

INTERNATIONAL THREE POSITION SHOOTING

Jack Writer

Jack narrated his film of the 1972 Munich Olympics. He then invited questions covering topics related to international three position shooting, including trigger control and adjustment, and ways to deal successfully with match pressure and weather conditions. (This session was given on the final day of the 1976 Olympic smallbore three position tryout. The outcome was still in doubt during the time Jack was speaking.)

EH: Was there a time during your match in the Olympic Games when the pressure became unbearable?

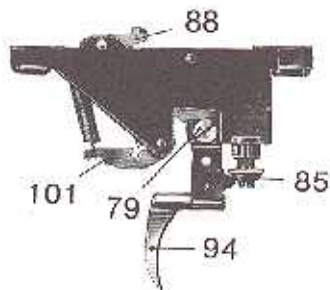
JW: No. Before the tryouts that year, and particularly after the tryouts, I had a lot of tension on me for a period of months. The match pressure really was not that great. I really didn't have much more pressure there than I did out here today, which really wasn't that much. The first couple of days out here this year were just like practice for me personally. I had a little pressure today standing, not enough to have pulse beat, and a little kneeling, but nothing great. I've had a lot more pressure shooting collegiate matches or junior matches than I had at the Olympics. This wasn't by accident. It's something I prepared myself to handle. Obviously, if I had a lot of pressure, I wouldn't have performed very well. At that time, I was performing consistently well for a number of months before Munich. I think between the tryouts that June and the match that day in October, I had no scores at all in training below 1170. I was shooting very consistently in the 1170's. My standing was running 383 to 385. It seems after the match, I forgot how to do it! I haven't shot that well in standing since then. I tried to prepare myself so I wouldn't have pressure.

The biggest problem I had psychologically was having a letdown kneeling. I think it cost me two or three points. I got a little careless with the wind and mirage. The conditions weren't real calm, I did have to do some wind doping. I can remember though at the outset when I started kneeling, after sitting down and watching the mirage and checking the wind, I decided for the most part just to shoot straight through it and not mess with it. Sometimes you can mess with it and get into trouble. I figured if I shot them all down the middle, the wind wasn't going to knock so many out that I'd lose the medal. It's kind of like a golfer who has a big lead. He isn't going to take a chancy shot, but is going to play it cool. I concentrated on my performance. The only thing that disappointed me that day was the letdown kneeling. I don't think I'd get in the same position again, because I learned something from that. But I hadn't ever experienced having a big lead in a big international competition before. You normally expect to have several people pretty close to you, like Margaret was today within a few points, right up until the end.

Okay, I'm supposed to talk about trigger control and how to adjust triggers. You realize I really haven't had time to prepare this like I wanted to, with the tryouts and all. Really, honestly I don't know if I have anything more to say about trigger control than you can read in the MTU manual. Basically, your trigger control is a reflex reaction to what you're seeing in your sight picture.

You have to train until it's an automatic type of thing. First, you have to have a good hold; second, you have to concentrate on your sight picture. When you're really performing well, you're not really thinking about trigger control. The shots just go off when the sight alignment is beginning to develop. I had some problems today and got fouled up a couple of times on my trigger control. In standing, I started off real nice, one point down in the first seven shots, and then I shot four straight eights. A couple the wind helped put out, the other two I just shot out. When I run into trouble like that - starting to anticipate the shot or having trouble getting the shot off - I find it helpful, if I'm going to concentrate on any area to pull myself out of it and get my trigger control back, is to concentrate on my follow through. If you're performing well on your follow through, you're not very likely to jerk the shot. Very often when people are having trouble getting a shot off, they are hesitant and not aggressive. They try to be careful pulling the trigger, which just makes them more hesitant. You slow down and be real careful not to jerk it and invariably what you do is jerk it. A couple of times today I did that. I dry fired some and then went back to firing. Concentrate on follow through and not on trying to have a perfect break.

If you're concentrating on your trigger control, you're not concentrating properly. It should be the sight picture you're paying attention to, and your trigger control is a reaction to your sight picture.



ANSCHÜTZ TWO STAGE MATCH TRIGGER

Okay, now I'll try to talk about adjusting the trigger. I wish I had a diagram, but I think most of you are shooting an Anschütz trigger. I usually take the barreled action out of the stock to work on the trigger, but you can leave it in. People have often brought triggers up to me that they think are bad. Invariably when I check it out, they've got about two or three turns worth of engagement on the engagement screw. Sometimes they even have definite creep in it. I understand the instruction manual that comes with the triggers says if you want to make the trigger heavier, turn the screw on the side in. The little screw on the side of the trigger is what sets your engagement. First, if it's a two-stage trigger, when you take the first stage up, you take off almost all of the engagement. When you stop and hit the second stage, there should be a minimal amount of engagement left in the second stage. The amount of engagement that's

left at that point is determined by how far in or out that side screw is. The way I set a trigger up is to set up my slack first - say I want a quarter inch movement in the first stage. Then I set my engagement. Then the weight.

