

## The Vital Problems of Pistol Shooting Part 2

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### The Vital Problems of Pistol Shooting Part 1

#### An introductory note.

Those who read my previous article («ISSF News 1/2003») may find a few repetitions in this article. The reason is that the first was written with a clear objective of defining, to my understanding, the most important moment in pistol shooting, that is, the end of the process of aiming and trigger action. But after the article was published I saw that the content might only be comprehensible to specialists. I also received letters from my coaching colleagues and shooters with questions regarding the other aspects of shooting. So I decided to write this follow-up in order to discuss all the elements of the pistol shooting technique.

#### I. Introduction.

I started to write this article as a daily log. Almost all my active life in sports I was a shooter and coach at the same time, a coach who was a shooter. My experience as a coach may be very different from that of others since I worked in six different countries, each with very different levels of development in shooting and with distinct mentalities both as cultures and shooters. The main objective of this article is to encourage the coaches and shooters to seek new methods and means of training. This search is indispensable because the most modern methods are losing their efficacy with time and must be modified.

Something that happened at a Shooting Seminar of the Institute of Higher Physical Education of Moscow served as a boost to start systematizing my notes. I was there with the other coaches of the National Team of the Soviet Union as a guest of the School of Coaches. The teachers at the Shooting Seminar, headed by Yefim Khaidurov, designer of the famous «TOZ-35» pistol, have worked very hard on the publication of the shooting manual for the students specialized in this event. We once witnessed a discussion among the supporters of certain formulas on posture. What's so complicated about it? Well, all the parties involved defended their opinions with an eagerness that could be channeled in a more productive direction. At the height of the argument, Gueorguiy Krylov, the normally a quiet coach of the Women's Rifle team and chemical engineer, unexpectedly chimed in: «Colleagues, please excuse me. Listen carefully: the voluntary exit through an orifice of the products of the dry transformation of wood under the influence of extremely high temperatures, normally of a quadrangular shape... for those who have not understood, I will repeat: smoke goes out the chimney». The discussion ended immediately. But the authors of the manual (editor Dr. Arkadiy Korh), do not seem to have learned this lesson very well. When the manual was issued for sale I bought one and was convinced that Krylov's lesson was in vain, the manual turned out to be too «scientific».

This manual, like other books on pistol shooting, indicates that «the posture must be energy-efficient in physical and psychic terms». Why not discuss the need for energy efficiency in pistol shooting? In order to minimize energy expenditure one must employ only those muscles and sense organs that are participating directly in the shooting process. At this time, the muscles must assume a «balanced» posture, with equal angles of stability, in other words, the projection of the centre of gravity of the «shooter-pistol» system must cross the centre of the support surface. In practice, the best shooters show us that the balanced posture (pictures 1 and 1a) allows one to produce many «10s», but there are also the shots that are too long.



Picture 1



Picture 1a

The «reinforced» posture (pictures 2 and 2a) makes sure there are no long shots, which enhances the shooter's confidence in his probabilities. A typical example of the reinforced posture was Mexican Olympic free pistol champion, Grigoriy Kosyh. He could make up to 200 shots without a single 8, so that he was able to win important competitions with few 10s.



Picture 2



Picture 2a

Training in the reinforced posture with a rigid stabilization of the wrist, Kosyh shot for a whole season with a modernized Margolin semi-automatic pistol resembling a Free Pistol. The Sports Committee of the Soviet Union even gave him a special dispensation allowing him to participate in the National Championship with the pistol. Almost all throughout his training he shot without lowering his hand, training his wrist to work with a great deal of energy expenditure. The result of his work is well known: Olympic gold. The need for

economy in terms of energy is clearly indicated in all the books on shooting, but let's see what's really happening in practical terms.

When it comes to Free Pistol or Air Pistol, these recommendations are not unarguable. The best shooters (some still active), like Mahmud Umarov, Anton Yasinskiy, Alexey Gushchin, Grigoriy Kosyh, Vladimir Stolypin, Józef Zapędzki, Ragnar Skanaker, Alexandr Melentiev, Serguey Pyzhianov and the representatives of the youngest generation, like Roberto Di Donna, Igor Bassinskiy, Mikhail Nestruev, Joao Costa, Taniu Kiriakov, Frank Dumoulin and other less famous cannot boast that they are very economical. In my opinion, the typical examples of the economical style are Marlen Papava, Harald Volmar, Uve Potteck, Boris Kokorev, Wang Yifu and Vladimir Goncharov. Their achievements are well known, but in the world elite most are not economical shooters. The expression «reinforced posture» was used by the Team of the Soviet Union about 25 years ago, but what kind of economy can be applied in active work? How can one attain perfection by saving energy?

