

# PLANNING FOR PERFORMANCE

## A COACHES GUIDE TO BUILDING PERFORMANCE PLANS

WITH THE START OF THE 2011 COMPETITION SEASON JUST AHEAD THE JOURNEY FOR MANY ATHLETES AND THEIR COACHES DAWNS AS THEY LOOK FORWARD TO THEIR QUALIFICATION FOR THE LONDON 2012 OLYMPICS. OVER THE PAST FEW MONTHS, MANY COACHES WILL HAVE BEEN QUIETLY WORKING ON THEIR COMPETITION AND TRAINING PLANS FOR THE COMING YEAR AND THESE PLANS WILL FOR MANY BE THE KEY FEATURE IN ACHIEVING THEIR SUCCESS.

**T**he planning process within shooting sports is no different from any other sport. Considerable research has been undertaken by many individual sports to identify and quantify the training elements necessary to achieve a specific performance during a specific time frame. This outcome of this process is commonly referred to as 'peaking' and forms the key goal for a performance plan.

In this article we will examine the processes that we as coaches go through to identify the components and processes that make a good annual training & competition plan and how we can put them together to create a road map for the coach and athletes for the competition year to result in the required performance being delivered at the right time.

### WHY DO WE NEED A PERFORMANCE PLAN?

A performance plan offers benefits to both the shooter and the coach as it sets out an agreed pathway that will, if adhered to, create a change in the shooters performance. For rather than hoping for an improvement in performance, we endeavour to create the performance through specific training and measuring the progress towards the goal.

At its simplest of level is it similar to the process of building a house. In this scenario the coach is the equivalent of the architect. The ultimate goal is to produce a structure fit for purpose and the architects plans provide the road map to achieve it, whilst specifying the materials and people that will be required to construct the building. At each point in its construction, measurements are taken and compared to the plan. If the building is not progressing as expected, the work is changed or the plan is altered to accommodate the new circumstances.

### MODERN PERFORMANCE PLANS

The concept of the performance plan is to quantify the current performance level of our athletes and to determine where we wish their performance to be at a given period in the future. The tricky stuff is what happens in between in order to raise the performance levels up to the level that is required. Many of you reading this article will be familiar with the book "Periodization Training For Sports" as developed by Tudor O. Bompa. Simply put, the basis of periodization planning is to break the process of development of an athlete into cycles of activity with a mixture of specific and general training. The volume and intensity of the training is varied to bring about a cyclical rise in the level of training and ultimately an increase in the overall level of performance.

Periodization is a valid and proven planning method for shooting sports and is widely used by many successful shooting nations. Periodization planning can provide the framework upon which we can build our plans and as it is an international concept it offers the benefit of being understood by the many different sporting bodies that a coach is likely to have to interact with including governmental sources of funding and sport service providers.

A key feature of a performance plan is that it is changeable. It is not set in stone. The plan relies on the feedback that comes from the various activities that are conducted throughout the life of the plan. It creates a feedback loop which will dictate if the plan is working or in need of modification. It is for all intents and purposes a living document for the duration of the programme.

### STARTING THE PLANNING PROCESS

How to start the process can be a daunting task for a coach but the truth is that it need not be difficult. We have the benefit of using Periodization as a framework to help us start the process. It is important to state at the very start that the coach and the athletes must understand what is being proposed and there must be an agreed mutual commitment to achieve the work that the plan will outline. If the coach develops a plan in isolation without consulting the athletes; the coach runs the risk of developing a plan in which the athletes do not have any sense of involvement or ownership. The athletes might not believe the goals are achievable or that the plan does not go far enough. It is also essential that a mutual level of respect is present between all the participants, the coach and the support staff. Where team based plans are being developed the process must be seen as unbiased and a fair process and not favouring the requirements of one athlete over another.

### SCOPING THE PLAN

The first practical point in starting a plan is to establish the scope of the plan. We begin with an overview of the essentials that the plan must have and the areas it will cover. It should be produced as a written document that can be distributed amongst all the stakeholders and in particular those who will operate and participate in the plan.

An example of the areas covered within the scoping document would include:

- An analysis of the previous years competition programme and plans.
- Identify the major competition or performance goals.

