## **ARCHERY CANADA**

# Competition Development

**WORKBOOK** 

Coach Certification Committee 11/9/2015

# COMPETITION – DEVELOPMENT WORKBOOK



# CHAPTER 1 THE COACH









# PARTNERS IN COACH EDUCATION

The National Coaching Certification Program is a collaborative program of the Government of Canada, provincial/territorial governments, national/provincial/territorial sport organizations, and the Coaching Association of Canada.





















Health and Wellness







The programs of this organization are funded in part by the Government of Canada

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#### **CHAPTER 1**

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#### **Coaching Philosophy**

Below, write your coaching philosophy: Why do you coach archery?

What satisfies you and challenges you?

**PREP WORK FOR THE WORKSHOP**: Copy your coaching philosophy below from the NCCP Multi-sport workshop. If you wish to make changes, highlight those changes and discuss the reasons for the changes since the NCCP workshop.

I .	
I .	
I .	



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#### **Leadership Style and Communication – Self-Assessment**

**PREP WORK FOR THE WORKSHOP**: Fill in the questionnaire below. Compare it to the answers you gave during the Multi-Sport Module for Coaching and Leading Effectively. Did you change any of your answers since that workshop? Discuss changes and the reasons for any changes with the ARCHERY CANADA workshop facilitator.

For each statement presented below, **circle the number that best represents whether you achieve the statement** (Never, Sometimes, Often, Always).

DATE:

	DATE			
I take leadership action that improves the conditions that support athlete performance by	Never	Some- times	Often	Always
Applying leadership practices to create positive change in coaching situations	1	2	3	4
Identifying barriers to communication and ways to reduce their impact	1	2	3	4
Determining what interventions are appropriate, given key situational factors	1	2	3	4
Recognising how self-awareness enhances leadership effectiveness	1	2	3	4
Recognising the importance of developing a clear coaching philosophy and acting in a manner that is consistent with it	1	2	3	4
Appreciating that leadership skills can be learned and improved	1	2	3	4
Identifying critical factors in coaching situations that affect the leadership actions available	1	2	3	4
Applying the experiential cycle to enhance learning in any situation	1	2	3	4
Employing facilitation techniques to hear a variety of views or develop alternative approaches	1	2	3	4
Listening attentively and empathically to understand athletes' feelings and meanings	1	2	3	4
Deliver messages that clearly communicate what action is needed and why	1	2	3	4
Leading the development of a facilitative process to develop behavioural norms	1	2	3	4
Giving feedback that leads to positive change or reinforces existing behaviour	1	2	3	4
Providing feedback to peers to enable improved performance	1	2	3	4
Valuing communication skills as essential to leading effectively	1	2	3	4
Leading a facilitative process to increase commitment to decisions and solutions or to learn from experience	1	2	3	4
Exchanging ideas and interacting with other coaches	1	2	3	4



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### <u>Application of the Theory: - Why do archery coaches react a certain way to situations?</u>

What do coaches perceive as stressful? In order for coaches to change their behaviour positively, they must reflect on their current thought processes and analyze emotional reactions to occurrences.

### <u>PREP WORK FOR THE WORKSHOP</u>: Ask yourself the following questions and write in the answer for each:

1.	Are your reactions to a situation proportional to the importance of the situation?	YES	NO
2.	Do you attach too much significance to minor stresses during training?	YES	NO
3.	Do you attach too much significance to minor stresses in competition?	YES	NO
4.	Do you react emotionally first and then get the details later?	YES	NO
5.	Do you think how your reaction affects your archer(s)?	YES	NO
6.	Do you tend to put the blame on external forces?	YES	NO
7.	Do you accept responsibility for the consequences of your actions?	YES	NO
8.	Do you always assume the worst?	YES	NO

#### Want to learn more about yourself?

Use the self-evaluation for psychological preparation in Chapter 3 regularly. It will help you pinpoint your strengths and weaknesses in real coaching situations.



#### D 28

#### PREP WORK FOR THE WORKSHOP

# EXERCISE #1 FOR COACH BEHAVIOUR: NAME: \_\_\_\_\_\_ DATE: \_\_\_\_\_

List  $\underline{\mathbf{3}}$  archery coaching situations or incidents below which you find very stressful personally.

1	-
	_
2	-
	_
	_
3	
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#### **EXERCISE #1 FOR COACH BEHAVIOUR**

For each of the incidents above, list <u>your typical reaction to the critical incident and how you handle it normally</u>. If the situation or incident is something long-term, such as archers perpetually late for practice, detail how you handle these regular occurrences.

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2	
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3	
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#### **EXERCISE #1 FOR COACH BEHAVIOUR**

For each of the 3 examples you have listed, if you had had <u>a chance to react differently</u>, what would you have changed?

1	
11	
2	
2	
3	
5	



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#### PREP WORK FOR THE WORKSHOP

Application of the Theory: - Start Planning – The Coach needs to organised Once you start planning, and discipline yourself to use daily planning, it will become a lot easier. To get you started, use the template below. Fill it in for next Monday.

Follow steps 2-7 in the reference manual to complete this assignment. Evaluate your successes and where you had problems. Be prepared to discuss these points with a group and/or the Facilitator.

Date: Monday,		
TASK	Estimate TIME REQUIRED	RATE IT: A/B/C
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Now move to the next page and add the tasks into actual times in the Day Planner.

Remember to check off each task as you complete it.

**Assess** your success.

DAY	Date: Monday,	,
	Date: menacy,	√
PLANNER		
TIME	TASK	COMPLETED
08h00		
09h00		
10h00		
11h00		
12h00		
13h00		
14h00		
15h00		
16h00		
17h00		
18h00		
19h00		
20h00		

<b>Evaluation</b> : How did you do?		
I completed (%) task	ss I assigned myself.	
I did not complete the following tasks because of the reasons listed below:		
TASK	Reason it could not be completed today	
I could have completed these task	ks if I had:	
TASK	What I should have done to complete it	

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iv) Self-evaluation Exercise #1:	NAME:
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DVIE:		

#### Inventory of Present Coaching Skills in the 4 training components

Rate your ability in each of the following areas. Scale: 1 = no knowledge

2 = poor knowledge or ability
Circle one 3 = basic ability and skills

4 = good ability and skills 5 = very good ability & skills

#### **PART A: Psychological Training Component**

1.	I am able to teach relaxation, breathing and visualisation skills to my archers.	1	2	3	4	5
2.	I can teach archers Coping Strategies for stress.	1	2	3	4	5
3.	I simulate elite competitive stress in my practices.	1	2	3	4	5
4.	I can improve the archer's psychological preparedness.	1	2	3	4	5
5.	I know when to introduce mental training into an <u>annual</u> plan to increase archer readiness.	1	2	3	4	5
6.	I know how to build mental toughness into the <u>annual</u> plan in progressive stages.	1	2	3	4	5
7.	I listen to my archer's fears and concerns.	1	2	3	4	5
8.	I catalogue my archer's reactions to competition.	1	2	3	4	5
9.	I recognise state anxiety when it occurs in archers.	1	2	3	4	5
10.	I can judge athlete psychological preparedness for competition.	1	2	3	4	5
11.	I can teach the archer to be responsible and self-reliant in training and competition.	1	2	3	4	5
12.	I can teach exercises to increase archer concentration.	1	2	3	4	5
13.	I can design exercises to improve archer confidence.	1	2	3	4	5

I would like to improve my ability in	
	-
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iv)	Self-evaluation Exercise #1:	NAME:	Continued
Inven	tory of Present Coaching Skills in	DATE: n the 4 training componen	ts
	PART B: Physiolog	ical Training Component	

1.	I am familiar with the body's energy systems.	1	2	3	4	5
2.	I know which systems are used in archery generally.	1	2	3	4	5
3.	I can design an appropriate basic fitness programme.	1	2	3	4	5
4.	I know when to introduce physical training into the annual plan to increase archer readiness.	1	2	3	4	5
5.	I know how to increase archer fitness levels in progressive states throughout the annual plan.	1	2	3	4	5
6.	I can design an appropriate (general and/or progressive) strength programme.	1	2	3	4	5
7.	I know when to introduce strength training into an annual plan to increase archer readiness.	1	2	3	4	5
8.	I can analyse form biomechanically in order to enhance performance.	1	2	3	4	5
9.	I know when to make form changes during the annual plan.	1	2	3	4	5
10.	I can assess the overall energy output of the archer.	1	2	3	4	5
11.	I can teach kinaesthetic awareness.	1	2	3	4	5
12.	I can design exercises to improve, posture, body balance and stability while shooting.	1	2	3	4	5

I would like to improve my ability in	

iv)	Self-evaluation Exercise #1:	NAME:	
•		DATE:	

#### Inventory of Present Coaching Skills in the 4 training components

#### **PART C: Technical Training Component**

1.	I can tune a RECURVE bow effectively.	1	2	3	4	5
2.	I can tune a COMPOUND bow effectively.	1	2	3	4	5
3.	I can tune for long-distance target shooting needs.	1	2	3	4	5
4.	I can tune for 3D archery requirements.	1	2	3	4	5
5.	I can tune for field archery requirements.	1	2	3	4	5
6.	I can tune for Ski-Arc requirements.	1	2	3	4	5
7.	I can select equipment suitable for young archers.	1	2	3	4	5
8.	I can select equipment suitable for women.	1	2	3	4	5
9.	I can adapt and refine equipment to meet the needs of wheelchair archers, amputees and blind archers.	1	2	3	4	5
10.	I use bare-shaft and/or paper tuning methods regularly.	1	2	3	4	5
11.	I assess the pros and cons of riser designs to when selecting equipment for a particular archer.	1	2	3	4	5
12.	I know when to evaluate the archer's equipment set up	1	2	3	4	5
13.	I know <i>how</i> to evaluate the archer's equipment set up.	1	2	3	4	5
14.	I know <b>when</b> to introduce equipment changes during the <u>annual</u> plan to enhance archer readiness.	1	2	3	4	5

I would like to improve my ability in	

iv) Self-evaluation Exercise #1: NAME:								
DATE: Inventory of Present Coaching Skills in the 4 training components								
PART D: Tactical Training Componen	ıt	1						
1. I can train an archer to perform well in wind.	1	2	3	4	5			
2. I can teach proper body alignment for field.	1	2	3	4	5			
I can train archers to shoot the FITA team round for target archery indoors and outdoors.	1	2	3	4	5			
4. I can prepare my archer for travel and jet lag.	1	2	3	4	5			
I can teach my archer basic nutrition and hydration strategies when shooting competitions.	1	2	3	4	5			
6. I can teach and train distance estimation for field or 3D.	1	2	3	4	5			
7. I know when to introduce tactical training concerns into the annual plan.	1	2	3	4	5			
I know how to evaluate archer readiness for challenging competitive situations.	1	2	3	4	5			
I can train archers to shoot Match Play and other Shoot-off" formats effectively.	1	2	3	4	5			
I would like to improve my ability in  General comments on what you learned about your present coaching skills by completing this questionnaire:								

What area(s) would you like to strengthen/enhance first?
Wh. 2
Why?