Success in shooting is not attained through muscular strength but through organized mental work. Comparisons among shooters, World and Olympic champions, is showing that their physical traits are very different. They are tall and strong like Ragnar Skanaker, Harald Stenvaag, Igor Bassinskiy, Miroslava Sagun and Yasna Sekaric, but they are also short and delicate like Vladimir Goncharov, Serguey Alifrenko, Svetlana Smirnova, Renata Mauer-Rózanska and Artem Hadzhibekov. What they may have in common is only their mental capacity. For this reason, one must work on the ability to think of energy saving. Only intensive mental work can shape in our subconscious the scheme for a safe shot that will serve as an «automatic pilot» in any stressful situation. The best results are almost always obtained in circumstances where the athlete is shooting without thinking, when he is working from his subconscious and is not affected by stress. Even a very experienced shooter isn't always able to concentrate during the complete shot. Then, why should we expect beginners with a very deep «TV Syndrome», which enables them to drink soda, listen to rap music, chat with friends and half-watch what's happening on TV, to be able to concentrate? A disperse attention span, a lack of concentration is the result of watching a screen without the need for any mental effort. Young shooters who like to read books practically never have this problem. During intensive training the TV Syndrome becomes less intense, but always provided that the training is aimed at organizing the mental processes during a shot. I believe it is better to stick to the opinion that posture must guarantee a 10 and that saving energy during the process is not important. I will close this long introduction by discussing a few ideas on the grip of the pistol. I like Yefim Khaidurov's idea (he is not only a pistol designer but also a very good shooter and World Championship medalist). Yefim compared gripping a pistol with holding an egg with a very fragile shell – one cannot hold it too tightly nor relax one's fingers too much. I prefer the reinforced grip, where the pinky finger is exerting greater force than the ring finger and the latter more than the middle finger. The thumb is pressing the grip only in the middle, with the tips of the fingers exerting no effort at all on the surface of the pistol.

I am here reminded of something that happened in 1961 at the Soviet Union Championship. I was training with the Russian Olympic free pistol champion, Alexey Gushchin. Many people would come up to congratulate him. One young man congratulated him and asked: «Alexey Petrovich, how are you holding the grip? Very firmly?» Gushchin replied, «Of course, very firmly». Almost immediately, another person came up and asked «How are you holding the grip, loosely?» Gushchin answered, «Of course, loosely». This time I asked: «Alexey, who of those two did you lie to?» Alexey said, «Neither. The force of my grip depends on conditions and those of the competition. Sometimes I hold it firmly and sometimes loosely, but this is not important. Did you notice how they asked? The boys were looking for confirmation of their own theories and I gave them what they were looking for. If I started to explain the problem to them just before a competition, no good would come of it». What a great shooter and what an intelligent man Alexey Gushchin was.

Now, after this long introduction, let's talk about some of the main elements of the technical preparation of pistol shooters.

## **II. Technical preparation.**

### **1. The Position.**

The evolution of sport shooting and the research of the coaches have changed and will continue to change shooting techniques and posture, among other things. This problem has received, in my opinion, too much attention. The opinions are sometimes quite different and even contradictory. Currently there is an integral posture that is being used – we know it as the active posture (pictures 1 and 1a). Shooters and coaches are convinced that good stability is possible in any posture and the shooter, with or without the help of his coach, find his variation of the position. The experience of the coach is very useful in this case in order to help the shooter use his anatomical traits more efficiently and to avoid the desire to blindly copy the postures of the champions. After the victory of Moris Minder in the 1978 World Championship, with a new world record, he had a lot of followers of his original posture, but nobody obtained any good results. Minder held his hand almost at 90° to the right.