- Training activities and sport science interventions.
- Programme measurement and testing.
- Coach and Athlete commitment.
- Resources to implement the plan.

To start, these essentials can form the basis of an agenda that can be discussed amongst all participants and stakeholders to generate input into the process. Creating a performance plan is not an isolated task it must be a collaborative effort. Take for example the following questions which would be common to most scoping documents and are a necessary requirement to determine the scale and nature of the programme that is to be developed.

### ? FOR WHAT PURPOSE IS THE PLAN REQUIRED?

Here we look for the overall performance goal of the plan. There might be just one goal or there could be several goals. However, it is important to separate the performance goal from the intermediate goals that we will set along the way. I believe it is best to describe the performance goal as a statement of intent, a mission statement for the programme.

For instance, the purpose might be to take a group of beginners through the learning process of basic shooting technique through to being intermediate stage shooters over a four-year period. It might be to take an international level shooter and increase the consistency of their score by 0.5% - 1% over a six-month period. Or it might be to create an annual training and competition plan to peak the performance of a world-class shooter/s at the Continental Championships.

Whatever the performance goal is must be agreed with the athlete/s who must give their commitment to accomplishing the tasks necessary to accomplish the goal. We must also be aware of the competence and ability of our shooters in how we set these performance goals. The goal must be realistic and achievable and within the technical grasp of the shooter to achieve. All shooters and coaches have aspirations for themselves but we must ground our work in reality and ability. Setting a performance goal beyond the ultimate ability of a shooter can do serious harm to the confidence and wellbeing of the shooter and will damage the reputation of the coach.

### ? WHAT TIME SCALE DO WE MAKE THE PLAN FOR?

The nature of the performance goals will determine the time it will take to achieve the outcome. Performance planning can stretch from as short as three weeks to as long as four years. Generally, within shooting we work plans on an annual basis to coincide with the competition calendar.

### ? WHO IS THE PLAN BEING MADE FOR?

We must know and understand the context in which the plan is being developed. At the elite level we are dealing with very finely tuned athletes and the scope of our activities must reflect that. If we are working with beginners we must tailor our work to the fundamentals and ensure that we create the opportunities for the athletes to have a wider experience of the shooting disciplines before they decide on which one to specialise.

### ? WHAT RESOURCES ARE AVAILABLE?

This is a wide ranging but very important question that can be broken down into:

- Human resources
- Facilities
- Financial

Amongst all the issues of resource, the most important for the success of a plan is the qualified human resources that are available. This refers to the people who operate and are involved directly or indirectly with your plan. It is the coaching staff, medical and sport performance professionals which might be available to you either directly from your federation or through the extended network of sources such as the government sports bodies, your National Olympic Committee and from sponsors and supporters. It also refers to the coaches and the athletes themselves, their time and availability to conduct and participate in the plan can limit the scope to which the plan can operate. In many cases around the world, athletes and coaches have family and other work commitments that must be accounted for in determining the amount of time that can be given on a week-to-week basis.

Facilities can be provided by your federation, local clubs or through sharing training facilities with other national sporting bodies. Remember that facilities are not just shooting grounds but can also be gymnasiums, educational establishments and sport science centres, in essence any organisation that can provide you with direct or indirect assistance. And finally, access to financial funding to offset the costs of your plan and your participation at training camps and competitions. The best of plans can fail immediately if they are constructed with no thought given as to how the plan is costed and subsequently funded. It is one of the important areas of resourcing that needs to be established and quantified.

### ? WHAT EVENTS ARE WE GOING TO COMPETE AT?

Here we need to identify the major competition/s that we wish to achieve our best performances at. Just like the overall performance goal we must narrow the major competitions to two or three events. We must then identify the pathway competitions that we will participate in the run up to the major events.

These events will be determined by the overall performance goal. If the purpose of the plan is to develop national level shooters then the competitions can be based on the local domestic shooting scene. However, as in the majority of our work with international level shooters we must give the exposure to international competition.

### REVIEWING THE SCOPING DOCUMENT

Now that we have produced the scoping document we have the basis for establishing a skeleton of our plan. A discussion of the scoping document should be encouraged amongst the stakeholders and whatever feedback is received should be incorporated into the document to ensure that it is fit for purpose. The more time that is spent on this phase of the planning process will result in time and money saved at a later stage when late changes might have to be incorporated within the plan. From here the coach should take the document and apply it to the periodization framework.