The second thing is to set the engagement. The amount of engagement you have does vary the weight just a little bit. Changing the slack can change the weight and changing the engagement can change the weight. The last thing you want to set is the weight. To set the engagement, I put a piece of empty brass in the chamber so I can dry fire it. Close the bolt, unscrew the screw on the side that you can reach through the stock, a quarter turn at a time until you reach a point where the trigger won't stop on the second stage. It just goes off. When you reach that point, then start turning the screw back in, an eighth of a turn at a time, until you reach a point where it will just barely hold. That's the finest engagement setting you can get on it. At that point, you should put on an additional quarter of a turn on the engagement screw. This is usually enough engagement so that you won't get a set off, but it isn't an excessive amount of engagement. The area where you get the largest variation, when you get a trigger set up, is in engagement. You can get variation in weight or lock-time in the trigger when you have excessive engagement because when the levers pull apart, they use more tension to do so. When you take your first stage up, and you have your engagement down like I've told you, there is less there to fluctuate. Once the lever is disengaged and the trigger is functioning, the variation isn't that much. If, for instance, you have a whole lot of overlap on your engaging edge, then everytime you pull your trigger it can vary. One time it may slip off a little easier than another time and you get fluctuation. You should have the engagement set very fine, but not so it will set off. Some triggers may still set off at a quarter of a turn. If yours does this, add another eighth of a turn until it holds with no danger of set off. A set off will cost you two penalty points in an international match. This is a game you play - you don't want more engagement than you need to have, therefore, you're always kind of on a marginal edge. On the other hand, if you get too fine and have set offs, you won't shoot well and you'll be penalized if you fire a miss.

Last I set the weight. I have a trigger scale to set the weight. If you don't have a trigger scale, then try to get the right weight by feel. Really, the only way to adjust it is by clipping the spring at the back, thus making it shorter and tighter, or stretching the little loops on the end of the snap spring in the back of the trigger. It's a crude way to do it, but once you get your trigger set, it's not something you do all the time. The way the Anschutz trigger is made there just really isn't any trigger weight adjustment, except just shortening or stretching the snap spring. Be careful. You can shorten that spring to where it's so heavy that when the trigger fires, the little lever that flips back when you pull the trigger, won't go forward again. You can get it so light, on the other hand, that when you cock the rifle you have very little tension on that spring. You can stretch it until you have no tension and the spring just rattles around. If you just barely have tension, that isn't a good condition. You should have definite tension on the spring when the bolt is closed and the trigger is cocked. You usually can set them in a range from around 110 grams up to about 180 grams.

DZ: You're talking about the trigger we all have now, not the new trigger you shoot.

JW: Right. I'm shooting an experimental trigger. It's supposed to be out this fall. It will be pretty expensive though, and I don't think most of you will want to go out and buy one. The new trigger is easier to adjust - all you have to do is turn screws to adjust everything. On the new trigger you still need to be careful of too much engagement, but it is much easier to adjust.

DZ: You use the new trigger now, don't you?

JW: No, I use a prototype trigger that Deiter Anschutz only made about three of. I guess I'm the only guy in the world that likes it. Margaret uses one too. Back to the standard triggers, one thing I want to caution you against is getting the trigger as light as you can get it. You'll get into trouble trying to do this and get some fluctuation. The Anschutz trigger isn't made to work at 80 grams for instance. There are two variations of the Anschutz triggers. The levers are a little different, which is hard to explain without a picture, but everything I've said about adjusting is true for both. Deiter has what he calls a heavy lever and a light lever. I'll try to describe this. On the standard Anschutz trigger, if you'll look at the side, you have your trigger bar that comes down and moves when you pull the trigger. Well, inside of there is a little silver triangle that sticks out in the back. If the point of that triangle is right at the base of the trigger frame, even with the bottom of the base of the trigger frame, then this is a light lever trigger. If that little point is an eighth of an inch below the trigger frame, then it's a heavy lever trigger. What this heavy lever does is give you more difference in weight between stages. The first stage weight is the same on both triggers, but on the heavy lever trigger the second stage is heavier. You can set both triggers to the same weight, but you have to stretch the spring on your heavy lever trigger in order to lighten it up a little more.

DZ: When you're talking about stretching the spring, you mean just pull it?