Some shooters have obtained good results with different postures and the best example is the

evolution of posture in the double world champion, Vladimir Stolypin, who belonged to the Soviet Union's team for 20 years. In the beginning he shot with his side towards the target and the upper part of his torso leaning very much towards the left. At the end of his activities in sports he was using the frontal posture, with his chest facing the target and without any inclination at all. The Olympic champion from Mexico, Grigoriy Kosych used to shoot in a posture almost identical to Stolypin's first. I believe that these two examples suffice in order to understand that posture can only be an individual matter. For example, normally in books on shooting it is recommended that the line of the shoulders has to go over the line of the feet by 10-15° to the right, but Serguey Pyzhianov is moving his shoulders to the left and he is a multiple world record holder and current holder of the air pistol record. We can conclude that the model for posture is not fundamental in attaining good results. The important thing is the shooter's ability to attain good stability in the chosen posture, with optimal muscular tension. Optimal, in this case, does not mean economical in the sense of energy consumption. Muscular tone must guarantee firm stability. For most shooters, this problem can be solved only with significant muscular tension. For the firm stabilization of the ankles, legs and waist, in other words, to create a basis for stability, I can recommend a very simple but effective method: when you start to raise the pistol, raise yourself slightly on your toes and then lower yourself without leaning back. This way you are creating the necessary muscular tension in your feet, legs and waist. It is better to keep the feet parallel.

*Conclusion: Posture must guarantee maximum stability, based on the firm stabilization of the feet, legs and waist, but each shooter must decide how much energy he is willing to expend in order to attain this stability.*

## **2. The Order of the Actions During a Shot.**

The experience of many years of working with the best shooters in the Soviet Union and in other countries have allowed me to draw certain conclusions on the need to formalize changes in the order of the actions carried out during a shot; these changes are a reality in practical terms, but found them only partially reflected in a book by German coach Elfe Stauch: *Sport Pistol Shooting*, (Eigenferlag Elfe Stauch, Hans-Braun-Str. 57, 85375 Neufahrn, Deutschland, 1997, I. Aufgabe, 4000). I am deeply convinced that the shooting process, which begins a few seconds before raising one's arm and ends after it is lowered, must be divided into two parts that are related to each other and of equal importance. The first part, preparation, consists of one's thoughts on the coming actions, checking one's position and deciding to shoot. Before raising the pistol, the shooter is inwardly «watching a film» of his future actions and only carried them out after the film. When he raises the pistol a little above the target, he is inwardly going through the most important points regarding posture: ankles, knees, waist, shoulders and wrist. Then he's done with the first part of the shot: preparation. It is very important to separate the preparation phase from the execution – the shot. For example, after thinking «I'm ready», one can inhale as one raises the pistol and after thinking «Go», at the same time that one exhales, one brings down one's arm. This is the first «signpost» and it signals the beginning of the shot itself. In the preparation stage it is very important not to be afraid of wasting time on controlling the position. After the «I'm ready. Go!», with a decisive and calm movement, the shooter lowers the pistol towards the shooting zone and at the same time starts to move his index finger. All these actions must be controlled with one's peripheral vision and only after the start of the movement of the index finger should one focus one's eyes on the sights with maximum attention. One must aim during the movement of the index finger, with maximum attention on controlling the aiming mechanisms. Aiming and the action of the trigger, stability and movement are antagonists. Our objective is to look for a compromise. The beginning of the movement of the index finger during this delicate aiming process almost always disturbs the stability. The time within the shooting zone is greater, the width of the movements of the sights is greater and we fall into a vicious circle at the end of which a bad shot is waiting to happen. But if we aim when the index finger is already activated, everything is different and it's just a matter of not being afraid of losing a little precision in the beginning. The time for the shot does not depend on aim but on the speed of the movement of the index finger.

*Conclusion: The preparation stage of the shot is an autonomous element that is no less important than the shot itself; the preparation stage must be marked and it is better to do so with a natural movement. One must also mark the termination of the shot.*

## **3. Gripping the Pistol During the Shot.**

The concept of gripping, in the case of the free pistol, loses its traditional meaning because the anatomical grip guarantees a permanent positioning of the hand. During the shooting process with any pistol the degree of muscular tension in the hand is not important, but rather the continuity of the muscle tone. The firm stabilization of the wrist, without excessive tension in the muscles of the fingers is a solid base for the delicate construction of a shot. When the base is firm, the shooter shoots with more confidence, without fear that one of the muscles will fail at the time of the shot. The autonomous stabilization of the wrist is a very complicated process that demands special training. Unfortunately, many coaches are not aware of this and when young shooters begin to train they do not pay much attention to this issue. After some time, a young and talented shooter reaches a certain level and suddenly his results begin to slip. This is because in critical