#### iv) Self-evaluation Exercise #2: Inventory of Psychological Preparation

#### Instructions:

After a practice session or an important tournament, fill in the inventory below.

Critical reflection is a very important skill that good coaches hone.

Be honest with yourself and your answers.

Evaluate your responses and plan strategies/tasks to improve your own psychological preparation.

Situation:Date:			
1.	What happened today which gave you satisfaction in your coaching?		
2.	What happened today to annoy you?		
3.	Describe how you reacted to this situation.		
3a)	Did you get additional information on this situation before you reacted publicly?	YES	NO
4.	Was this an important issue? If so, why?		
5.	In your opinion, what triggered the situation that annoyed you?		
6.	Did you feel that you had to intervene in order to correct the situation? Why?		
6a)	What would have been the consequences if you had not gotten involve	d?	
7.	Did you notice any changes in your body language?	YES	NO
8.	Did you notice any changes in your emotional control?	YES	NO
9.	Did you notice any changes in your voice or tone?	YES	NO
10.	Were any of these changes directed towards an archer?	YES	NO
	If yes, what happened?		
11.	Did you consider the athlete's reaction while this situation occurred?	YES	NO
12.	Did you have a clear-cut reason for reacting the way you did?	YES	NO
13.	Did you think about the long-term implications of your reaction?	YES	NO

General comments on what you learned about yourself and how you handle stressful situations:

#### iv) Self-evaluation Exercise #3: Inventory of Current Time Management Skills

The good archery coach is organised, effective and makes efficient use of the time available. How would you rate yourself in the following abilities?

Scale: 1 = no skill	2 = poor skill	3 = basic ability and skills
4 = good ability and skills	5 = very good ability and s	kills

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

1.	I get copies of tournament schedules as soon as they become available and mark them down in the plan.	1	2	3	4	5
2.	I meet regularly with my archers & their supporters.	1	2	3	4	5
3.	I set aside regular weekly coaching times.	1	2	3	4	5
4.	I am always punctual for practice times.	1	2	3	4	5
5.	I am always on time for tournaments.	1	2	3	4	5
6.	I work with my athlete to plan the upcoming season.	1	2	3	4	5
7.	I finish all tasks on time.	1	2	3	4	5
8.	I am reliable: when I promise to get something ready for an archer, it is done on time.	1	2	3	4	5
9.	I leave time for my own recreational needs.	1	2	3	4	5
10.	I say "no" when I can't promise to do something on time.	1	2	3	4	5
11.	I am 100% committed to coaching archers well.	1	2	3	4	5
12.	I allow for adequate time to get tasks done properly.	1	2	3	4	5
13.	I make sure my archer knows how to stay organised.	1	2	3	4	5
14.	I am very organised in my work habits.	1	2	3	4	5
15.	I keep notes on my archer's training progress.	1	2	3	4	5
16.	I keep notes on my archer's tournament results.	1	2	3	4	5
17.	I evaluate the plan's success & implementation regularly.	1	2	3	4	5
18.	I allow adequate time for the archer to speak with me after training and tournaments.	1	2	3	4	5
19.	I review the plan for the next month for each archer.	1	2	3	4	5

I would like to improv	e my ability in		

#### v) Case Studies:

1. Intervention during a practice

Charlie was practicing in his back yard, getting ready for an "important" tournament tomorrow. You agreed to come over to coach him. It was a very windy day and Charlie was having obvious trouble with his control.

Should you stop the practice session in fear that he will teach himself poor form faults, or use the opportunity as a learning experience, coaching him to have better control in the wind? Give reasons to support your decision.


#### v) Case Studies:

2. Intervention during a major competitive event Jacqueline is an elite outdoor target shooter. Characteristically, she starts out well at the longer distances and this gives her a great deal of confidence. She always chats with peers and officials in between ends. She always looks relaxed and calm.

However, Jacqueline's demeanor changes when it is time for the head-to-head shootoffs at the same distances. She becomes cold, aloof and silent. Her average scores are always lower during these events than in training or normal competition.

You have worked with her on this problem over the past six months, always stressing the need to keep a positive perspective and repeat reassuring phrases in her mind. Now the national championship round is about to start.

What do you look for as signs that Jacqueline is ready to shoot well? If these signs were not present, what would you do or say to alter her thinking without breaking her concentration on the task at hand?


#### v) Case Studies:

3. Intervention when performance deteriorates

John started out shooting really good form at the first leg of a major 3D tournament. His back tension was great. His release stayed in tight to his face on the follow-through. And the bow arm went right towards the target on the shot. His first half score was very competitive. He was happy.

In the intervening two hours between rounds, John talked with all sorts of people, including others in his equipment class. The more he talked, the more pressure he felt to perform well the second half. People had told him their expectations of him. He told you, his coach, about the conversations.

At the warm-up butts 10 minutes before his group is about to leave, you notice that his eyes are moving on the shot and the bow arm is dropping. You don't have time to reemphasize the skill. What do you say, or do to get John back on track quickly?

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vi) Self-evaluation Exercise #1:

NAME:			

#### **ONE YEAR LATER** DATE: \_

#### Inventory of Present Coaching Skills in the 4 training components

Rate your ability in each of the following areas. Scale: 1 = no knowledge

2 = poor knowledge or ability
Circle one
3 = basic ability and skills

4 = good ability and skills 5 = very good ability & skills

#### **PART A: Psychological Training Component**

1.	I am able to teach relaxation, breathing and visualisation skills to my archers.	1	2	3	4	5
2.	I can teach archers Coping Strategies for stress.	1	2	3	4	5
3.	I simulate elite competitive stress in my practices.	1	2	3	4	5
4.	I can improve the archer's psychological preparedness.	1	2	3	4	5
5.	I know when to introduce mental training into an <u>annual</u> plan to increase archer readiness.	1	2	3	4	5
6.	I know how to build mental toughness into the <u>annual</u> plan in progressive stages.	1	2	3	4	5
7.	I listen to my archer's fears and concerns.	1	2	3	4	5
8.	I catalogue my archer's reactions to competition.	1	2	3	4	5
9.	I recognise state anxiety when it occurs in archers.	1	2	3	4	5
10.	I can judge athlete psychological preparedness for competition.	1	2	3	4	5
11.	I can teach the archer to be responsible and self-reliant in training and competition.	1	2	3	4	5
12.	I can teach exercises to increase archer concentration.	1	2	3	4	5
13.	I can design exercises to improve archer confidence.	1	2	3	4	5

I would like to improve my ability in	-
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vi)	Self-evaluation Exercise #1:	NAME:	Continued
Invent	ONE YE ory of Present Coaching Skills in t	AR LATER DATE:he 4 training components	