JW: Let me explain it more fully. On the spring you have a little loop on each end. Generally, just by stretching the loop out a little bit, you can lessen the tension on the spring and lighten your trigger weight. If you have access to somebody who has done this, one of the good shooters, ask him to watch you try it the first time. You can check with gunsmiths. The only problem there, is that they aren't shooting the rifle. They usually set the trigger to be sure you won't ever have a set off. You need to learn to adjust your own trigger because you're the one who will be shooting it. A half turn of engagement will prevent a set off, but you probably won't shoot as well with it. Most people can't really tell if they have a bad trigger. I wasn't aware how bad some of these triggers were until I got my scores up around a 380 standing. This is when I became more critical of triggers. There is a lot of difference between individual units. This doesn't mean if you shot a 340 today you should run out and get a new trigger. If my trigger had two turns of engagement on it, it would probably take 10 points off my standing scores. But you have to have a fairly high performance level to be critical of your triggers. You shouldn't just turn the screw in and make the trigger heavier. All the adjustments must be made in relationship to each other.

RF: Would you talk about how to shoot fast?

JW: I always say if it looks like a ten I shoot it! The speed with which a person shoots, I think, is primarily dictated by the type of concentration

technique he uses. Even people that shoot slow will recognize the fact that a person who shoots fast has certain advantages over someone who shoots slow. Today in kneeling, I was on my thirtieth shot when the wind switched. It had been coming most of the day on a right drift. I had noticed that the wind would stay in one direction for ten to fifteen minutes. I had two sighters left, so I got out of position and rested. The condition came from the right again in about ten minutes, so I repositioned, shot ten shots and finished just before it switched back to the left. I don't have to wait as much for conditions as some other shooters, because I can get off more shots in the condition I want while it's there. If you take two hours and I take one hour to shoot standing on a windy day, you'll shoot through twice as many switches as I will. Normally, the first shot after the wind changes is the riskiest one as far as wind doping is concerned. Now I don't think that a person that has learned to shoot slow should go out and try to learn to shoot fast. I never intentionally tried to learn to shoot fast. I just seem to perform better that way. My concentration is best about 4 or 5 seconds after I take my breath to deliver the shot. If I take several holds on a shot, the percentage of my getting a ten is less. Another thing, I wear contact lenses, so if I hold my eye open too long I have problems seeing, especially out here where it's so dry.

DZ: Did you always shoot fast?

JW: Actually, when I started in college, I had a lot of trouble finishing in the time limit. It was about my junior year in college that I started speeding up, but it wasn't an intentional thing. I concentrate better this way. I like to get a cadence going, if I can, which seems to help my concentration. I dope the wind a little different than most people because I shoot fast. I usually shade. Today in kneeling, I held center, clicked and chased my shots, which is probably only the second time I've done that in seven or eight years of shooting at Black Canyon. The wind switches so fast here it's difficult to stay up with it by clicking. Sometimes when the wind switches, you wait for maybe ten minutes and your condition never does come back. Then the time begins to run out, so you reach a point where you have to shoot and you're out of touch with the condition. There are different ways to dope the wind, but a person who shoots fast can use to an advantage the shading technique.

For three days kneeling out here this year, I've been shooting and chasing. I didn't watch mirage, I watched the flags, I watched the dust and where my previous shot was in relation to my call. Believe your call and correct off your call. The wind out here builds up and dies down, especially in the afternoon. You don't get all these little puffs and swirls. This type of condition is usually good for shading. If you shoot fast, you can keep up with conditions and get off several shots without having to shoot through complete reverses. I usually don't like to hold out more than about the nine line. Yesterday for awhile I was holding out in the eight ring. That sounds careless, but really it's not for me. If I'm with conditions, I can hold out in the middle of the eight ring and I know that shot is going to be a ten. If I thought I could do better by using another technique, I'd be using it. Sometimes, I'll start off using one technique; maybe I'll start off waiting and clicking or waiting for a condition, and if I'm not performing well and feel out of touch with it, I'll start shading, or vice versa. Sometimes, I'll completely change the technique I'm using right in the middle of a string, if the initial technique I'm using didn't work out.

I'm not saying everyone should shade. But you can't shoot fast if you're going to wait on conditions to shoot shots. Sometimes, it's necessary to wait. I waited four or five minutes a couple times in kneeling today. I tried to work with it, but when a certain condition was there, I wasn't having very much success with it, so I just didn't shoot in it. I shot almost everything today off a right wind. When I shot off the left, I was getting some elevation I couldn't see, so I didn't want to continue using it. Normally, I'll take twenty to twenty-five minutes to shoot a kneeling string.