talented snooter reaches a certain level and suddenly his results begin to slip. Usually, it happens in critical moments such as an invitation to participate in the national team. This change in the quality of one's shooting places an additional load on the novice which may be heavier than he can bear. (There is a wide field of work for the coach and the psychologist to cooperate at this point!). Where he used to shoot naturally, now he has to demonstrate that he's still capable of shooting at a high level of performance. His fear of failure, his drive and the need to win create a state of stress and the most fragile element can break. Frequently, this element is the stabilization of the wrist. I can name 11 shooters who used to be junior European champions but who never became elite shooters. I am not suggesting that the reason for their inability to succeed further in their careers is just the faulty stabilization of the wrist, there are obviously other reasons, but in many cases this detail is decisive. I am sure that four of these eleven shooters, with whom I participated in competitions and trained in the Soviet and Ukrainian teams, have not attained a higher level of performance due to a lack of basic preparation from the start. This is why I would like to recommend to all shooters and coaches that they value this element of the technique and give it the attention it deserves in their training. Some advice on training can be found in the section titled «Shooting in a Seated Position with Support». The basic problem in the stabilization of the wrist is that the muscles of the wrist are not controlled by the central nervous system but by the peripheral nervous system. An inexperienced shooter cannot stabilize his wrist without tensing his fingers. Since the isolated stabilization is not practiced in daily life, the connections of the nerves between the wrist and the central nervous system have almost faded. Only specific long term training can help one recover these connections. The result of this training is the possibility of keeping the pistol within the shooting zone and moving the index finger independently. What else do we need in order to make a sure shot? The shooter has to know how to create muscular tone before the shot that is equal to that after the shot. The following are a few training methods:

- Double shots with a semi-automatic pistol. After the first shot, the shooter has to stabilize his new muscular tone, «record» it in his memory and, based on this tone, make his second shot. This method was used 35 years ago by Victor I. Mikhailov in his training with Grigoriy Kosych, but it was never publicized. I have been using this method with great success for more than 30 years;
- Making double shots with air and free pistols. The first shot is made in one's mind, creating the muscle tone after the «shot» and then shooting for real;
- Shooting in series of 20 seconds in standard pistol. The success of this type of shooting depends a great deal on the first shot, since the rest will come out automatically. This automatic process is the result of the creation of muscular tone in the first shot. Twenty seconds for the 5 shots is the ideal time for this type of training, as the intervals between shots are sufficient to avoid haste and they are brief enough to avoid aiming too much, in other words, the conditions are optimal for creating an «automatic pilot» system. Without a doubt, this exercise is the key for pistol shooters. All my students can tell you that, despite my age, I can make two or three series (I cannot do more due to a lack of resistance) better than they can and without any training whatsoever. The reason is that my right wrist has remained firm after all these years. My best results in the last competitions are: air pistol 578, standard pistol 568, central fire 584, and I was over 60 years old back then.

*Conclusion: The most important element of the pistol shooting technique is the firm stabilization of the wrist. Once this technique has been mastered, the shooter is rid of a lot of problems.*

#### **4. Aiming and Trigger Action.**

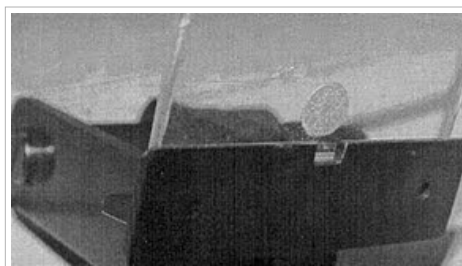
We have found in many books mistaken ideas on the pistol shooting technique. Books tell us that we have to aim after starting the action of the trigger, but these two elements of the final part of the shot must really be carried out at the same time. I am completely convinced that talking about a precise shot in the case of pistol shooting is a mistake because this type of shot always entails a compromise. The compromise consists of the need to make a sure shot even with the impossibility of keeping the weapon perfectly still, because a shooter is not a vise and the weapon always moves. What is more important, the precision of the aim or the firmness of the stabilization of the pistol in the shooting zone? Is the stabilization of the wrist important or not? In one's daily life, the most important information we receive is often visual. This is true also in shooting, but we have to decide whether perfect aim is indispensable in pistol shooting and whether we can use it in case we are able to attain it. Our best accessory is the SCATT electronic system for training, designed in the Soviet Union and currently made in Russia. While researching the SCATT files, I came across documented confirmation of many of my suppositions. For example, that stability by itself does not guarantee good results. Vladimir Goncharov can keep the pistol in the 10 zone for 5-6 seconds; Mikhail Nestruev has very brief windows of opportunity, of up to one second, but he takes full and effective advantage of that time. Thanks to his ability to «seize the ideal moment» he was voted World's Best Shooter of 2001. The SCATT is also demonstrating that every shooter has his own arc of movements (AM) in the last second before the shot in the 9.5 circle (most have a smaller, higher quality AM). This means that if at the time of the shot there is no movement that does not belong to the AM, the shot remains within that circle. From personal experience I know that stability within the 9.5 circle is not a trait exclusive of elite shooters but also of midlevel shooters (a majority). All shooters are familiar with the phenomenon when the shots come out almost automatically – the