#### **PART B: Physiological Training Component**

I am familiar with the body's energy systems.	1	2	3	4	5
I know which systems are used in archery generally.	1	2	3	4	5
I can design an appropriate basic fitness programme.	1	2	3	4	5
I know when to introduce physical training into the annual plan to increase archer readiness.	1	2	3	4	5
I know how to increase archer fitness levels in progressive states throughout the annual plan.	1	2	3	4	5
I can design an appropriate (general and/or progressive) strength programme.	1	2	3	4	5
I know when to introduce strength training into an annual plan to increase archer readiness.	1	2	3	4	5
I can analyze form biomechanically in order to enhance performance.	1	2	3	4	5
I know when to make form changes during the annual plan.	1	2	3	4	5
I can assess the overall energy output of the archer.	1	2	3	4	5
I can teach kinaesthetic awareness.	1	2	3	4	5
I can design exercises to improve, posture, body balance and stability while shooting.	1	2	3	4	5
	I know which systems are used in archery generally.  I can design an appropriate basic fitness programme.  I know when to introduce physical training into the annual plan to increase archer readiness.  I know how to increase archer fitness levels in progressive states throughout the annual plan.  I can design an appropriate (general and/or progressive) strength programme.  I know when to introduce strength training into an annual plan to increase archer readiness.  I can analyze form biomechanically in order to enhance performance.  I know when to make form changes during the annual plan.  I can assess the overall energy output of the archer.  I can design exercises to improve, posture, body balance	I know which systems are used in archery generally.  I can design an appropriate basic fitness programme.  I know when to introduce physical training into the annual plan to increase archer readiness.  I know how to increase archer fitness levels in progressive states throughout the annual plan.  I can design an appropriate (general and/or progressive) strength programme.  I know when to introduce strength training into an annual plan to increase archer readiness.  I can analyze form biomechanically in order to enhance performance.  I know when to make form changes during the annual plan.  I can assess the overall energy output of the archer.  I can design exercises to improve, posture, body balance	I know which systems are used in archery generally.  I can design an appropriate basic fitness programme.  I know when to introduce physical training into the annual plan to increase archer readiness.  I know how to increase archer fitness levels in progressive states throughout the annual plan.  I can design an appropriate (general and/or progressive) strength programme.  I know when to introduce strength training into an annual plan to increase archer readiness.  I can analyze form biomechanically in order to enhance performance.  I know when to make form changes during the annual plan.  I can assess the overall energy output of the archer.  I can teach kinaesthetic awareness.  I can design exercises to improve, posture, body balance	I know which systems are used in archery generally.  I can design an appropriate basic fitness programme.  I know when to introduce physical training into the annual plan to increase archer readiness.  I know how to increase archer fitness levels in progressive states throughout the annual plan.  I can design an appropriate (general and/or progressive) strength programme.  I know when to introduce strength training into an annual plan to increase archer readiness.  I can analyze form biomechanically in order to enhance performance.  I know when to make form changes during the annual plan.  I can assess the overall energy output of the archer.  I can design exercises to improve, posture, body balance	I know which systems are used in archery generally.  I can design an appropriate basic fitness programme.  I know when to introduce physical training into the annual plan to increase archer readiness.  I know how to increase archer fitness levels in progressive states throughout the annual plan.  I can design an appropriate (general and/or progressive) strength programme.  I know when to introduce strength training into an annual plan to increase archer readiness.  I can analyze form biomechanically in order to enhance performance.  I know when to make form changes during the annual plan.  I can assess the overall energy output of the archer.  I can design exercises to improve, posture, body balance

I would like to improve my ability in _		

vi)	Self-evaluation Exercise #1:	NAME:
•		

#### **ONE YEAR LATER** DATE: \_

#### Inventory of Present Coaching Skills in the 4 training components

#### **PART C: Technical Training Component**

1.	I can tune a RECURVE bow effectively.	1	2	3	4	5
2.	I can tune a COMPOUND bow effectively.	1	2	3	4	5
3.	I can tune for long-distance target shooting needs.	1	2	3	4	5
4.	I can tune for 3D archery requirements.	1	2	3	4	5
5.	I can tune for field archery requirements.	1	2	3	4	5
6.	I can tune for Ski-Arc requirements.	1	2	3	4	5
7.	I can select equipment suitable for young archers.	1	2	3	4	5
8.	I can select equipment suitable for women.	1	2	3	4	5
9.	I can adapt and refine equipment to meet the needs of wheelchair archers, amputees and blind archers.	1	2	3	4	5
10.	I use bare-shaft and/or paper tuning methods regularly.	1	2	3	4	5
11.	I assess the pros and cons of riser designs to when selecting equipment for a particular archer.	1	2	3	4	5
12.	I know when to evaluate the archer's equipment set up	1	2	3	4	5
13.	I know <i>how</i> to evaluate the archer's equipment set up.	1	2	3	4	5
14.	I know when to introduce equipment changes during the annual plan to enhance archer readiness.	1	2	3	4	5

I would like to improve my ability in	

vi)	Self-evaluation Exercise #1: NAME:					
	ONE YEAR LATER DATE:					
In	ventory of Present Coaching Skills in the 4 training compo	nents	S			
	PART D: Tactical Training Component					
1.	I can train an archer to perform well in wind.	1	2	3	4	5
2.	I can teach proper body alignment for field.	1	2	3	4	5
3.	I can train archers to shoot the FITA team round for target archery indoors and outdoors.	1	2	3	4	5
4.	I can prepare my archer for travel and jet lag.	1	2	3	4	5
5.	I can teach my archer basic nutrition and hydration strategies when shooting competitions.	1	2	3	4	5
6.	I can teach and train distance estimation for field or 3D.	1	2	3	4	5
7.	I know when to introduce tactical training concerns into the annual plan.					
8.	I know how to evaluate archer readiness for challenging competitive situations.	1	2	3	4	5
9.	I can train archers to shoot Match Play and other Shoot-off" formats effectively.	1	2	3	4	5
I would like to improve my ability in						
General comments on what you learned about your present coaching skills by completing this questionnaire:						

What area(s) would you like to strengthen/enhance first?
Why?

#### vi) Self-evaluation Exercise #2: Inventory of Psychological Preparation

#### Instructions:

After a practice session or an important tournament, fill in the inventory below.

Situation: ONE YEAR LATER Date:

Critical reflection is a very important skill that good coaches hone.

Be honest with yourself and your answers.

Evaluate your responses and plan strategies/tasks to improve your own psychological preparation.

1.	What happened today which gave you satisfaction in your coaching?		
2.	What happened today to annoy you?		
3.	Describe how you reacted to this situation.		
3a)	Did you get additional information on this situation before you reacted publicly?	YES	NO
4.	Was this an important issue? If so, why?		
5.	In your opinion, what triggered the situation that annoyed you?		
6.	Did you feel that you had to intervene in order to correct the situation? Why?		
6a)	What would have been the consequences if you had not gotten involve	d?	
7.	Did you notice any changes in your body language?	YES	NO
8.	Did you notice any changes in your emotional control?	YES	NO
9.	Did you notice any changes in your voice or tone?	YES	NO
10.	Were any of these changes directed towards an archer?	YES	NO
	If yes, what happened?		
11.	Did you consider the athlete's reaction while this situation occurred?	YES	NO
12.	Did you have a clear-cut reason for reacting the way you did?	YES	NO
13	Did you think about the long-term implications of your reaction?	YES	NO

Continu	ied

General comments on what you learned about yourself and how you handle stressful situations:
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#### vi) Self-evaluation Exercise #3: Inventory of Current Time Management Skills

The good archery coach is organised, effective and makes efficient use of the time available. How would you rate yourself in the following abilities?

Scale: 1 = no skill 2 = poor skill 3 = basic ability and skills

4 = good ability and skills 5 = very good ability and skills

#### NAME: ONE YEAR LATER DATE: \_\_\_\_\_

1.	I get copies of tournament schedules as soon as they become available and mark them down in the plan.	1	2	3	4	5
2.	I meet regularly with my archers & their supporters.	1	2	3	4	5
3.	I set aside regular weekly coaching times.	1	2	3	4	5
4.	I am always punctual for practice times.	1	2	3	4	5
5.	I am always on time for tournaments.	1	2	3	4	5
6.	I work with my athlete to plan the upcoming season.	1	2	3	4	5
7.	I finish all tasks on time.	1	2	3	4	5
8.	I am reliable: when I promise to get something ready for an archer, it is done on time.	1	2	3	4	5
9.	I leave time for my own recreational needs.	1	2	3	4	5
10.	I say "no" when I can't promise to do something on time.	1	2	3	4	5
11.	I am 100% committed to coaching archers well.	1	2	3	4	5
12.	I allow for adequate time to get tasks done properly.	1	2	3	4	5
13.	I make sure my archer knows how to stay organised.	1	2	3	4	5
14.	I am very organised in my work habits.	1	2	3	4	5
15.	I keep notes on my archer's training progress.	1	2	3	4	5
16.	I keep notes on my archer's tournament results.	1	2	3	4	5
17.	I evaluate the plan's success & implementation regularly.	1	2	3	4	5
18.	I allow adequate time for the archer to speak with me after training and tournaments.	1	2	3	4	5
19.	I review the plan for the next month for each archer.	1	2	3	4	5

I would like to improve my ability in

#### vii) Opportunities for Professional Development in Coaching

The quest for knowledge and self-improvement does not end when you finish this course. It is only the beginning. Plan your next step in your educational base and experience. Commit to at least one or two of the following within the next 18 months following the ARCHERY CANADA workshop:

DATE:
Education There is a rules-update clinic being held in next
I will subscribe (or renew my subscription) to the Sport Information Resource Centre of CAC either through the mail or the Internet by
I will attend the next National Coaches Seminar when it comes to my part of Canada next OR I will attend 1 course offered at the National Coaches Institute near my home no later than
I will attend a conference or seminar related to management skills, inter-personal skills or archery equipment no later than
Experience I will seek out a coach mentor for feedback by
I will attend a major tournament as an observer in one of the four archery disciplines, which I train archers in no later than
I will attend a major tournament as an observer in one of the four archery disciplines which I DO NOT train archers in, no later than
I will gain experience in the following sport specific task, which I feel, needs improvement within the year.
TASK:
PLACE:
TENTATIVE DATES:

### My Leadership Plan

Challenge/Change		
The challenge I want to focus on for the rest of this workshop is:		
What needs to be different to resolve this challenge?		

Component	Action	Implementation Date
Intervention	Intervention Option 1	
Summarize two phased interventions that are consistent with the Stage of Group Development you identified in 4.1.2.of the "Coaching and Leading Module" (workbook pg 10reference 5-6). For this intervention, list those involved, and describe the type of intervention, its emotional impact, and the expected outcome	Intervention Option 2	
Listening Effectively		
Thinking about your leadership challenge,		
List the people you need to have a conversation with to ensure that the changes occur		
Identify the listening fault you need to pay special attention to in these conversations so you can really hear what's being said		

Component	Action	Implementation Date
Facilitation (cont'd) Identify the What? So What? Now What? questions to ask in a debrief related to your leadership challenge	Debrief What?	
	So What?	
	Now What?	
Coaching Philosophy		

## **COMPETITION – DEVELOPMENT**

## **WORKBOOK**



**THE PLAN** 





## **CHAPTER 2**

# <u>Application of the Theory:</u> using Smart Goals <u>PREP WORK FOR THE WORKSHOP</u>



Using SMART goals, write out your 6 good goal statements as the coach of an elite competitive archer. Discuss them with the workshop Facilitator. Make revisions if necessary.