Yesterday, on a windy day, you saw some shooters waiting on conditions and getting good scores, and other shooters shooting through and getting good scores. One technique is not necessarily better than another. Shading helps you if you shoot fast, and shooting fast helps you shade. When you're shooting fast, you can stay up with conditions. You get going and get a rhythm, and I just know where that sight picture should be. It's the same as shooting prone with a telescope. When the wind picks up, you favor over a little bit. I'm doing exactly the same thing only I'm doing it with iron sights. Bassham was shading in the eight ring standing today. I shade predominately kneeling here in Phoenix, because the conditions are usually worse by that time of day. If I'm performing well standing, which I wasn't out here this year, I'll shade.

EH: Is it as easy for you to hold out in the eight ring as it is to hold center?

JW: Just about. If on a calm day I hold in the eight ring and shoot a ten shot group, my group will be just about as good as if I'm holding center. Let's say you've got a wind that will put you out in the eight ring, you're not going to estimate that wind down to an eighth of an inch. One of the shooters told me the other day he sat for ten minutes waiting for his condition to come around again and it never did, so he was completely lost and had to start in a completely different condition. His next shot was an eight. Now, if he had kept shooting as the condition turned around, he might have saved that eight. I'm not saying he wouldn't have shot an eight shooting through the change, but he probably wouldn't have done worse.

If you've had elevation problems out here, the reason may have been that you are shooting in an enclosed range. If you come out here for the Wildcat match, you don't have all this elevation. We've been shooting with a six o'clock wind and you have to allow for the wind coming down over the roof of the building. If you have a dead calm and the wind picks up from six o'clock, your shots will go down on this range when the booths are up.

I remember one occasion about two years ago when I was zeroed on a light, nine o'clock drift. The wind would pick up from nine and I'd shade out at ten o'clock like I'd normally shade. When the wind would switch to a seven o'clock direction, the angle would be less and so I wouldn't hold as far to the left. However, the seven o'clock wind would cause the bullet to drop forcing me to hold high. I'd be holding on the nine line at eleven o'clock because the elevation had changed so much. The bullet had dropped so much that I'd be holding a quarter-inch left and three-eighths to half an inch high of the spot I wanted my bullet to strike. I was getting more elevation than I was windage in that condition. Then when it would switch around again to a moderate nine o'clock wind, I'd go back to my ten o'clock hold.

Did any of you get any shots at two o'clock? If the wind is from six o'clock and it goes around to eight o'clock, and you miss seeing the switch, the bullet will go to the right and up. The wind isn't pushing your bullet down (as it does at six o'clock), so it will go up as well as right. On most ranges you will get a shot at four o'clock, but here it may be at two o'clock if the conditions are right.

This is a peculiar range to dope wind on and for most people it's tricky the first time out here. I remember one time when it was dead calm, but as we started to shoot prone the wind just barely started to build up and when we finished it was about a five mile per hour six o'clock wind. I had to come up six clicks elevation through that string. I thought my gun was going out, but everybody on the line came up four to six clicks. The windage remained the same. You'll get elevation when the wind switches around to the side or lets off. You get even worse conditions on a safety range when the wind comes off a wall or around the baffles.

I hope you'll hear some other shooters tell you how they dope wind. I know Wig dopes a lot different than I do. Out here you'll see Foster, Lanny, Dave Boyd and myself shoot standing and be done in a half hour, then you have Margaret and Wig finish up much later. Somebody said to me, "It looks like all the good shooters are either done in a half hour or in two and a half hours, and anybody who finishes inbetween doesn't shoot very well." Like Kimes, back there - he fools around, and fools around, but you shade sometimes don't you?

DK: Yeah. I shaded kneeling today. The condition I wound up shading in, I must of ended up shooting two-thirds of my shots in.

JW: One other thing I should say, it generally isn't too good to click and shade. When I'm shading, sometimes I'll get certain conditions in my mind, if it's changing a lot, maybe I'll be shooting five or six variations. Each of these conditions is a variation of my sight picture. It would be hard for me to click for some and shade for some without being confused.

DK: I don't know if Jack brought this up already, but you should only get into this shading bit when you can break three-quarters of your shots kneeling in. Your performance has to be good. You need to be around a 385 shooter kneeling to use the shading techniques successfully.