### THE PERIODIZATION FRAMEWORK

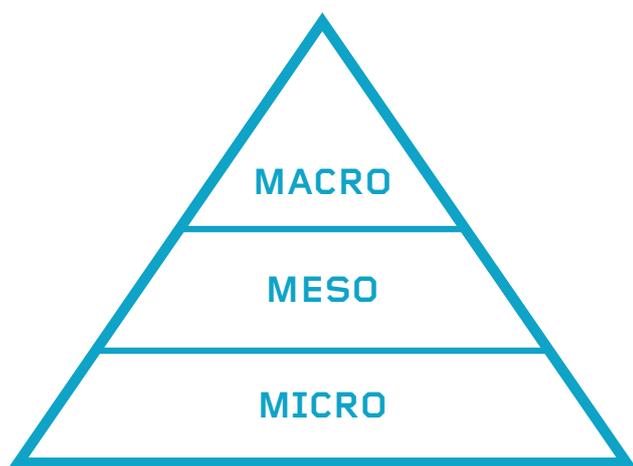
This is a good opportunity to expand on the periodization principle of planning. There are several books available on the subject and much material is also available on the Internet.

The first of the features of Periodization are the cycles of activity. At the top level they are called Macro Cycles that are in turn sub-divided into smaller periods called Meso Cycles that in turn can be further divided into Micro Cycles. The length of time allocated to these cycles and sub-cycles can vary but a good guide is to consider Macro cycles as one month periods, Meso cycles as one-week periods and Micro cycles as one day periods.

The nature of the cycles and their layout permits their easy representation within a spreadsheet layout.

A quick look at the below figure will show that the structure of the cycles is pyramid shaped. Each cycle in turns spawns two or more sub cycles and so on.

Training Phase	Preparation				Competition				Transition			
Macro Cycle												
Meso Cycle												



Within this pyramid structure, Periodization allows the development of smaller or objective based plans within the overall plan. The nature of these objective plans might be to affect a change in technique or to prepare a plan to address a specific competition. These objective plans have a short time frame ranging from one month to three months but because they are built using the same structure as the overall plan they can be incorporated seamlessly within it.

### THE TRAINING PHASES

The training phases are the top-level activity of the plan. Here we break out plan out into areas of high-level activity as follows:

#### ↳ PREPARATION PHASE

During the preparation phase the activities undertaken are designed to raise the performance level of the athlete in a step-by-step basis through a variety of training activities. The volume of activity undertaken is significantly higher in this phase than in the competition and transition phases. The intensity of activity will vary but will also be predominantly higher than any other phase. This is also a time for the incorporation of a physical training programme to complement the technical programme. Through the use of macro cycles within the preparation phase we can create a basic preparation and pre-competition cycle to address specific areas as required.

#### ↳ COMPETITION PHASE

This phase represents the major period of competition where we must focus on the production of the performance whilst maintaining the gains achieved through the preparation phase. It is a time of increased focus on the tactical and mental preparation that is required for the competition cycle.

We may have more than one competition cycle, which can be interspersed with cycles of specific preparation. The flexibility is there within the model to accommodate this as long as the phases and cycles are kept in line.

#### ↳ TRANSITION PHASE

Following the competition phase, we must allow the athletes a period of transition at the end of the programme and before the start of the next programme of activity. At the annual plan level this is the time period of about 6 - 8 weeks after the last major international championships. It is a time of analysis, reflection and overall physical and mental recovery. The integration of these three phases is cyclical. As the transition phase ends it tails into the start of the preparation phase of the following plan.

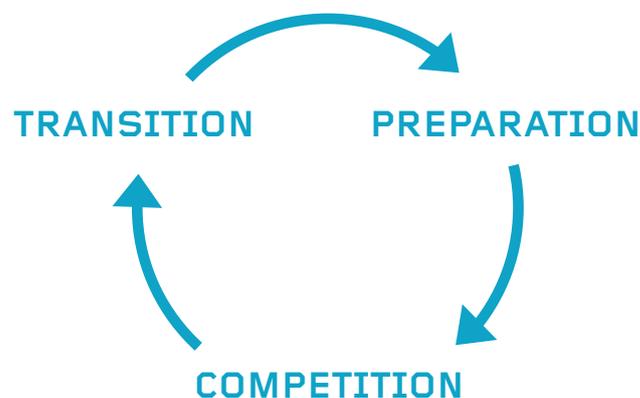
#### ↳ VOLUME & INTENSITY

The second feature of periodization is the integration within the cycles of a variable volume and intensity of training. Volume and Intensity is related not just to physical activity such as athletic training but it is equally applicable to technical and skill based activities.