General goal statement:	
Details of the general statement: Specific:	
	-
Measurable:	_
	_
Attractive:	-
	-
Realistic:	_
	-
Tangible:	_
	-



SMART Goals - ARCHER'S (	COPY	NAME:	<b>DATE:</b> preparation) in the next 12 months I want	
In the area of	_ (e.g	. mental	preparation) in the next 12 months I want	
to:				
Specific:				
			_	
Measurable:				
<u>Measurable.</u>				

Attractive:	
B. B. C.	
Realistic:	
T 11 I	
Tangible:	
3	

#### THE INVENTORY

#### How to complete the task:



The following are examples of assessments for each training component. The elite competitive coach should feel free to modify and adapt the questions to suit the needs of the archer(s) being trained.

Print the assessment inventory twice.

Fill it out for one of your archers.

Give the other copy to the archer in question. Let that person fill it out as well.

When both versions have been completed, compare the findings with your archer. Submit both copies to the workshop Facilitator for comments.

#### **Training Component Assessment**

Date:	Name:		
Chosen Archery Discip	oline: Target	Field 3D	Ski-Arc
Number of years comp	peting in this disciplin	e	
Equipment division:			
Age category:			
Female:	Male:	Birth date:	
Check which of the following	lowing sport specialis	sts this archer uses:	
Physiotherapist	Massage Therapist	Sport Psychologist	Sport Nutritionist
Chiropractor	Acupuncturist	Other:	

Part 1: Mental

1. Psychological Ability to Stay Motivated

1.	Does the archer have a clear idea of the training goals for each session?	YES	NO
2.	Can the archer stay on-task during training sessions?	YES	NO
3.	Is the archer able to control frustration during training sessions?	YES	NO
4.	Does the archer appear confident and calm during training sessions?	YES	NO
5.	Can the archer visualise proper form clearly?	YES	NO
6.	Can the archer visualise within the time allowed during the event?	YES	NO
7.	Can the archer simulate elite competitive situations and stress effectively?	YES	NO
8.	Is the archer able to control frustration during competition?	YES	NO

2. Funnelling Elite Competitive Anxiety into Success

1.	Does the archer enjoy competing?	YES	NO
2.	Does the archer appear confident and calm during competitions?	YES	NO
3.	Does the archer implement relaxation techniques during stressful events?	YES	NO
4.	Can the archer visualise proper form clearly during competitions?	YES	NO
5.	Can the archer recover from shooting a poor arrow or a bad end?	YES	NO
6.	Can the archer recover from poor performance starts during competition?	YES	NO
7.	If performance scores are lower than expected, does the athlete pout/show anger?	YES	NO

Note: for details on training the archer in this component, see Chapter 3: Psychology

## Part 2: Physical

## 1. Cardiovascular Fitness

1.	What is the resting heart rate?	/bpm
2.	How high does the archer's heart rate go during training?	/bpm
3.	How high does the archer's heart rate go during competition?	/bpm

4.	Can the archer consciously lower the heart rate effectively?	YES	NO
5.	Does the archer tire quickly in training and/or competition?	YES	NO
6.	Does the archer show signs of fatigue from the total output of energy to train?	YES	NO
7.	Does the archer recover quickly from physical exercise?	YES	NO
8.	Does the archer engage in cardiovascular exercise +2-3 times per week?	YES	NO

## 2. Biomechanical Efficiency

1.	Is the archer's weight distribution centered over the base of support?	YES	NO
2.	Does the archer's weight shift as the bow is drawn?	YES	NO
3.	Does the archer cant the bow?	YES	NO
4.	Does the archer keep the shoulders aligned over the hips while drawing the bow?	YES	NO
5.	Does the archer keep the shoulders aligned over the hips while aiming?	YES	NO
6.	Does the archer have the shoulders down, in line behind the bow at full draw?	YES	NO
7.	Does the archer keep the shoulders aligned over the hips at release?	YES	NO
8.	Does the archer remain stable and in line with the bow and the target at release?	YES	NO

Continued

### 3. Consistent Form

1.	Does the archer address the target in the same manner each end?	YES	NO
2.	Does the archer place the hand in the bow exactly the same way each time?	YES	NO
3.	Does the archer:  a) place the fingers on the string exactly the same way each time  OR	YES	NO
	b) attach the release aid and position the drawing hand exactly the same?	YES	NO
4.	Does the archer draw the bow from the pre-aim position in line with the bow?	YES	NO
5.	Is the anchor position achieved without excessive head movement to the string?	YES	NO
6.	Is the anchor position achieved without excessive head rotation and/or pressure?	YES	NO
7.	Can the archer replicate the anchor exactly each time?	YES	NO
8.	Does the release occur in line with the nock of the arrow, in line with the bow?	YES	NO
9.	What is the archer's current score <u>range</u> in the chosen archery discipline?		

## 4. Strength

1.	Is there a score average difference between the first and last arrows of each end?	YES	NO
2.	Is there a score average difference between the first and last ends of each round?	YES	NO
3.	Does the archer's bow appear to shake or tremor near the end of the tournament?	YES	NO
4.	Can the archer shoot the same score level in progressive days of competition?	YES	NO

Note: for details on training the archer in this component, see Chapter 4: Physiology

#### Part 3: Technical

## 1. Appropriate Equipment

1.	Does the archer have suitable equipment for the selected archery discipline?	YES	NO
2.	Does the archer have suitable equipment for the current age and physical strength?	YES	NO

## 2. Equipment Selection

1.	Is the bow's mass weight beneficial to the archer's form?	YES	NO
2.	Is the bow's draw weight beneficial to the archer's performance?	YES	NO
3.	Are the arrows suitable for the archer's chosen discipline in terms of speed?	YES	NO
4.	Are the arrows suitable for the archer's chosen discipline in terms of durability?	YES	NO
5.	Are equipment accessories, including stabilizers, assisting archer smoothness?	YES	NO
6.	Do the accessories enhance archer aiming stability?	YES	NO
7.	Is the tiller measurement correct for the archer's technique and equipment?	YES	NO
8.	Does the equipment assist the archer's body alignment and follow-through?	YES	NO

## 3. Tuning

		ı	1	
1.	Has the archer's equipment been checked over in the last 2 months?	YES	NO	
2.	2. Has the arrow flight been assessed in the last month?			
3.	Does tuning with paper or bare-shaft methods require very little time to do?	YES	NO	
4.	Does the archer's strike pattern conform to a horizontal line more or less?	YES	NO	
5.	Does the archer's strike pattern conform to a vertical line more or less?	YES	NO	
6.	Does the archer occasional have a scatter-pattern in the target?	YES	NO	
7.	Does the archer's equipment respond well to variable conditions (Temperature)?	YES	NO	

Note: for details on training the archer in this component, see Chapter 5: Equipment

## Part 4: Specific Training Needs

## 1. The Discipline's Special Training Demands

	<del>-</del>			
1.	Are both you and archer aware of the current rules for shooting and equipment?	YES	NO	
2.	Does the chosen discipline require specialized training or equipment?	YES	NO	
3.	3. Is the chosen discipline only seasonal?			
4.	Will the archer's plan contain a large percentage of discipline-specific training?	YES	NO	
5.	Are there local facilities available to train often in the chosen discipline?	YES	NO	
6.	Does the archer need to travel and spend large sums of money to train adequately?	YES	NO	
7.	Does the archer train in varying environments and locations?	YES	NO	
8.	Does the archer record training experiences and observations in a diary?	YES	NO	
9.	Does the coach keep a record of archer training experiences and performance?	YES	NO	

## 2. Elite Competitive Demands

1.	Will the archer's plan contain a large percentage of discipline-specific events?	YES	NO
2.	Does the archer need to travel and spend large sums of money to compete?	YES	NO
3.	Does the archer compete in varying environments and locations?	YES	NO
4.	Does the archer record competitive experiences / observations in a diary?	YES	NO
5.	Does the coach keep a record of archer competition experiences and performance in a diary or logbook?	YES	NO

Note: for details on training the archer in this component, see Chapter 6: Specialised Training Concerns.