JW: Right. You don't have to be a Wigger or a Murdock to use shading, but you should be a good shooter. The first time you come here the wind may give you problems. The last few days out here have been super-duper excellent conditions. We have days out here in past years when nobody breaks 1140. The first day 300 meters last year, I think there was one score above 1100. I shaded seven ring 300 meters, if nothing else just to end the agony. I did pretty good - I had two straight 1106's last year. Had a 1092 the first day. I've seen a lot of up and coming junior shooters who average around 1135 - 1140, come out here and get wiped out, because this is a lot different kind of range to shoot on. You've got to watch the wind all the time. If your performance isn't good and you need to spend a lot of effort concentrating on the mechanics, and also, here at Black Canyon, find you need to spend a lot of time watching the wind, you'll end up shooting a lot of shots out because of your efforts to dope the wind. If you watch the wind, watch the

mirage, check the flags, watch how the birds are flying, figure out exactly how the wind is moving, and zero your rifle perfectly, then you shoot an eight because you're not concentrating, the wind in fact caused you to shoot that eight. If you paid so much attention to the wind that you lost that shot, you lost it because of the wind. You might just as well have cranked on a few and shot.

Sometimes I get on ranges where I can't read the wind. When there is a little puff here and a little puff there and I can't see the condition, I just go ahead and shoot through it. If I spend a lot of time trying to read conditions that can't be read, I'm going to shoot a lot of shots out.

DK: That's what I did when I won the 300 meter standard rifle event out here a few years ago. I had clicked myself out for three days of free rifle, so I just got a condition in a nine o'clock wind of about fifteen to twenty miles per hour, zeroed for it and shot. When I got one out in the nine ring, I just shot again and the next one would be a ten. I had about a 197 prone that way, I think.

JW: Dave won the 300 meter standard rifle championship at the World Championships in Switzerland by concentrating on a good performance. He had to have a possible on his last string kneeling and he got it. He had about twenty seconds left when he fired his last shot.

I think, ideally, if a person is trying to develop himself into an all-around shooter able to shoot well in all conditions, he should be able to use a variety of techniques. He should be able to wait on conditions, he should be able to click with them, he should be able to shade with them, he should be able to shoot fast and he should be able to shoot slow. If a person can develop the flexibility to use different techniques and different paces depending on what the conditions warrant, he is a better all-around shooter. A person who shoots fast usually has a hard time on a day when he needs to be more patient and wait. There are days when you can say this is Wigger's kind of condition - you know, pick the gun up, put it down, pick it up, put it down. The condition holds for a few minutes, then leaves. Wig can stand there all day and do this, but I go bananas. But on other days, I'm shooting kneeling shading here and shading there, and Wig is sitting there waiting for his condition that he lost twenty minutes ago.

Generally, my technique works well for this range, especially kneeling. Keep in mind these are the best conditions I've ever seen here at Black Canyon, and I've been shooting here since 1969. We had a six o'clock wind the whole time this year. Sometimes it was at twelve o'clock, blowing your position. You usually get a lot bigger switches than what we had out here today. I held center today and clicked. Yesterday I shaded. The conditions were a little more stable today, so I could get off seven or eight shots, wait a little bit and do it again. Some days the wind changes from several directions and there are so many conditions you can't wait for any one condition to return. On days like this, I shoot through and shade.

Dave, why don't you talk to them about how you shoot? We shoot entirely different. Dave's on his fifth shot and I'm finished. Yet Dave will probably agree with me that if he had been able to shoot faster with the 50 meter standard

rifle in the World Championships, it would have helped him. Dave shot on the afternoon relay. I talked to the range officer while he was shooting, and a squall line was supposed to move through in about an hour and a half. Bassham and I shot first relay. We had to delay about half an hour for the match to start because the targets were blowing out of the frames. We shot in really bad conditions. About the time we finished, it calmed down for awhile so that when the second relay started it was pretty good. That day you could figure good conditions weren't going to last too long. I'd have been out there smokin' them on the afternoon relay. You could see the thunderheads moving in. Dave took his time and shot in some terrible conditions by the end of the relay. Still he had a very good score. Dave can shoot through more garbage conditions and get good scores than I can believe. He performs well when he has to wait for long periods. I don't. I think we both have good ability to dope the wind, but use entirely different techniques. We talked about the conditions when we finished and we both doped the wind equally well it seems. Dave is a slow, deliberate shooter and his wind doping technique goes along with his shooting style. I shoot fast and my wind doping technique goes along with my style.

MM: I agree with Jack that being able to shoot fast is good in some conditions. In defense of a slow, deliberate technique though, I think Dave and Wig and I have the patience to really work on conditions when we need good scores. I feel with my technique that I can produce tens, when I need tens. I can really work on it and get a superior score when I need one in a big match.

DK: Jack, it would be interesting I think if you cover your trigger technique for standing and kneeling.

JW: This is what Marie asked. Everybody is talking about my trigger technique and I honestly don't know what I do. Explain it to me.