Within traditional periodization planning, volume can be equated to time spent training whilst intensity equates to the level or force of application applied. For instance, in weight training where the use of a low weight coupled with a high number of repetitions could be classed as a high volume-low intensity training session versus a high weight, low repetition session which would be classed as high intensity-low volume.

We can take this analogy and translate it to the shooting disciplines. An example for volume could be the amount of shots taken in dry fire training or in live fire training as well as the time spent during the session. The intensity could equate to the level of additional focus and the degree of competitive simulation applied to the training.

#### ↳ MEASURING PROGRESS & CHANGING THE PLAN



Throughout the plan time and opportunity must be created to measure the progress of the plan. Just about every plan developed will require modification if the expected progress at different stages occurs later or indeed earlier than expected.

The plan is a living document, it must change and adapt as the circumstances of the programme change. As you develop your coaching activities you should incorporate a quantitative measurement of the progress of your work. Using qualitative methods such as asking your shooters if they feel that they are performing a technique better, or if their score are improving is not an accurate enough. In the end this line of evaluation is only opinion.

Quantitative measurement means counting or measuring a particular aspect of performance and comparing it to a past measurement of the same activity. Within shooting, this can be score but it should not be score on its own. Score should be seen as one component of many that when combined go to make the overall performance.

Based on the outcome of your measurements you should feed the results back into the plan. If a desired change in the shooters technique is not materialising then you might decide to spend more time on it or adjust the specific activities you are conducting to bring about this change. We should be disciplined as coaches to acknowledge when a training activity is not producing the required results that we should change the activity. It is not a failure on the behalf of the coach or athlete but a normal outcome of the coaching process.

We are not endowed with such skills that we can design plans that are tailor made to produce 100% results. Now that we understand the concepts of periodization and we have completed and agreed the scoping document we can start the process of filling out the structure of the performance plan.

### STARTING THE PREPARATION PHASE

This is the phase where the most time and the most training activity will occur. It is during this phase that we will conduct activities designed to bring about change. It is essential that this phase of the plan is well constructed and fully evaluated both during the planning process and also operationally when it is up and running. As it is the foundation of the overall plan, mistakes made at this point can delay and invalidate much of the work already undertaken up to the point where a subsequent problem is recognised.

From our scoping document we will know what our programme goals for the year are. We must evaluate the current performance levels and draw a baseline measurement. We can do this through evaluation of the previous season's performance. We can utilise the shooters and the coaches training diaries to review the areas of strength and weakness as identified through the previous programme. This is also the time to perform all of the medical, vision and psychological tests to establish the current health state of the athletes. Physical fitness should also be measured and tested at this point. With a base level of performance identified we can see what overall improvement in score or technique is required and then begin the process of determining what training activities we will need to undertake to achieve the improvement.

For example, we might determine that a combination of physical improvement coupled with a technique change is required. With this knowledge we can then bring back to the scoping document and the review of available resources. From the scoping document we can see if we have access to a physical trainer who can evaluate and design a training activity to address the requirement.

We can now look to addressing the technique change and break down the steps required to make this change. If the change is significant, it will require the athlete to be aware that performance levels will likely fall before they improve. Frustration and a lack of patience on behalf of the athlete needs to be factored in and the athlete supported sufficiently though what will be a difficult time. A time scale must be identified over which the change is expected to occur and an evaluation process put in place to determine if the change is taking place as expected.

### SESSION PLANNING

As coaches we tend to build up a series of drills or activities centred on making a certain technical change to a shooter. We can utilise these ready-made activities but we should build them into a session plan to ensure that we have a structure for guiding the athlete through the change but also to ensure that we measure the effects of the activity. The use of a session plan by the coach is an ideal way to show in advance to the athletes the activities that will be undertaken for each training session. It gives the athlete clarity as to what is expected of them and if the session is planned correctly, information will be gathered during the session which will indicate if the activities carried out in the session were successful or if further work is required.