sights enter the shooting zone and the finger goes into action effortlessly – he is working on automatic pilot, subconsciously. Let's try an experiment in which we will try to separate out subconscious and conscious actions. The shooter, taking on the conscious role, has to carry out all his actions as he usually does, and the coach, as the subconscious, activates the trigger without looking at the aiming image. In 100% of the cases, the shots subconscious shots are better than the usual shots, clearly confirming that aiming plays a secondary role in the shooting process. The main thing is the immobility of the weapon in the moment when the shot is made, regardless of the precision of the shooting. Our stability is always better than we imagine it. To sum up: if after the sights enter the shooting zone the shooter moves his index finger without concerning himself about aiming, the shot will come out within his AM, that is, the shooter will realize his potential. I carried out this experiment for the first time 40 years ago with a rifle. I was training together with Vladimir Lukianchuk, a perfect rifle shooter. Suddenly, he told me he had lost his confidence when he shot standing. I stood by his left side and, observing that his rifle was more or less stable, I hit the trigger with my pistol. The result in the first 10 shots was surprising – 95 points! We shot a few more series with similar results. One week later, Vladimir set a new record in 3x20 free rifle 300 meters. The result, 590 points (200+193+197) is still good today. This record was never broken and people simply stopped competing in this event. It is possible to try this experiment without any mechanism, using air and sports(standard) pistols. The coach grips the hand of the shooter with his own hand, placing his index finger on top of the shooter's index finger and, after the stabilization of the arm, calmly but decisively moves his index finger until the shot is made (picture 3).



Picture 3

Those who are still unconvinced can consult the SCATT results again. In the graph time shift we can see that if the shooter were to shoot 0.1-0.3 seconds earlier, the result could be better. But this is not entirely true because, by shooting earlier, the shooter will make the same mistake, only earlier. This mistake is due to a loss of stability in the last instant of the shot. The conclusion is the same: immobility when making the shot is the main condition for making a sure shot. The pistol shooting process does not depend on the modality, it is always the same. In any event one must keep the sights aligned, and not concern oneself with their position in relation to the target. A very old saying among Russian shooters is right: «Calm pulling, no breathing, controlling the sights» – this saying clearly indicates the order of actions: pull first, aim second. I know it is difficult to control only the sights and to distance oneself from the target, but this is basic. In order to adapt to aiming «without a target» one can make use of a mechanism invented by a shooter and doctor of the Ukrainian team, Serguey Kolesnik. A square piece of transparent plastic with a circle to cover the image of the target displaced over the rear sight. When the shooter is aiming he cannot see the target (picture 4). This will help him lower the psychological pressure. All shooters are familiar with the situation where the finger becomes «blocked».



Picture 4

The voluntary activation of the finger can alter the stability and this usually happens when the shooter cannot afford to make any mistakes. The fear of making a bad shot is making one concentrate too early on the aim, which in turn blocks the movement of the index finger. We have to do some dry firing with control on the activation of the finger before aiming in order to recover the coordination of one's movements. Under these

circumstances, the most important factor is the shooter's confidence in the firmness of his posture and in his attitude. This element of the shot is so psychological that it should not be treated as a purely technical element. The security and confidence of the shooter in his own capabilities are more important than his technical preparation. Anyone can learn the shooting technique, but applying it under the time for the shot does not depend on aim but on the speed of the movement of the index finger. One must aim during the movement of the index finger, with maximum attention on controlling the aiming mechanisms. Stressful conditions can only be pulled off by those who worry less about the results, those who have confidence in their technique and whose main concern is the application of this technique in every shot. I think that, at this point, the Niels Bohr anecdote bears repeating because it can explain this problem. The Nobel Laureate was taking a stroll one day with some students in the country. A young man threw a stone and hit a post about 40 meters distance. Niels Bohr, being the genius that he was, drew a general idea from the action and said: «Aiming at a distant object and hitting it – that, of course is impossible. But if we throw a stone in the right direction, imagining the absurd possibility of hitting the object will make success more probable. In this case the certainty that this can happen is more important than training and will». We should apply this thinking in every shooting range – psychological preparation condensed into a few words.