DK: Your trigger technique is organized. The rest of us just get up there and when it looks center, we shoot. The reason I was interested in your technique is because on days when I don't have a good hold, when I have some pulse beat, I always shoot a bad score. By developing a proper trigger technique I can control my rifle, at least in kneeling now, so that on bad days I don't have to anticipate or accept a bad score, even with a pulse beat. I can still shoot tens. I feel I am gaining confidence in being able to produce a good score even when I'm a little nervous or a little off on a particular day. I don't panic when I get into position and see a pulse beat.

JW: On days when I have more pulse beat than usual due to match pressure, I just don't worry about it. I concentrate on my performance and it goes away. Maybe this is what people are talking about. I do time my trigger squeeze to correspond with a consistent pulse beat. If you watch me shoot kneeling, you'd say I don't have a very good hold. My beat is consistent and when it's on the left side I pop the shot. I can anticipate a repetition of the movement once it develops. Each time it comes in I put on a little more pressure, then a little more and a little more until it goes off. I can anticipate the rifle moving out and back.

Now, in standing, I have more wiggles and wobbles than I'd like to have. The predominant movement is from a ten to four direction. This may represent

only about thirty percent of my overall wiggles and wobbles - that is the movement from ten to four. But the ten to four movement is a more repetitive movement. I just don't think about the other movements. We talked about trigger control being a conditioned reflex reaction to your sight picture development. When I'm shooting standing, my reaction is only to this ten to four movement. As my hold settles down, I'm ready to react only when this particular movement comes. If I don't get it the first time, I get it the second time, because I'm ready for it and break the shot as it's coming in. I'm not consciously thinking, "there it is" when I get it. But I've trained myself to react to that movement being set up. I don't pay attention to other movements because I can't anticipate them as well.

DK: What do you do if it just comes down and sits dead center?

JW: Most of you have experienced this. When it's sitting there dead center, when you try to shoot it, more often than not it's a bad shot. To me, when you become aware that it's centered, you've broken your concentration by being aware of it. If you are a properly disciplined shooter, you won't shoot that shot. If you didn't react to it as it came in you're too late when you become aware it's centered. Now if you pull the trigger you're doing something other than what you trained yourself to do. It's tempting to shoot it, but you shouldn't. If it's dead center, the only way you can go is out. If you move, which you probably will, you only have half the ten ring left for the shot.

DZ: I'd like to hear you talk about training. I understand there are two different approaches to training and you are one who shoots about two hundred shots standing a day, whereas Wig will shoot forty to eighty shots and take several hours doing it.

JW: Okay. When I give a clinic I include psychology and training. Bassham is going to talk on this later, and probably it will be different than what I have to say, but I'll give you my perspective on it. I'm going to ad-lib here because I'm not prepared to talk about this. We already talked about pressure and how it affects your ability to perform. You have to understand what is putting pressure on you and you have to figure out what you can do as an individual to alleviate it. My attitude for shooting team matches is this - to shoot for myself. The better I can do, the more I'll help the team. I can't worry for the other guy. I've never had much problem shooting on teams. Colonel Pullum always maintained that team medals would take care of themselves if each individual performed his average.

You put pressure on yourself. There is nothing inherent in a competition that puts pressure on you. You must understand this. I had a little bit of pressure on me today because I was worried about Margaret. Honestly, the first two days I had very little if any pressure. I imagine a lot of you had pressure. Now, if shooting in a match to make the Olympic team puts pressure on the shooter, then I should have had a lot of pressure and you shouldn't have had any. The most downhearted, serious looking faces on the line today were people who didn't have a prayer in the world of making the team. The experienced shooters have trained themselves not to experience pressure. You know, I'm over there pulling on Margaret's trigger finger trying to get her upset before the match, and she's jumping some line officer because he's hassling me, and we're both

completely relaxed. Now, I've known a lot of shooters who have shot longer than I have, but still experience a lot of pressure. Experience alone isn't the answer. Knowing yourself and how to eliminate pressure for yourself is the answer. You have to sit down and think about what it is that you think about that causes you to have pressure. It's the thoughts that are going through your mind that puts pressure on you in a competition.

An example I like to use is from my club in Illinois. I was listening to two juniors who had been shooting about two years, talking about shooting the state gallery championship. This one kid usually shot a 99 or 100 prone, but he shot an 88 in the match. He was saying he just got nervous. I butted in and asked, "Why did you get the 88?" He didn't know. He said, "I just get nervous and that's what happens." I asked him if he'd ever thought about it and he said, "No." Well I said, "You dummy, you've spent a year and a half learning to shoot possibles prone and you haven't spent five seconds learning why you shot an 88."