## Athlete/Coach Agreement Archer's Copy

I, the archer will make every effort to:

1.	Take responsibility for setting reasonable short, intermediate and long-term goals with the coach.
2.	Take responsibility for sticking to the plan agreed upon by the coach and the archer.
3.	Show up for practices on time, prepared to train in a committed fashion.
4.	Notify the coach immediately if it is impossible to make practice, and why.
5.	Communicate feelings and concerns regularly to the coach.
6.	Meet with coach and support network on a regular basis to discuss progress/challenges.
7.	View sport as only one aspect of life, not the only reason to live or feel self-worth.
8.	Shoot all tournaments listed in the plan unless absolutely impossible.
9.	Advise the coach immediately of injury or illness.
10.	Allocate sufficient funds for equipment, travel, training and competition annually.
11.	Stay current on developments in the sport and the chosen discipline(s).
12.	Act as a good ambassador for the sport, home club, province and country.
13.	Keep emotional outbursts under control at all times, and discuss problems with the coach.
14.	Enjoy the process of training and competing each day.
15.	Define "success" in terms of commitment and attained goals, not by scores and rankings.
16.	Keep an archer diary or logbook updated regularly regarding training and performance.
17.	Respect all opponents, coaches, officials and volunteers at all times.

l,	agree to keep my part of the working agreement with
my coach	If changes occur in my life, which make it
impossible for me to live up to this co	ommitment, I will tell my coach immediately.
Signed	
Dated:	

## Athlete/Coach Agreement I, the coach will make every effort to: Coach's Copy

1.	Set reasonable short, intermediate and long-term goals only with archer input.			
2.	Stick to the plan agreed upon by the coach and the archer.			
3.	Show up for practices on time, prepared to train in a committed fashion.			
4.	Notify the archer immediately if it is impossible to make practice, and why.			
5.	Encourage the archer to communicate feelings and concerns regularly.			
6.	Meet with the archer and support network on a regular basis to discuss progress/challenges.			
7.	View coaching as only one aspect of life, not the only reason to live or feel self-worth.			
8.	Attend all tournaments you committed to attend in the plan unless absolutely impossible.			
9.	Keep the athlete's personal thoughts and concerns in trust at all times.			
10.	Allocate sufficient funds for equipment, travel, training and competition annually.			
11.	Stay current on developments in the sport and the chosen discipline(s).			
12.	Act as a good ambassador for the sport, home club, province and country.			
13.	Keep emotional outbursts under control at all times, and discuss problems with the archer.			
14.	Enjoy the process of training and competing each day.			
15.	Lead by example.			
16.	Remain open-minded to change.			
17.	Keep a coach diary/logbook updated regularly regarding training and performance.			
18.	Respect all opponents, coaches, officials and volunteers at all times.			
	,			
	I, agree to keep my part of the working agreeme			
	the archer If changes occur in my life, which ma			

·,	
the archer	If changes occur in my life, w
impossible for me to live up to this com	mitment, I will tell the archer immediately.
Signed:	
Dated:	

#### **The Planning Process**



#### - Primary and secondary tournaments within the annual plan

**For our theoretical plan**, the archer is a target archer who has agreed to shoot the following tournaments:

- a) All local Canadian FITA tournaments: May (3rd weekend), August (4th weekend), September (2nd weekend)
- b) Two of the following FITA 70M tournaments: June (1st and 3rd weekends), July (1st and 3rd weekends), August (3rd weekend), September (1st weekend)
- c) 2 FITA Stars in the United States: July (2nd weekend), September (2nd weekend)
- d) Provincial outdoor championships: July (3rd weekend)
- e) National outdoor championships: August (1st weekend)

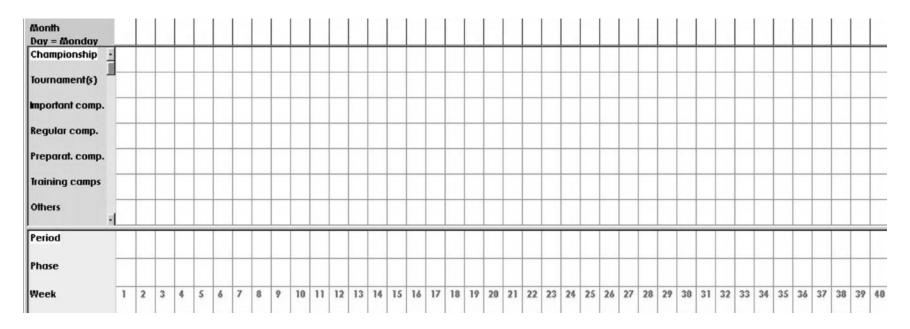
#### Task 1:

Record the dates selected from the lists above onto the "**Tournament**" spread sheet. Identify **no more than 2-3 tournaments** as the major or principal goals of the plan.

**Note: Before** you can fill this in <u>for your own</u> archer, you will have to confirm tournament schedules from all levels of archery. Though some major tournaments are hard to control, most local and provincial events keep to a similar timetable every year.

- 1. List all the competitions in which you would like your athlete to compete throughout the season, and determine their relative importance (regular tournaments, testing tournaments, important tournaments, championship, etc.).
- 2. Make an inventory of the training opportunities available to you and to your athlete (number of practices or training sessions per week, duration of each session, facilities and equipment available).
- 3. Determine when the first formal training contact with your athlete will take place. Enter this date on your planning form; it will represent the beginning of the Preparation Period and the end of the Transition Period of your plan.
- 4. Determine when the first official competition will take place. Enter this date on your planning form. It will represent the beginning of the Competition Period of your plan.
- 5. Determine when the last official competition will take place. Enter this date on your planning form. It will represent the end of the Competition Period and the beginning of the Transition Period of your plan.
- 6. Identify the various events that will be featured in your plan (training camps, regular competitions, important competitions, championships, fundraising activities, social events, etc.), and specify their relative importance. Indicate the date of these events on your planning form.

## Planning Calendar Worksheet



Note: Regular comp. refers to regular competitions. Preparat. comp. refers to preparatory competitions or pre-season competitions.

#### - Archery Skill Level Requirements - Form

Through your analysis, you have found that the archer's ability to shoot arrows well at the longest distance is not as consistent as it is at 30 meters.

You have decided that the reason for this problem lies in the archer's body position when the bow is elevated. The archer tends to lean backwards instead of keeping hips and shoulders over the feet. You have noticed that the string-hand elbow does not stay in line with the bow and the target very well either.

These are serious form corrections that will take time for the archer to learn and incorporate into the subconscious. Therefore, it is *imperative* that sufficient time is allotted for this process.

Some archers pick up skill correction easily; some are slower. Some archers retain the new form correction under elite competitive stress; some revert back to the old form and forget what they have been doing in training.

#### TASK: 2



On the spread sheet, block in time for skill correction.

## Use the letter "F" for Archery Form.

Be sure that there is adequate learning time and testing time at low stress level events so that the archer can try out the new form.

If the goal for the first tournament is "80% of all shots at the longest distance will conform to the new technique", then the tournament can still be a success without fear or extra pressure to perform well in a top-level tournament such as the national championships.

#### - Specific Training Needs

From the assessment and interview, it seems the archer has difficulty shooting well in elimination rounds.

This will be a real challenge at major tournaments such as the national championships since final ranking is decided by this head-to-head competition.

As a coach, you should be planning ahead. If you cannot fit elimination-style tournaments into the schedule, you may have to add simulations instead.

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#### **TASK 3:**

On the spread sheet, block in time for specific training needs.

Use the letter "S" to signify specific training.

#### - Physiological, psychological and equipment initial testing and re-testing

Given the example of the outdoor target shooter, decide when it would be appropriate to test and re-test the archer's level of preparedness.

Remember that physiological testing is necessary very early in the plan and re-testing should be kept away from major tournaments as muscle stiffness may result.

On the spread sheet, mark in weeks when testing will be done. Be sure testing equipment or facilities are available on the times selected

#### TASK 4a



Psychological testing and re-testing should happen frequently.

Use the short-form "M" for psychological testing.

Equipment should be re-tested and checked at regular intervals, particularly before every tournament. The coach can use video-logs to assist in the assessment of the archer and equipment relationship.

#### TASK 4b

For the hypothetical archer, you have found that this particular archer needs to increase draw weight in order to have more consistent strike patterns at the longest distance.

It will take time for the archer to adapt to the new bow weight. The introduction of the heavier limbs, as well as the weight training that will be needed, will mean the equipment changes must take place no later than the end of the indoor season.

On the spread sheet mark in weeks that will concentrate on this specialised training need

Use the short-form "E" for equipment testing and "C" for equipment change. Record on the spread sheet times increase weight-training activity and decide when to make the equipment change

Use short f-form "W" for weight training

**TASK:5** Evaluate the plan

## -Assessing the Hypothetical Plan

When the Hypothetical plan has been completed, it should be assessed for practicality and compatibility with the Archery Canada LTAD.

First check horizontally. Is there sufficient time to get major task accomplished before major events. Is there enough time for testing? Now look vertically down the plan to see if you put too many tasks into the same weeks or months. Finally complete the "Competition Days" and Practice Days "below.

What did you find out? Is the plan compatible with Archery Canada's LTAD?

Use the information on page 98 of the reference manual to fix any problems you found.





#### **Number of Competition Days**

Using the table below, calculate the number of competition days in your program. Count both preparatory and regular competition.

Identify the Number of Weeks in \	Partial Total			
There Are Competitions With:	There Are Competitions With:			
1 day of competition	x 1	=		
2 days of competition	x 2	=		
3 days of competition	x 3	=		
4 days of competition	x 4	=		
5 days of competition	x 5	=		
6 days of competition	x 6	=		
7 days of competition	x 7	=		
A: Number of days of competition	A =			
(add all the numbers in the colum				

Competition Days Table

#### **Number of Practice Days**

Have candidates use the table on page 17 to estimate the number of practice days in their program.

Indicate the number of weeks in each period (Preparation, Competition, Transition), and multiply this number by the average number of practice days in each period. Avoid spending too much time on this exercise; the key word here is "Average".

Calculate the number of practice days in your program.

Period	Length	Average Number	Partial Total
	(Weeks)	of Practice Days	
		per Week	
Preparation	х		II
Competition	х		II
Transition	х		II
B: Approximate number of	B =		
all the numbers in the colur			

Key Element in Your Program

,	<u> </u>			
#		Column A	Column B	Column C
		If your number	If your number is	If your number is
		is less than	between	more than
1	Length of your program in weeks	15	20 and 32	35
2	Length of the Preparation Period in weeks	6	7 and 15	16

#		Column A	Column B	Column C
		If your number	If your number is	If your number is
		is less than	between	more than
3	Length of the Competition Period in weeks	6	7 and 20	20
4	Length of the Transition Period in weeks	2	3 and 4	6
5	Number of competition days	5	6 and 20	20
6	Average length of a practice in the Preparation Period	60 minutes	75 and 120 minutes	150 minutes (2½ hours)
7	Average number of training days per week in the Preparation Period	2	2 and 4	5
8	Average length of a practice in the Competition Period	60 minutes	75 and 120 minutes	150 minutes (2½ hours)
9	Average number of practice days per week in the Competition Period,	2	2 and 4	5
10	Percentage of training program devoted to competition*	10%	20–35%	40%
11	Percentage of training program devoted to practices*	60%	65–80%	85%

<sup>\*</sup>To calculate these percentages:

Total number of program days = Total number of competition days (A) plus Total number of practice days (B).

