# The Swedish Coaching System

by Robert Danewid, Gliding Section of the Swedish Aviation Sports Federation



This paper deals with the coaching system used in Sweden. The main idea is that every member of a gliding club shall have access to a coach. The coaches work on three levels, i.e. ground, thermal and cross-country coach.

During the last twenty years, the role of the instructor has changed considerably. Nowadays, he is a highly specialized teacher in basic training. Twenty years ago he was often a social leader in the club, as well as a cross-country pilot, competition pilot etc. This aspect among others, i.e. the high rate of accidents when landing off field etc., has led to the introduction of the coaching system.

The club management must look upon their instructors and coaches as a continuous chain.

The benefits of the system are

- A more efficient and complete training of the pilots
- Engages more people in gliding
- Better flight safety
- Raises the interest in competition gliding

# THE SWEDISH COACHING SYSTEM

### 1. Introduction

In recent years a coaching system has been introduced in Sweden. The coaches work in three levels, as described later. The main idea is that every member of a gliding club, from primary training pupils to competition pilots, should have access to a coach. This paper deals with the coaching system and tries to analyse the benefits and future of the system.

# 2. Background

To understand the coaching system it is necessary to gain some information about the swedish gliding movement. The Swedish government supports gliding. The Royal Swedish Aeroclub (KSAK) handles all matters concerning basic training and airworthiness of gliders, as well as the training of all gliding instructors and technicians. The Swedish Aviation Sports Federation (FSF) handles all matters concerning competitions.

Sweden is divided into 5 regions. In these regions the clubs co-operate in certain matters and yearly regional championships are held.

Every gliding pilot in Sweden is a member of a gliding club, and the club is a member of the Aeroclub and the Federation. Consequently, Swedish gliding is well organized and rather strictly controlled by the national aeroclub/federation.

Most clubs run a gliding school. The instructors are trained centrally at Ålleberg, the central flying school.

The training scheme for the glider pilot license is laid down in detail by the KSAK. All flying is made in Bergfalkes (made by Scheibe, Dachau). Since the fifties, this means that the training is of equal standard in all clubs, as they use the same gliders and instructors, trained to equal standard. Though discussable, the system has led to a high standard of training, which ranks as one of the highest in the world.

A gliding club is a small community of its own. The role of the instructor has changed during the last 20 years. In the sixties the instructor held a strong position in the club. As well as being an instructor, he often was a social leader. This is understandable, as the member chosen for an instructor course often was the best pilot in the club. Thus, he knew a lot about soaring, both theoretically and practically. He was often one of the few, or only, cross-country pilots in the club. In the sixties the instructor influenced and led most parts of the gliding club.

During the seventies, and especially the eighties, the role of the instructor has changed considerably. Today, the instructor is merely a teacher, teaching people to glide. In 15 years the "king" has become an employee. The reasons for this are many. Here are some.

• In the sixties basic training was the main task of a gliding club. Today, in many clubs, cross-country flying and competitions are considered to be the main tasks of the club.

• In the sixties, the Bergfalke was considered to be a rather high performance glider. One must remember that until the beginning of the seventies the Swedish gliding fleet consisted mainly of Ka6 and K8. Today, the instructor is still flying Bergfalkes but the rest of the pilots are flying glass ships.

• The above is also true about instruments. For some reason most Bergfalkes are equipped with old-type varios with-

out TE competition.

• As the competition activities increased, the basic training became more effective. This meant that in many cases the ordinary instructor has not been able to keep up with the latest techniques etc. in gliding and has not been able to develop himself as a cross-country or competition pilot.

• Though, it must be remembered, as was stated earlier, that during the same time the effort of the instructors has lead to a high standard of basic training, probably one of the highest in the world. In the late seventies, Torleif Hiort, an experienced instructor from Uppsala, suggested that something had to be done to support the new gliding pilot with a fresh license in his pocket, on his way to become a good, safe pilot and, ultimately, cross-country pilot.

In the beginning of the eighties a committee, headed by Torleif Hiort, was formed. Under the guidance of Torleif, the committee developed the coaching system.

# 3. Description of the Coaches

The coaches are divided into three "levels", level-one coach, level-two coach and level-three coach. The names may sound strange, as they do not reflect the tasks of the coaches. The reason is that in many other sports in Sweden, a similar coaching system has been used for many years.

For simplicity the coaches may be called; Level one: ground coach

Level two: thermal coach

Level three: cross-country coach

In the following the requirements and tasks of the coaches will be described, as well as the training scheme of the coaches.

### 3.1 Level one: ground coach

Task: Take care of and keep in touch with new pupils and help them to become a part of the club. To co-operate with the other coaches and the club management. Certain theory instructions such as flight safety, competition rules, basics about barographs, inform about events, create family contacts etc.