This is true of most shooters. They don't spend time understanding themselves, getting to know themselves. Everybody has certain personality characteristics. Some are uptight, some are relaxed. A lot of top shooters, myself included, are rather high strung type people - very competitive, easily bothered, easily angered, but not when they are on the line shooting. When they are shooting an Olympic competition you can't get them upset. My wife might do some little thing that I would really react to at home, but on the line, the range officer can really hassle me and I can ignore it when I'm trying to shoot. I might tell him about it when I'm finished, but I'm not going to let him hurt my shooting.

You have to be honest with yourself and find out what your weak points are in your own personality. If you have a lot of anxieties, if you do lack confidence, then you have to set up a training program to help develop this confidence. You've all been on teams where some of the shooters are consistent and some are inconsistent in practice. Now, some coaches will put the inconsistent shooter who occasionally shoots a high score on the team in hopes he'll shoot it in the match. Myself, I'd put the consistent shooter on the team. He'll shoot his practice average in the match which is a good, solid score. It may not win the match, but he knows what he is capable of doing and can do it during a match. The guy that goes into the match shooting a 280 one day and a 295 the next, is not going to go into the match confident of a 295. He'll go in worrying about reaching a 280 and will probably shoot a 275. In training, try for consistent scores so that when you enter a match you try to fire within your average range. Occasionally, you'll perform better than your average in a match, but don't go in pushing to do this or you won't get it. Be happy with shooting your average in a match. Improve your scores in practice. Do everything you can in training to improve your scores. In matches shoot your average score. This is the type of training program that will eliminate some match pressures and build your confidence in your ability to perform.

I remember thinking in Munich, "Well, I've done everything I can do to prepare for this match. What I do on the line today will be determined by everything I've done for the last fifteen years." Prior to going into '72, I had an extensive training program for two years. I didn't have it this year, which is probably why I lacked the edge. Margaret is an exception to all training concepts.

She had three days training before winning the Pan Am Games and setting a new world record standing. She's exceptional. Worse than that, she's a girl.

DK: Unbearable!

MM: Trouble is, it's going to catch up with me one of these days.

DK: Going into the '72 Olympics, Jack was averaging in the 1170's. He took a training trip to Russia that spring with the expressed purpose of shooting well in Russia. He had an 1164 which gave them a lot to think about in the intervening months. He shot several good scores in practice before the match, and Dieter Anschutz was worried because he was afraid Jack had peaked before the match. Everybody else was trying to peak at the Olympics, and Jack was averaging over the world record! All he had to do was come close to his average to get the gold medal; whereas everybody else was struggling to refine their performances and get up there just at the right point, so hopefully on that day they would shoot better than anything they had ever shot in their lives. It was their only chance to win. The better way is to get your average up and shoot your average in a match.

JW: Right. Lanny's in the position now that I was in in '72. He's outperforming everyone he's shooting against. He is shooting very well. Anybody going to Montreal has to worry about beating Lanny. He's not worried about anybody. It's a good feeling going into a match that way. That's the way I went into Munich in '72. This is a good example of how to use your training to help alleviate pressure. Over the years, I've always kept track of my scores - how I do in matches, how much I train, and how soon I see a result. I determined that it takes me about nine months to average in matches what my practice scores average. I'm talking about a consistent match average, day in, day out, match after match. Ideally, when you hit 1160 in practice, you should do it in matches. But realistically, I knew I wasn't doing that. I felt it would take an 1170 performance to win in the Olympics. My training goal then was to be shooting by the end of 1971 consistently in matches, not just in practice, 1170 scores. I wanted to be shooting that entire previous year scores good enough to win the Olympics. This knowledge helped motivate me to train even harder in 1971. I realized I had a lot of work to do in '71 to get up there. I really believed I had to do this. It wasn't just some little trick I was playing with myself. Looking at all my statistics over the years, I knew I had to be able to do this to be confident when I walked out on the line in Munich. I wasn't pleased that it took me so long from practice improvement to match improvement, but I looked at it and accepted it and found a solution to take care of it. A lot of people are afraid to look at the negative parts of what they are doing. Everybody has some problems. No one does everything in training or in matches like they would like to. You have to have a very realistic perspective on what you're doing. You have to understand yourself, you have to know how you will react in certain situations.