Percentage of training program devoted to competition = Number of competition days divided by Total number of program days, expressed as a percentage.

Percentage of training program devoted to practices = Number of practice days divided by Total number of program days, expressed as a percentage

Key Elements Table

#### iv) Exercise #1: The archer, the discipline of choice, and the preliminary plan

As you work through each topic in Chapters 3-6, fill in the appropriate information on the plan. Make sure you have completed all chapter exercises and tasks before moving on to the next topic.

#### v) Exercise #2: A meso-cycle



Choose one part of your plan overview. This should correspond to a cycle of pre-training, training, competition and rest. Some standard examples are the indoor and outdoor seasons. But for the shortened annual training plan process, a meso-cycle could be one month. State your reasons for choosing this time period below.

ime period chosen:	
This time period constitutes a logical break in the plan because:	
Γhe goals for this cycle are:	
The coach will submit a month-long meso-cycle to the workshop Facilitator for an	

## individual archer.

Fill in the month according to the level of activity for each training component: For instance, if in week one, a key tournament will be shot to test physical endurance and new arrows, then the coach should put "I" and "T" in the box along with "C" for competition.

V = very intensive training I = important H = maintenance T = testing/evaluation C = competition

topic	month - week 1	month - week 2	month - week 3	month - week 4
Physical training				
Mental training				
equipment				
special training				

Does your work plan address the goals for this meso-cycle?

If yes, continue. If not, re-work it.

## vi) Exercise #3: A micro-cycle

Take **one** week from the chart in Exercise #2 and break it down into daily training intensities.

Make sure you keep heavy physical training workouts after tournaments, not before.

Abilities to	Train	Worksh	<b>eet</b> (See not	es next page)
Abilities to	Train	Worksh	<b>eet</b> (See not	es next page)

Week #	of the plan for archer

Athletic Abilities to Train	Training Objectives	Types of Exercises/ Practice Conditions	Number of Training Sessions/ Time Required
1.		( ) General exercises     ( ) Specific exercises     ( ) Competition exercises     Practice Conditions:	sessions/week X minutes/session = h : min
2.		( ) General exercises     ( ) Specific exercises     ( ) Competition exercises     Practice Conditions:	sessions/week X minutes/session = h : min
3.		( ) General exercises     ( ) Specific exercises     ( ) Competition exercises     Practice Conditions:	sessions/week X minutes/session = h : min
4.		( ) General exercises     ( ) Specific exercises     ( ) Competition exercises     Practice Conditions:	sessions/week X minutes/session = h : min
5.		( ) General exercises     ( ) Specific exercises     ( ) Competition exercises     Practice Conditions:	sessions/week X minutes/session = h : min
		Total training time required for the week	h : min

- For each combination of athletic ability objective, identify appropriate types of exercises that could be used during practices (for all athletic abilities) and practice conditions (for sport-specific technical and tactical elements only).
- For each of the athletic abilities you have identified, and bearing in mind the desired objective, determine the number of training sessions needed per week and the amount of time that must be planned for training during each practice. **Note**: You may choose to spend more time than the "minimum recommended time for training a particular athletic ability. However, you should not devote less time than recommended if you really want to achieve the desired training effect.
- Add up all the training time required. This represents the amount of time you *should* devote to training in the week you have chosen.
- To determine if the total time obtained is realistic for your training situation, add up the number of practice sessions that you can have during the week and the length of the *main part* of each session. This figure represents the *actual training time* available to train the various athletic abilities in the week you have chosen.
- Determine the gap between the time required in the ideal situation and the actual time available for training in the week you have chosen.
- If the gap in time is significant, consider the following questions when you come to decide which athletic abilities to prioritise:
  - Can the archer train certain athletic abilities outside your practice sessions, or before or after the sessions?
  - Is it possible to combine the training of certain athletic abilities in your sessions? Which athletic abilities are the most important according to the sample program of your family of sports?
- Bearing in mind the training time available and the reflection you did, lay out the training priorities and content in the different practice sessions of the week. Use the Planning a Practice Session Worksheet and, for each session, specify the following information:

The athletic abilities to be worked on

The training objectives

The practice conditions and types of activities that are appropriate

The training methods and the time devoted to training each athletic ability

Once you have this information, you should be able to put together the main part of each of your practice sessions using the process presented in the module Planning a Practice.

Coaching priorities during the week					
Week from:	to:	Phase:			
Training focus for the	e week:				
Practice #1 Date:		Training Description			
Physical ability					
Motor ability					
Skill ability					
Activities					
Time					
Practice conditions					
Objective					
D (1 110 D )		T			
Practice #2 Date:		Training Description			
Physical ability					
Motor ability					
Skill ability					
Activities					
Time					
Practice conditions					
Objective					
Dreatice #2 Date:		Training Description			
Practice #3 Date: Physical ability		Training Description			
Motor ability					
Skill ability					
•					
Activities					
Time					
Practice conditions					
Objective					
Total minutes:	Total minutes:	Total minutes:			

Practice session 2

Practice session 1

Practice session 3

Use the following abbreviations to list what needs to be done each day.

Example: On Monday you wish the athlete to concentrate on physical training. On that day you list:

Morning: V = 100 arrows;

Morning: M = 12 mental arrows; Afternoon: P =fitness workout X hrs.

E = N/A; S = N/A

P = physical

V = volume of arrows to be shot

M = mental

E = equipment

S = specialised training for the chosen archery discipline

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
AM							
PM							
' '							

I = important H = maintenance V = very training intensive T = testing/evaluation

Once you are satisfied that the workloads and intensities fit the goals of the plan and are workable for the archer, transpose your information onto the calendar example that follows.

One copy should stay with you, one goes to the archer, and if applicable one copy goes to the members of the archers support network, particularly parents.

		SUNDAY
		MONDAY
		TUESDAY
		WEDNESDAY
		THURSDAY
		FRIDAY
		SATURDAY

#### AFTER YOU HAVE ADDED THE NAME OF THE MONTH AND THE ARCHER:

1. fill in tournament days **Note 1:** Make sure the athlete has special

2. fill in physical work events and commitments added in before

3. fill in mental training you make copies for both of you.

4. decide shooting volumes
5. add testing
Note 2: Slate in a day in the month for evaluation of the plan and modify any

training goals etc. as necessary.

Make a legend:

P = physical M = psychological V = volume of arrows to shoot E = equipment concerns

T = test/re-test

 Athlete(s): \_\_\_\_\_\_ Date: \_\_\_\_\_

 Location: \_\_\_\_\_ Start time: \_\_\_\_\_ Total Duration:

## vii) Exercise #4: Plan the Practice



## Sample Practice Planning Sheet

Objective(s):	
Equipment:	
Activities  Goals: Athletic abilities, type of effort, length, intensity, movements, etc.	Key Points/Messages Guidelines, safety, etc.
Introduction (duration = min)	
General warm-up (duration = min)	
Specific warm-up (duration = min)	
Main part (duration = min)	
Cool-down (duration = min)	
Conclusion (duration = min)	

## Sample Activity Planning Sheet



Practice session date:A	thlete:
Name of the activity:	Warm-up ( ) Main part ( ) Cool Down ( )
Duration:Objective(s):	
Equipment needed:	
Description: (Athletic abilities to be trained, puintensity, duration, etc.)	prpose, movements, types of effort,
Directions/guidelines to give athlete:	
Success criteria:	
Risk factors/safety guidelines to give to athlete	e: -
Notes/comments:	

Use the detailed weekly training chart from Exercise #3 to design a training session <u>for just one day</u>. For example: Monday was a high-intensity physical training day.

Shooting component: Break the volume of arrows to be shot into the phases of warm-up, learning, special training (if applicable), equipment and form (if applicable) and warm-down.

These elements are in addition to the general warm-up and warm-down.

Element of form to train	today's goal	# of arrows	distance	% shot properly
1. Example: shoulder	Keep shoulders	Warm-up	10 M	100
alignment with the bow	and string hand	20 arrows		
	elbow in line with	(with eyes		
	the bow when the bow is elevated	closed)		
	above	36 arrows	70 M	80
	perpendicular	with eyes	70 101	00
	Perpendicular	open		
2.				
3.				
3.				
4.				

Time: ? # hours (morning)

Fitness component:

rithess component.	_	•		
Exercise name	sets	reps	resistance	speed
Example: abdominal strengthening exercise	3	10	None	Slow
2.				
3.				
4.				
5.				
Etc.				

Time: ?# hours (afternoon)

Go over each aspect of the plan and the daily workout with the archer to ensure it has been understood and there is agreement that it can and will be done.



viii)	Exercise #5:	Emergency Action Plan for your club	or training facility
ARCH	IER / TRAINING GROU	JP:	DATE:
	TION: Number, street numbe		
CHAR	GE Person's Name:		
First A	aid Qualifications:		
injured 2.Desig 4.Chec ble 5.Waits	person from the element gnates who is in charge o cks that airway is clear, br eeding)	of the other participants reathing is present, a pulse is present, and the injured person is	nd there is no major
CALL	Person's Name:		
	for emergency help ides all necessary informations	ation to dispatch (e.g. facility location, na	ture of injury, what, if

3. Clears any traffic from the entrance/access road before ambulance arrives

4. Waits by the driveway entrance to the facility to direct the ambulance when it arrives 5. Calls the emergency contact person listed on the injured person's medical profile

any, first aid has been done)

NUMBER CARD			
Locations of Phones 1 2	{Pay phone (need 50¢)}		
Phone Numbers  Emergency 911 or  Ambulance, Police, Fire 911 or  Campus Security (if applicable)  Details of Location (to be read over pho			
Map of the location			

ix) Exercise #6: Planning for the Future – Quadrennial Plan



Archer name:	Future Planning	_ Date:	
Goals for next year:			
Tasks for next year:			
Goals to achieve in two years:			
Tasks to complete in two years:			

When the time comes, refer to these notes to build the next annual plan. This is essential to a logical, dynamic training process.