Requirements: Good club feeling, good ability to cooperate and recommandation from the CFI.

<u>Training scheme:</u> 15 hours. See appendix A for details.

#### 3.2 Level two: thermal coach

Task: To help the ground coach, but especially to fly with the beginner in two-seater and train him in: thermalling, best-speed-to-fly (McCready-ring), pre-flight planning

Theory instructions about: methods of training, physiology, instruments

Requirements: At least one year as a ground coach, minimum 125 hours gliding time and recommendation from the CFI.

<u>Training scheme:</u> A 7-day course. 10 hours flying time and theory, see appendix B.

Examination: The coach is examined by an examiner.

# 3.3 Level three: cross-country coach

<u>Task:</u> To help the ground and thermal coach, but especially to fly cross-country with the trainee in a two-seater.

Requirements: At least two years as a thermal coach, competition experience and at least 1000 km total cross-country. Recommendation from the CFI.

<u>Training scheme:</u> A 7-day course. Cross-country flying in two-seater and single-seater. Theory. See appendix C.

### 3.4 Training of the coaches

To create the coach system it is necessary to train special instructors. In every region, there are about 10 instructor, whose job is to train the coaches. In the case of level 2 and 3, these instructors are usually experienced gliding instructors. These "coach-instructor" courses are held on a national basis.

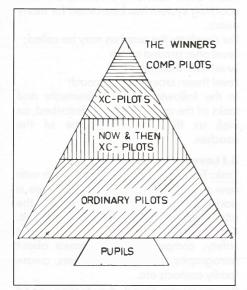


Figure 1 The vertical axis is the time scale of a gliding pilot. During his "life" he should always have access to a coach (and/or an instructor).

# 4. Discussion of the Coaching System

The primary idea of the system is that the glider pilot should have access to an instructor or coach at every stage of his career. To gain maximum effect of the system, the club management must look upon their instructors and coaches as a continuous chain. In Sweden, glider-pilot training is made in two steps. First a course to achieve the C badge and thereafter a course to achieve the glider-pilot license. To gain a cross-country rating, the pilot must have at least 35 hours of gliding time. Then he flies another 8 flights with an instructor, who checks him out and approves him for cross-country flights. See Fig. 1. The coaches are used to fill the "gaps" between the courses and, as is the primary task of the ground coach, to assist the instructor. There must be close co-operation between the instructors and the coaches. It must be remembered that, at all stages, it is the instructor who approves, or examines the trainee. The task of the coach is to assist the trainee and help him (or her) through difficult passages, such as learning to center a thermal. If the trainee has real problems, such as bad landings etc., the coach must hand the trainee over to an instructor.

The whole gliding movement can be viewed upon as a sort of pyramid, see Fig. 2. In the bottom we have all the pupils, training for the glider-pilot license. Above that are most of the glider pilots. They fly rather little, and never go crosscountry. The next layer is made up of pilots who occasionally go cross-country and fly rather a lot. Above that we have the cross-country pilots, who occasionally fly competitions. The next layer consists of competition pilots. They fly a lot and enter competitions regularly. The top layer consists of a small group, made up of the very best competition pilots, the winners. It must be understood that this pyramid in no way should be seen as a form of hierarchy. Within the pyramid there are many sideways, such as aerobatics, cloud flying, wave flying, instructing, motorgliding etc. This is why soaring is such a wonderful sport. It caters for every taste. The individual must be allowed to develop his own interest within soaring, and he/she should never be forced or persuaded to, as an example, go cross-country. The desire to learn cross-country flying must grow within the individual. It is the responsibility of the club management to cater for all tastes, or to define the tasks of the club. When using an integrated system of instructors and coaches, the club has a good chance to "place" the individual member in the right place in the pyramid. The benefits for the individual glider pilot are obvious.

Earlier there were certain "gaps" in the training of pilots. With a complete chain of coaches, the individual can always ask for advice and support. The new pilot, who is quite unable to stay up, can take a thermal coach along in a two-seater. The pilot with a fresh XC rating can be shown how to dolphin and the novice can be shown how a gliding club is run. And so

Someone may say that all this can, and should, be done by older members in the clubs. This is true. But the benefits of the coaching system are not only to be found in what has been presented so far. The coaching system involves a lot of people. By training them and giving them materials to work with, the general knowledge level has been raised. This is an important part of the system. We engage a lot more people than before on an organized basis.