*Conclusion: I can state without fear of being deemed orthodox that the main condition for a perfect shot is the immobility of the weapon in the last instant of the trigger action, regardless of the position of the sights within the arc of movement.*

### 5. The Actions of the Shooter.

After the shot, the shooter must maintain not only his posture but also his internal state, for 3 to 5 seconds – the muscular tone must be kept the same, the index finger must continue to press, the sights must remain aligned in the shooting zone. It would be use less at this point to think «In the next shot I'm going to try it with the sights like this...». Then, with an inhalation, you raise your arm and then lower it along with an exhalation. This is our second «signpost», indicating the end of the shot. When lowering the pistol, the shooter relaxes his muscles and analyses the shot he made. If the real impact does not match his theory but the shooter is certain that the sights were aligned correctly, he will have to make the necessary sight corrections. When the impacts match the theories it is better to shoot keeping a fast pace (1 shot at 1 minute or faster). In case of a bad shot, it is important to pause – not to look for errors, but to recover the habitual pattern of the shot by dryfiring once or twice. An example of how one can underestimate this rule occurred in the Sydney 2000 Olympics. While shooting free pistol, after four series, Guatemalan Sergio Sánchez, a talented and experienced shooter who had already shot twice in world competition finals, was among the leaders. Suddenly, in the fifth series, he shot an 8 which probably didn't match Sergio's theory. He got angry and immediately made another shot, another 8, along with an explosion of uncontrolled anger. Only after having shot yet another 8 and even a 7 was he able to stop. But the point she had lost were gone forever, taking with them the hope of going on to the final, for which four 9s sufficed (only shooting within the AM!).

*Conclusion: One must recover one's before the-shot position, maintain it for a few seconds, imagining the next shot, and lower the arm to a special «signpost». If one's supposition does not match the impact it is better to keep shooting fast. If the impact does not match our supposition, looking for the error is not worth the effort, one has to do some dryfiring in order to recover the scheme of the shot.*

### III. Special training.

In this section we will discuss non-tradition altraining methods. We've already seen one of them (double shooting). All of these methods are very individual and require an enthusiastic coach and a great deal of energy, but I can assure you that it's worth it.

#### «Double» Shooting.

This training method is more effective for beginners, but it can also be useful for experienced shooters, especially when they've begun to lose some self-confidence. Junior shooters get the chance to taste the feeling of a good shot, to gain self-confidence in their abilities. Most of the young shooters go to the range to learn how to shoot a 10 and not to make a technically perfect shot. The «double» will undoubtedly help a young shooter overcome disappointment, which is basic after the first few bad experiences. The coach who is determined to use the contact training methods has to provide himself with plenty of patience and drive because these methods are pretty exhausting. The coach stands to the left of the shooter and with his right hand holds the shooter's hand that is gripping the pistol. The thumb touches the grip, the rest of the fingers come into contact with the wrist and the hand of the shooter (pictures 5 and 6). The coach remains passive, only offering support. This contact is delicate, enhances the stability of the shooter and enables the coach to give the shooter real information on the stabilization and function of the wrist of the student.



Picture 5



Picture 6

If the problem of the shooter is the «blocking» of the index finger, the coach can use another contact training method. In this «double» the coach stands on the right side of the shooter and inserts his thumb a bit ahead of the articulation of the wrist and the rest of the fingers on top of the student's fingers (picture 3). When he observes that the movements are calm, he moves his index finger together with that of the shooter, concerning himself only with the stability of the wrist.

It is usual for young shooters to think that the reason for their bad results is their lack of stability. This is true to a certain point, but stability, even in beginners, is usually sufficient to hit the black circle. The main reason for long shots is the young shooters' (an sometimes experienced shooters') lack of ability in keeping the stable tone of the muscles of the wrist during the shot. To demonstrate to shooters that stability is not our number 1 priority, the coach can do the following: first, make a series of shots with bad stability. Careful! One has to train before hand in order to avoid a negative effect. Second, one shoots a series using the technique we see in picture 3 (this method can be done at any given moment).