## x) Exercise #7: Planning a Provincial Team Training Camp



The following is a general guideline should you be asked to run a training camp. Add and edit this guideline to suit the specific camp you are asked to plan. Some of the tasks may be allocated to assistant coaches if there are any. However, this guideline has been developed with a single camp coordinator/coach in mind.

Lo	gi	Si	ti	cs	
	_			_	

1.	Purpose of the camp
2.	Preliminary dates for the camp
3.	To be held at:
4.	Who is eligible to attend?
5.	What is the budget for this camp?
6.	What is the age range of the participants?
7.	Who will coordinate the clinic?
8.	Who will coach at the clinic?

List the names and information for each participant below.

Name	Hometown	Mode of Transport	Arrival Date	Departure	Costs

9.	Is over-night accommodation required?	YES	NO	
Who wi	ill supply it?			_

#### **Training Camp Organisation**

Traditionally, archery training-camps have taken place on weekends. A letter of welcome, along with information pertinent to the archers attending the clinic, should be sent out well in advance of the camp dates. Information may include:

- performance/behaviour expectations
- financial assistance if available and out-of-pocket expenses
- location of training site
- transportation arrangements
- accommodations
- equipment, special tools/aids, training charts
- training camp schedule

#### The Schedule

There is generally greater archer satisfaction when training camps are expected to run to a tight schedule with lots of activities. Here are some topics you can expand upon.

- 1. Team building exercises 1 hour each day 2. Fitness assessment 2 hours one day 3. Relaxation training techniques 30 minutes each day 4. Shooting 3 hours each day 5. Video-taping 2 hours on day 1 6. Group discussions 30 minutes each day 7. Form assessment all day each day 8. Interaction with personal coaches all day each day
- 9. Meal times allow sufficient time at supper for socializing

You are limited only by your own imagination. List your sample schedule below.

	TOPIC/ACTIVITY	TIME ALLOTTED
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

#### xi) Case Study



#### 1. Did the plan work?

You have been given the tools to design and implement an annual plan. Along the way modifications may have been required. Some goals may not have been met; some goals may have been surpassed.

#### TASK:

As a formal end to your written work for certification, submit a <u>detailed</u> report of your season-long experience to your workshop Facilitator. Submit your coach log/diary and any video-log recordings you used to assess progress.

Use the following subject areas to ensure your report is complete:

1. Goals Were they SMART? Were they met/missed? Why?	
Athlete Assessment Were you accurate in your initial assessment? Did your re-testing provide any	
surprises?	

3. Coach/ath Did you both live	alete relationship up to each part of the working agreement? Why / why not?
List the highs and Ph Ps Eq	ing components I lows for each of: ysical training ychological training uipment/technical concerns ecialised training for the chosen archery discipline(s)

5. Final Assessment Was the plan useful to both you and the archer(s)? Were the event goals met for the identified tournaments? Was it successful? Why? Why not?	
What would you have changed if you could?	
6. Comments	

### **COMPETITION – DEVELOPMENT**



# COACH WORKBOOK CHAPTER 3 PSYCHOLOGICAL PREPARATION





### CHAPTER 3 – (Reference Manual pg. 144)

TASK 1: Preferred Learning Style Checklist Instructions to the archer



There are ten incomplete sentences and three choices for completing each sentence. Score the three choices for each sentence as they apply to you. Score (3) points for the choice that applies to you, score (2) for your second choice, and (1) point to the answer that is least typical of you.

For coaches, use the questionnaire starting on the next page.

4 140 11	
1. When I learn	a. ( ) want someone to explain it to me.
something new, I	b. ( ) want to read about it in a book or magazine.
usually	c. ( ) want to try it out, take notes, or make a model of it.
2. At a party, most of the	a. ( ) listen and talk to two or three people at once.
time I like to	b. ( ) see how everyone looks and watch the people.
	c. ( ) dance, play games, or take part in some activities.
3. If I were helping with	a. ( ) write the music, sing the songs, or play the accompaniment.
a musical show, I would	b. ( ) design the costumes, paint the scenery, or work the lighting effects.
most likely	c. ( ) make the costumes, build the sets, or take an acting role.
4. When I am angry, my	a. ( ) tell people off, laugh, joke, or talk it over with someone.
first reaction is to	b. ( ) blame myself or someone else, daydream about taking revenge, or
	keep it inside.
	c. ( ) make a fist or tense my muscles, take it out on something else, or hit
	or throw things.
5. A happy event I would	a. ( ) hearing thunderous applause for my speech or music.
like to have is	b. ( ) photographing the prized picture of a sensational newspaper story.
	c. ( ) achieving the fame of being first in a physical activity such as
	dancing, acting, surfing, or a sports event.
6. I prefer a teacher to	a. ( ) use the lecture method with informative explanations and discussion.
or protor a todollor tolli	b. ( ) write on a chalkboard, use visual aids, and assign readings.
	c. ( ) require posters, models, or in-service practice and activities in class.
7. I know I talk with	a. ( ) different tones of voice.
TTT KITOW T LAIN WILLIAM	b. ( ) my eyes and facial expressions.
	c. ( ) my hands and gestures.
8. If I had to remember	a. ( ) tell it to someone else or hear a tape recording or song about it.
an event so that I could	b. ( ) see pictures of it or read a description.
record it later, I would	c. ( ) replay it in some practice rehearsal using movements such as
choose to	play-acting, or drills.
9. When cooking	a. ( ) have someone tell me the directions – a friend or television show.
something new, I like	b. ( ) read the recipe and judge how it looks.
to	c. ( ) use many pots and dishes, stir often, and taste-test.
10. In my free time, I like	a. ( ) listen to the radio, talk on the telephone, or attend a musical event.
to	b. ( ) go to the movies, watch television, or read a magazine or book.
	c. ( ) get some exercise, go for a walk, play games, or make things.
	o. ( ) got some exercise, go for a wait, play games, or make tilings.

Add up all your scores for your (a) choices	Auditory
Add up all your scores for your (b) choices	Visual
Add up all your scores for your (c) choices	Kinaesthetic

Look over your scores for each style. The range should be from 10 to 30, and together they will total 60. What did you learn?

Instructions to the coach: Answer the 2 questions below. Define Learning... I know my archer is learning when... What concrete steps could you take to give your athlete the opportunity to learn in his or her preferred way?

What sources of information, situations, and experiences are most effective in promoting your

### The Coach: Understanding Your Own Learning Style

Individual Reflection: How I Learn Best

own learning? In other words, how do you learn best, and what helps you most to leathings?	arn new
	•
	•
	•
	•
	•

Discover Your Learning Style

Complete the following questionnaire to find out your preferred learning style.

### My Preferred Learning Style — Questionnaire

The following questionnaire is designed to help you discover your preferred learning style. To a large extent, your preferred learning style is linked to the sensory channel (hearing, seeing, feeling) you use the most to learn. In the 21 situations described in the following pages, circle the option (A, B, or C) that best describes your personal experience.

Read the analysis and interpretation of your answers in the Coach Reference manual.

### What happens when:

- 1. You are preparing a technical learning sequence for the next month:
  - A. You make lots of gestures with your hands while you think.
  - B. You draw up a diagram to help you clarify a few key ideas.
  - C. You prepare a detailed plan of the content of the coaching sessions.
- 2. You are getting ready to write up work for the workshop you are taking:
  - A. You are taken aback by the pile of paper.
  - B. You feel tired even before you begin.
  - C. You regret waiting until now to get to the work.
- 3. You are off to practice:
  - A. You are delighted to see that the sky is clear.
  - B. You hear birds singing and it is really delightful.
  - C. You yawn and wish you could stay in bed.
- 4. You go into the coffee shop and the first thing you notice is:
  - A. The sounds of conversations.
  - B. Your colleague's beautiful smile.
  - C. The smell of coffee.
- 5. You go to get some colleagues who are supposed to be participating in a meeting:
  - A. You see that they're chatting and don't hear the meeting is about to start.
  - B. You hurry them along so that they get into the room as quickly as possible.
  - C. You see that they are not ready to go into the meeting.
- 6. You walk into a room to begin a presentation:
  - A. You hope the heating will be switched on soon; it is cold in the room.
  - B. You notice the walls are painted an ugly colour.
  - C. You are upset by the athletes who continue chatting.
- 7. You walk into a room to start a presentation:
  - A. The whispering is intriguing.
  - B. You notice that two difficult archers are sitting next to each other.
  - C. You are not sure where to be: sitting down or walking up and down.
- 8. An archer comes to see you to ask you a question:
  - A. The fact that he/she is looking anxious is not a surprise.
  - B. You wonder what's behind his/her approach.
  - C. You are amused that he/she is coming to see you.
- 9. You are writing an important article for your archer:
  - A. Your hand will go to sleep if you go on any longer.
  - B. You try to figure if your handwriting is legible.
  - C. You really like these rolling ball pens.