The ground coaches are often recruited from new pilots, who have rather recently gained ther licenses. In other words, they have just been in the same situation as their trainees. Usually the ground coach is only active for a season or two. But this is rather unimportant. During that time they have learned a lot and helped novices. Instead, we train a lot of groundcoaches. The thermal coach is the most important coach. It has been found that just after the glider-pilot license has been gained, a lot of people quit gliding. Why is it so? The answer is probably that up till that time the pilot has always flown under the guidance of the teacher. Now they are suddenly left on their own. If the thermal coach is introduced to the new pilot at the closing stage of his basic training, the "transition" to the "new life" as a licensed pilot can be made a lot easier. The thermal coaches are usually recruited from the middle layers of the pyramid in Fig. 2. The XC coach is recruited among the pilots in the uppermost part of the pyramid. Most accidents with gliders occur when landing out. This is enough to justify a better training of the presumptive XC pilots. It has been found that it is better to use active, experienced XC pilots instead of instructors.

The coaches are trained regionally, or even at the club, if it is a big club.

Every coach is given a license which has to be renewed every two year by the CFI.

### 5. The Future

What about the future of the system? It takes a long time to introduce a system like this. It takes time to train so many people and there is always an initial resistance against everything that is new. Today, most clubs in Sweden have trained

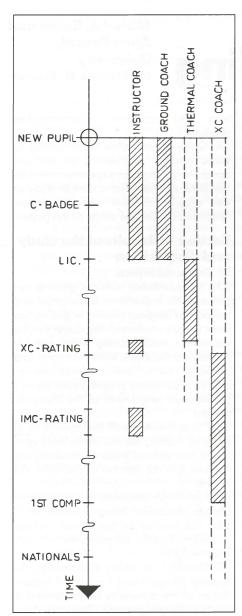


Figure 2 "The pyramid of gliding pilots". Must not be viewed upon as a hierarchy, but merely shows that the mass of the pilots are "Sunday pilots".

ground and thermal coaches. The XC coaches have so far only been trained at central courses. The problem today is to make the clubs understand how to use the coaches. It is very important that the clubs organize the coaching. Those clubs that have done that, have achieved considerable success.

It is hoped that in the late eighties, every pilot who enter his first competition, should have been trained by a XC coach. At the present, we are also discussing the introduction of a level-four coach or a national coach. The task of the national coach will be to coach the national team, which at the present consists of the five most successful pilots in each of the 15-m, standard and club class, i.e. a total of 15 pilots.

The committee, headed by Torleif Hiort, is constantly reviewing the coach scheme and improving the literature used by the coaches.

## 6. Conclusions

The coaches are divided in three levels and they should work in close co-operation with the instructors. It is necessary to look upon the system as a continuous chain of coaches and instructors. The member of a gliding club should always has access to a coach throughout his "career". The system requires the training of a lot of coaches. This is an advantage in itself as the general knowledge level within the gliding movement is raised.

All three coaches work on the ground and assist the club management with social events, theory lectures, etc. Additionally, the level two and three coaches are airborne coaches.

The benefits of the system are:

- a more efficient and complete training of the pilots
- engages more people in gliding
- better flight safety
- raises the interest in competition soaring

# Appendix A: The Ground Coach

The tasks of the ground coach are:

- arrange social events and lectures
- assist the instructor on the ground
- inform about the club and its activities
- give some lectures on basic theory
- give lectures on flight safety
- create family contacts

The training of the ground coach is done during a weekend

# Appendix B: The Thermal Coach

The thermal coach is an airborne coach, whose main task is to train new pilots in thermalling and general flying. The coach shall also give lectures on best-speed-to-fly, flight safety, etc. The training of the coaches is usually done on a regional basis.

Flight training (a total of 10 flying hours)

- 1. Thermalling
- 2. Rear seat check-out
- 3. Analysis of piloting
- 4. Applied methods of training
- 5. Inter-thermal flying
- 6. Thermalling with other gliders

The flight training is done in two-seaters (with instructor) and single-seater.

#### heory

- Repetition of the theories needed for the glider-pilot license.
- 2. Leadership
- 3. Flight-safety
- 4. Methods of training
- 5. Physiology and psychology

# Appendix C: The Cross-country Coach

The main task of the cross-country coach is to train the pilots in XC flying and competition flying. This mean both flying and giving lectures on various subjects.

### Flight training

- 1. XC country flying
- 2. Out-landings

The flight training is done in two-seaters and single-seaters.

Lecture No	Time hours	Content
1 Dis ver	3	a) Information about the coaching system     b) Organization of the Swedish gliding movement     c) Information about competition activities
2	2	Flight Safety a) examples of typical accidents b) flight safety on the ground c) thermalling with other gliders d) performance in tail- and headwind
3 4	3 3	Physiology and psychology The function of the basic instru- ments, and various items, such as tow-ropes, transceivers, etc.
5	4	Discussions about the training of leaders, methods of training, social activities, etc.

### Theory

- Theory on how to fly competition
- 2. Equipment (varios, cameras, maps, etc.)
- 3. Leadership
- 4. Competition rules
- 5. Flight safety
- Physiology and psychology