### STRUCTURE OF THE PREPARATION PHASE

Utilising the periodization framework we can set out the preparation phase in a spreadsheet by placing all the resource elements we wish to use along the vertical axis of a spreadsheet with the preparation phase subdivided into distinct sub-phases of progression across the columns of the spreadsheet. Each of these sub-phases will be complemented with a period of measurement and evaluation.

### AN EXAMPLE

What follows is an example of how we can construct the preparation phase along with examples of the type of training activities that are conducted. By using a spreadsheet we can visually see the plan the activities and how the various support service we employ interact with the plan and with each other.

For this example, the Macro cycle is one month with the Meso cycle representing one week. The Micro cycle represents a day of training. The macro cycles are divided into Meso cycles called General Preparation, Specific Preparation 1 and Specific Preparation 2. The first Meso cycle, General Preparation, is where we can conduct the medical and performance baseline tests. It is also the point at which the physical training programme is established. Specific Preparation 1 & 2 can refer to technical areas wherein we wish to start the improvement of the athletes' technical performance or to introduce a new technique or approach.

Preparation Phase																				Phase	
General Preparation					Specific Preparation 1					Specific Preparation 2					Macro						
Medical & Performance Baseline Testing	Physical & General Technique Development				Specific Technique Improvement - Part 1			Specific Technique Improvement - Part 2		Specific Technique Improvement - Part 3			Specific Technique Improvement - Part 4		Meso						
Micro Cycle - Training																					
	7	7	8	8	8	8	8	8	7	8	8	7	8	8	6	7	8	8	8	7	Volume (1 - 10)
	3	3	4	4	4	4	5	5	5	5	6	6	7	7	5	5	5	6	6	7	Intensity (1 - 10)
	A1	A1	A1	A2	A2	A2	A3	A3	A3	A4	A4	A4	A5	A5	A5	A5	A6	A6	A6	A6	Coaching Activity
Support																					
																					Physical Training
																					Physiology
																					Nutrition
																					Psychology
																					Performance Analysis
																					Physiotherapy
																					Medical Doctor
Monitoring & Testing																					
																					Evaluation

Below the Meso cycle level we see the micro cycles. These cycles will correspond to our training sessions. In the example below they are indicated by a short code to represent the session plan that the coach will use.

Below the micro cycle level we see detail of the various training and support activities that we will undertake. Due to size limitations it is not possible to fully expand in this article the level of detail that can be recorded in the sheet but it is suffice to say that for each day of training an indication will be given in the cells of the spreadsheet under that day as to what activity and how much training will occur. But for now, we can indicate that a particular activity is scheduled for that session by colour coding the cells of the spreadsheet.

Notice that monitoring and testing is a consistent theme through the sheet. It is placed at the bottom to provide a running scale of progress of the plan.

## STRUCTURE OF THE COMPETITION PHASE

Following the work achieved in developing and increasing the level of performance we are faced with the task of transferring that work to a competitive environment. We must also ensure that the gains made during the preparation phase are maintained and consolidated. The competition phase is not a time for adaptation of technique or the introduction of new equipment but one of fine-tuning and honing the shooter to the task of competition.

Competition Phase															Phase									
Pre-Competition Preparation					Competition 1					Competition 2					Macro									
Competition format training		Shoot off and tactical training			Specific-Competition Prep A			Competition - WC A		Specific-Competition Prep B			Competition - WC B		Meso									
Micro Cycle - Training																								
8	8	8	8	5	5	5	3	3	3	1	1	1	1	4	5	3	3	1	1	1	1	Volume (1-10)		
4	5	6	7	8	8	8	8	9	9	8	8	10	10	6	6	7	7	8	8	10	10	Intensity (1-10)		
A	B	A	B	A	B	A	B	A	B	A	B	C	C	C	C	A	A	A	A	A	C	C	C	Coaching Activity
Support																								
																							Physical Training	
																							Physiology	
																							Nutrition	
																							Psychology	
																							Performance Analysis	
																							Physiotherapy	
																							Medical Doctor	
Monitoring & Testing																								
																							Evaluation	

In this phase we will encounter the stresses of competition and the tactical process we must address in the performance of our athletes at the competition. This is a period of high expectations and competition induced stress and fatigue. It is very important to maintain a maintenance level of physical training and technique training as an anchor for such emotions and as a base for confidence.