You have to anticipate things that might happen in a match that will cause you to have pressures. In preparing for Munich, I knew if I was shooting consistently good scores, I'd probably have a lot of people running around saying, "You're the favorite to win." Anschutz had me picked to be the winner of the match that morning in the paper. If you didn't anticipate this, you might not be mentally prepared for it. Kusterman was the top German shooter at that time and

he admits that being the "hometown boy" shooting well, with the press picking him to win the match, put a lot of pressure on him. He shot poorly and this was one of the reasons. This creates pressure because it makes you feel responsible to win the match. You aren't. Your only responsibility is to go out and shoot the match, shoot your average score. The tendency is to go out and try too hard or to attempt to live up to your press billings. You've seen this happen in other sports where the news media picks some high school kid to be the next Jerry West. Then when he doesn't perform his freshman year in college like Jerry West does in the Pro's, everybody is down on him, criticizing him. A lot of pressure can be put on you by outside sources, if you let it. Even in shooting this happens when kids come up for autographs, and news media interview you and spectators talking to you and telling you to win for the U.S. Work it out in your mind ahead of time, so when it happens it isn't a shock to you.

Bob, I've never told you this before, but I was up in Alaska a few years ago giving clinics to Bob Mickey's group and they had an award presentation which would include me shooting a ten shot air rifle match with one of the juniors up there. I had more pressure on me in that little ten shot match than I had in the Olympics or any world championship I have ever shot. I had a day or two to think about shooting the match. I'd never done anything like this before. I could sit down and think, "Now I'm one hell of a better shooter than this kid is," but it didn't help. I still had the pressure. I thought, "What if he beats me!" This is a good example of not having anticipated the situation. Physically, I knew how to go out, hold up the rifle and shoot the match like any air rifle match, but mentally I couldn't anticipate how my thoughts would be running when I actually went up there to shoot. I wasn't able to get my mind straight on it. If I could do this every day for a week or two, it would be no sweat, because each time I'd learn a little bit more about myself and how I'd react in that situation and pretty soon I'd have it all squared away upstairs and I'd beat the kid real good. I knew how I was going to react in Munich. I didn't know how I would react in Alaska. I was nervous in Alaska and I wasn't in Munich. I prepared myself for one a lot better than I did for the other.

When I was a junior shooter, I think I spent two or three times the amount of time thinking about my mental attitude as I did training physically. I once had a lot of match pressure. I can remember sitting down about twenty minutes before the match and thinking about all the things I wasn't going to think about in the match and what bothered me in a match. I learned not to think about winning the trophy by having it fresh in my mind that I wasn't going to think about this if I had a good score going. I realized thinking about winning something put pressure on me. I could recognize the thought that put pressure on me faster and dismiss it. I began to identify the things I thought about that put pressure on me. After I was more experienced, I didn't have to do this. I do think it helped me. Most of you are well beyond this stage, but it's good for a beginner to do. I didn't have a coach when I was a junior and nobody told me how to get my mind straight. I guess I just lucked into analyzing my thoughts to help my shooting. You have to know what makes you tick,

Let me tell you, I spent a lot of time thinking about what I did wrong shooting that little ten shot air rifle match. I tried to pin down what specifically, not just generally, but what specifically caused me to have pressure. It was a good experience for me in progressing in shooting. Now, I could probably

do it without pressure, but only because I thought about it instead of just dismissing it. I think most people that are inconsistent, are inconsistent because they aren't training enough, and/or they are not studying their performances. Sometimes they do it right, sometimes they do it wrong, but they don't know what they do that is good and what they're doing that is bad. I attribute my inconsistency this year to lack of training. I've had scores in the 1170's and scores in the 1140's. I had a twenty point difference in my scores between the first day and the second day, and there wasn't that much difference in conditions. I felt off the second day. I attribute this to lack of practice. Some people like Margaret shoot well without practice. But that doesn't matter. I can't. I wish I could, but I have to train five or six days a week to consistently perform well. I didn't have pressure, but neither did I have a high level of confidence going into the tryouts out here. I performed poorly out here, but it's not a mystery to me why I did. I wasn't shooting that well in practice. So, I couldn't expect to do it in the match.

I've talked about a lot of things generally here that I hadn't intended to get into. When I give a clinic, it's more organized and to the point.

MA: I think we've all learned a lot from your "ramblings." These kids are beyond basics and I can see they agree that what you've been talking about is what they want to know.

DK: I've had the fortune to room with Jack at several world matches lately, so I've been picking his brain. Then I sneak in the bathroom after he goes to sleep and write all this stuff down.

JW: He does. We're sitting there yaking and he's got his notebook out writing.

DK: When I can get him to ramble on like this, I've learned quite a bit. His trigger technique has really helped my scores and my confidence. Talk to good shooters and sometimes a lot of what they say you already know or wouldn't work for you, but occasionally they'll say something that is a little jewel and will solve a problem you've been having.

MM: Jack, we really thank you at the end of a difficult day for sharing your experience with these juniors.