#### **Shooting in a Seated Position with Support.**

This training method is useful for any trainer, from beginners to champions. The support can be made of a sponge or wood and a sponge (pictures 7 and 8). The use of a support for beginners is simple and does not require a lot of explanations. As we know, learning to shoot with a rifle almost always starts with shooting with a support and this phase lasts for a few months, only to go on to shooting with a strap.



Picture 7





Picture 8

We also know that holding the rifle with a strap is easier than holding a pistol with one hand. For many beginners, the difficulties of holding a pistol, stabilizing the wrist and activating the trigger, all with the same hand, seem great and cause a certain lack of confidence in one's ability to overcome them, the end result being that many quit shooting altogether. The use of a support can actually keep people interested in the sport. The procedure is as follows: the shooter touches the slanted part of the support with only his fingers and not with the pistol (picture 7). This is enough to stabilize the position of the hand with the pistol, but at the same time the support is not actually sustaining the weight of the weapon. When shooting while seated, one must keep the position of the upper torso as one would while standing. The preparatory phase of the shot is carried out by raising the pistol a bit above the support. After thinking «I'm ready. Go!», one lowers one's hand until one makes contact with the support, at the same time pulling the trigger. The action of the trigger must be carried out with a continuous and decisive movement. The soft support does not allow one to relax the arm's muscles, but it creates almost perfect stability, which is maintained for a long time.

The use of a support can be very effective when training the ability to stabilize the wrist. The difference between this training method and the previous method is in the point of contact with the support. In this case, the shooter is touching the support with his forearm a little below the wrist (picture 8). What is the purpose of this method? When we shoot while standing, the «shooter-weapon» system has oscillations, each part of the body moves in relation to the rest. While seated with the forearm supported we eliminate the movements of the arm and body and retain control of the stabilization of the wrist. If someone out there is thinking that shooting with a support is easy, the first shots will take this idea out of his head. Let me tell you how a perfect shooter, Anatoliy Yegrishchin, who is currently the coach of the Russian team, made his first shots with a support. In early 1986, at the shooting camp of the Soviet Armed Forces in Lvov, the shooting capital of the Ukraine, as I was explaining to the shooters in my group the essential nature of training with a support, I asked them to reach a consensus on the matter, to either accept or reject my theory, with their personal coaches. All 10 shooters confirmed their acceptance of my proposal. On the third day of training Yegrishchin arrived and when he saw his colleagues shooting while seated, Siemionych (as his friends called him) asked me, «What are you doing?» When he heard my explanations he said, «Now I'm going to make 600». Imagine what he felt when his first shot was a high 6 and then a low 6. Siemionych learned this training method very fast, faster than any of the young shooters, but he was one of the best shooters in the world, with 581 points in free pistol when he was shooting actively.

Military shooters used this method in 1986, 1987 and 1988. The first competition we had was only after 2 months of training and we won seven national competitions in a row in free pistol and air pistol, leaping ahead of the «dynamo» team, which had beaten the military in the previous seven years. I do not believe that this success was only due to this training, but its positive effect seems certain. The main obstacle in the spread of this training method is the conservative spirit, if not laziness, of coaches and shooters, as well as a lack of confidence in the effectiveness of something new. The positive effect is not immediately revealed and it is different in each shooter. Some, especially those hunting for the ideal moment, can even see their results worsen temporarily. Those who are capable of applying this method with tenacity and work on this exercise for 40 to 60 minutes a day, are never going to regret the time they invest in this work.

It is necessary to mention something in relation to this type of training: one has to begin as one would in any other type of training, by warming up for 10 to 15 minutes and the maximum number of shots for this exercise is 50, a load which only a well-trained shooter can bear. At the end of the training while seated, one must rest for 10 minutes, warm up again while standing in order to prepare the muscles of the lower body. Without this warm-up, long shots may occur and these may cause a negative reaction towards training with a support. With my work I do not intend to propose that I hold the sole truth. I am aware that there are many differing opinions out there. The objective of this article is simple: to activate the thinking of coaches and help my colleagues improve the effectiveness of their work, about which, heart in hand, the poet Mihail Nozhkin once said:

THIS WORK IS NOT FOR EVERYONE, THERE IS NO PEACE BY DAY OR NIGHT. THE DAILY BREAD OF THE COACH IS VERY HARD, THE LIFE OF THE COACH IS SHORT.

I welcome your opinions on this article, which you can send to me.