Both the volume and intensity of activities change and by taking the approach we described earlier we might move to a low volume high intensity period of training where we lower the volume of live shot training but conduct this training in as realistic a competitive format as possible.

The nature of the training activities changes from being one of new skill learning to one of consolidation and confidence building in ones own technique. It is a time to examine the tactics of competition and to begin preparation for acclimatisation to travel and new shooting ranges.

During this period of the programme, the work of the support staff comes to the fore and in particular that of the sports psychologist who will have been working with your team during the preparation phase. During the competition the athlete is the master of his or her own destiny. The athlete must have the necessary mental skills learned to deal with competition anxiety and pressure. During this phase the work on the sports psychology programme moves to a new level. The focus is on preparation to compete and the coping strate-

gies for tactical situations that might arise such as equipment failure or delays. The structure of the competition phase follows the same framework of the preparation phase. The pyramid structure comes through with the emphasis switching to activities as outlined above. The volume and intensity indicators will adjust and show a tapering of activity in the immediate run up to the competition. Rest and recovery periods are introduced following each competition coupled with the ever-mandatory measurement and evaluation.

## STRUCTURE OF THE TRANSITION PHASE

Following the preparation and competition phases we must allow an active recovery period for the shooter to restore themselves. This is also the time for the ultimate evaluation and review of the programme.

The structure of this phase is more weighted towards the monitoring and evaluation process as we go through the years results and the individual evaluations to get an overall picture of the success or otherwise of the plan. There is a complete absence of training although in this instance it is to the coach and shooter to decide the level of shooting activity but for purposes of illustration I wanted to highlight the need for a break from the normal training and coaching activities.

Transition Phase										Phase
Season Debrief & Analysis			Active Rest & Recovery							Macro
Debrief		Analysis								Meso
Micro Cycle - Training										
										Volume (1-10)
										Intensity (1-10)
										Coaching Activity
Support										
										Physical Training
										Physiology
										Nutrition
										Psychology
										Performance Analysis
										Physiotherapy
										Medical Doctor
Monitoring & Testing										
										Evaluation

## REVIEW YOUR PROGRAMME

This is a downtime for athletes but a busy period for the coach. The coach must take the large volume of data produced by the plan throughout the year and distil it into a series of what worked well and what did not. Every programme produces both success and failures at different points in its operation. We ignore that information at our peril. Using the season debrief and analysis of the programme we can determine:

- The efficiency of individual training activities.
- Individual athlete performance.
- Individual coach and support staff performance.
- New information added to the plan through the year.

- External limitations to the plan such as lack of funding.
- Internal limitations to the plan such as a lack of support staff or infrequent attendance by athletes.
- Identify the major performances and the activities leading up to them.
- What lessons each competition provided.

Hosting the evaluation and debrief session must incorporate group and individual sessions with all the stakeholders of the plan. This is a process that might be best done with the assistance of an external facilitator who is not a party to the programme. Perhaps a performance manager from another sport might conduct the review. Such a fresh set of eyes can see elements within a plan that those so involved in its operation might have missed.

#### ↳ BEGIN THE PROCESS FOR THE NEXT SEASON

This is also the time to start the process of developing your plan for the following competition season. It might even be a prerogative of receiving future funding and while the experience of your analysis and review is still fresh.

#### ↳ EQUIPMENT

This is also the time to look at servicing or obtaining replacement equipment. Any change of equipment will require a period of acclimatisation and adjustment. This is the natural time to do this.

#### IN SUMMARY

Through this article I hope I have shown you a method to develop your own performance plan for the coming year. It is not the only way to build a plan but over many years of trying different methods I believe any plan no matter how well constructed is far better than no plan at all. The hardest plan to do is always your first one but from that point onwards you have armed yourself with the tools and the knowledge to develop performance plans with confidence.

#### Kevin Kilty

ISSF Training Academy tutor for Clay Target and Chairman of the ISSF Coaches Advisory Committee

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