waxing set". During the first training session in skiing, conscripts get the "Conscripts' Skiing Guide". The National Skiing Campaign supports the skiing training of both conscripts and personnel. After a long interval, the campaign was relaunched in winter 1998-99 in co-operation with the Finnish Skiing Association, Finnish Sport for All Association and National Association for Recreational Sports and Outdoor Activities of Finland. Last winter the Finnish Defence Forces skied more than 1.7 million km.

Indoor bandy is the most popular sports among conscripts. This summer, emphasis has been put on instruction in swimming, orienteering and marching. The main theme of 2001 has been the development of swimming skills among conscripts. The instruction in the above skills has been developed in co-operation with the Finnish Swimming Instruction and Life Saver Association, Finnish Swimming Association and Finnish Orienteering Association.

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