- 10. Your archer does not understand an explanation:
  - A. You immediately think about how to explain it another way.
  - B. You are surprised by the archer's puzzled face.
  - C. You are not pleased; you do not like this kind of situation.
- 11. Two archers challenge their personal coach, and you notice:
  - A. That it makes everyone uncomfortable.
  - B. That they speak without asking permission.
  - C. That they look very angry.
- 12. Some archers ask to discuss a problem that everyone in the organisation is talking about:
  - A. You think their request is out of line.
  - B. You are touched by their request.
  - C. You note that the other people present agree with the request.
- 13. The archer is surprised when you announce the next special activity:
  - A. Even though it has been in the schedule for a long time.
  - B. Even though the archer knows what to do anyway.
  - C. Even though you have repeated it several times.
- 14. You're off to a competition:
  - A. You notice your new shoes are very comfortable.
  - B. You are delighted to see the smiling faces of the hosting committee.
  - C. You check the numbers several times to be sure everyone is there.
- 15. You are summoned to your boss' office:
  - A. You have decided to stand firm on this issue.
  - B. You wonder whether this is a good omen.
  - C. You re-read the secretary's note to see if you can find an explanation.
- 16. A meeting is just about to start:
  - A. You notice person X isn't there.
  - B. You work out how long the meeting will last by figuring on ten minutes per agenda item.
  - C. You notice you have chosen a more comfortable seat than last time.
- 17. You approach the parents of an archer with whom you have arranged a meeting:
  - A. You notice they have a slight regional accent.
  - B. You extend your hand to them spontaneously.
  - C. Just a moment! You thought they were older than this.
- 18. A supervisor walks into your work area:
  - A. You find he/she has a pleasant voice.
  - B. You find him/her pleasant.
  - C. You have a dry throat.

- 19. In the cafeteria, you're swallowing the last few mouthfuls of your meal:
  - A. You have enjoyed the meal.
  - B. The conversation around you is not loud: so much the better!
  - C. You find the colour of the dishes brighter than usual.
- 20. Some athletes come and go during your presentation:
  - A. You look at your notes several times to find where you were because they distracted you.
  - B. You are put off by the coming and going.
  - C. You are inwardly furious.
- 21. Once the day is over, you go home and you:
  - A. Congratulate yourself for the successful moments of the day.
  - B. Think back over the good moments of the day.
  - C. Enjoy sitting down after a day on your feet.

### Interpretation Table

The table below shows what kind of learning each answer in the questionnaire represents. For example, choosing the answer B for the first question indicates a visual learning style.

For each situation in the questionnaire, circle the letter that corresponds to your answer for the situation. Now find the total for each of the three columns in the table. To do this, assign A answers the value 1, B answers the value 2, and C answers the value 3, and add the values for each column. The column with the highest total represents your primary learning style.

Situation	Visual	Auditory	Kinesthetic
1	В	С	Α
2	Α	С	В
3	Α	В	С
4	В	Α	С
5	С	Α	В
6	В	С	Α
7	В	Α	С
8	Α	В	С
9	В	С	Α
10	В	Α	С
11	С	В	Α
12	С	Α	В
13	Α	С	В
14	В	С	Α
15	С	В	Α
16	Α	В	С
17	С	Α	В
18	В	Α	С
19	С	В	Α
20	Α	С	В
21	В	Α	С
Total			

Reflect on what you have just learned by completing the following:

# How Different Learning Styles Could Affect My Coaching How could the existence of different learning styles (visual, auditory, and kinesthetic) affect how you coach?



### **Self-assessment**

This self-assessment will allow you to reflect on your current coaching practices. The items that are listed in the self-assessment are the evidences that an Evaluator will be looking for during assignments and observations. They will help determine if you have the required abilities/competencies. The self-assessment form will help you identify areas of strength and areas for improvement.

Rate your ability to use effective teaching methods to optimize athletes' learning. For each statement presented below, circle the number that best represents whether you achieve the statement (Never, Sometimes, Often, Always).

COACH NAME:	DATE:
-------------	-------

I make my teaching as effective as possible by	Never	Some- times	Often	Always
Having a practice plan to follow	1	2	3	4
Ensuring that my practices achieve the goals identified in my practice plan	1	2	3	4
Having an introduction and a conclusion in each practice	1	2	3	4
Providing suitable warm-up and cool-down activities	1	2	3	4
Making sure that the main segment of a practice includes activities that help athletes learn	1	2	3	4
Ensuring that equipment is available and ready to use	1	2	3	4
Using space and equipment effectively to enhance activity	1	2	3	4
Providing breaks for recovery and hydration	1	2	3	4
Greeting my athletes as they arrive at practice	1	2	3	4
Choosing activities that contribute to the development of skills, tactics, or athletic abilities	1	2	3	4
Making the best use of practice time is maximized and making sure that athletes are active most of the time	1	2	3	4
Sequencing practice activities so they enhance learning or specific training effects	1	2	3	4
Modifying practice activities as required to deal with context-specific circumstances or logistics (e.g., weather, timing, resources, etc.)	1	2	3	4
Adapting practice activities as required to challenge athletes appropriately	1	2	3	4
Adjusting practices as required after observing athletes' performance	1	2	3	4

Continued

I encourage athletes' learning by	Never	Some- times	Often	Always
Creating opportunities to interact with all athletes	1	2	3	4
Ensuring athletes are positioned appropriately to see and hear demonstrations	1	2	3	4
Having 1 to 3 key learning points in my explanations	1	2	3	4
Explaining key factors or teaching points and making sure athletes understand those factors or points	1	2	3	4
Choosing key teaching points that are appropriate for the athlete's age and stage of athletic development	1	2	3	4
Constructively reinforcing athletes' efforts and correcting performance	1	2	3	4
Providing feedback and instructions that clearly identifiy what and how to improve	1	2	3	4
Providing feedback that is positive, specific, and directed toward both the group and individuals	1	2	3	4
Establishing appropriate expectations for athlete behavior and reinforcing these expectations when appropriate	1	2	3	4
Modelling and promoting a positive image of the sport to athletes and other stakeholders	1	2	3	4
Speaking respectfully to athletes	1	2	3	4
Maintaining a positive outlook and acknowledging athletes' needs and thoughts	1	2	3	4
Explaining things clearly and concisely and providing opportunities for athletes to ask questions	1	2	3	4
Modelling desired performance myself or having other athletes do so	1	2	3	4
Knowing when to promote critical thinking by withholding feedback from the athlete	1	2	3	4
Asking questions to facilitate awareness and promote critical thinking	1	2	3	4
Getting athletes to focus on external cues or on the expected effects of a movement rather than focus on internal cues or internal aspects of the movement	1	2	3	4
Integrating decision-making into each practice and teaching athletes basic decision-making	1	2	3	4
Integrating mental-preparation strategies into practices	1	2	3	4
Using a variety of interventions to reach as many learning styles as possible (auditory, visual, kinesthetic)	1	2	3	4
Emphasizing independent thinking and problem-solving	1	2	3	4
Encouraging calculated risks in accordance with the NCCP Code of Ethics	1	2	3	4

### **OBSERVATION OF THE COACH'S FEEDBACK**

Coach: \_\_\_\_\_ Number of athletes: \_\_\_\_\_ Length of time coach under observation:

Type of Feedback	Definitions	Exa	amples
Evaluative	The coach assesses the quality of the performance, so the coach makes some kind of assessment or judgment	That's fine! Good job!	No, not like that! Not good enough!
Prescriptive	The coach tells the athlete how to execute the skill next time	Throw it higher! (general) Kick farther!	Get your arm higher! (specific)
Descriptive	The coach describes to the athlete what he/she has just done	The build-up was too slow (general)	Your legs were really extended (specific)

Type of Feedback	Occurrence (Checkmark)	Total	#/Minute
Positive Evaluative			
Negative Evaluative			
General Prescriptive			
Specific Prescriptive			
General Descriptive			
Specific Descriptive			



TASK 2: Maslow's hierarchy of needs self-assessment & athlete assessment Take the time to reflect on your own progress towards self-actualisation. Use the Maslow pyramid to assess your own progress toward meta-goals. Then consider the archer you are working with. Where is the archer on the pyramid?

Write down the **reasons** for each decision below. Cite an example of behaviour or reaction to a situation that led you to this assessment.

I am at	level of the pyramid because:	
Example of behaviour or reaction t	to a situation that led you to this assessment:	
The athlete (name) of the pyramid because:	is at	level
Example of behaviour or reaction t	to a situation that led you to this assessment:	
·	·	
Dated:		



### TASK 3: Application of the Theory – Positive Behavioural Patterning

Highly motivated athletes have the following behaviours:

- 1. They set realistic objectives.
- 2. They have a strong desire to succeed and detest failure.
- 3. They rarely attribute failure to other people or external factors.
- 4. They are not easily discouraged by setbacks or poor performances.
- 5. They are high-spirited and determined.
- 6. They will commit to rigorous training regimes.
- 7. They train regularly and often, seriously.
- 8. They arrive to train on time and ready to participate until the last possible moment.
- 9. They keep up-to-date on sport-related developments that may be used to their favour.
- 10. They are organised, keep diaries and records of training, competition, and analyse both.
- 11. They appear unaffected by elite competitive stress.

### **TASK: Teaching Positive Attitude**

From the list of 11 positive behavioural traits above, pick 4, which you can teach your archer(s) during the annual training plan in order to reinforce intrinsic (internal) motivation. List one way you, as the coach, can encourage/implement this positive behaviour pattern for each of the 4 points you chose.

Behavioural Trait #1:	
I will implement this in the annual plan by:	
	-
Behavioural Trait #2:	
I will implement this in the annual plan by:	
	-

Behavioural Trait #3:
I will implement this in the annual plan by:
Behavioural Trait #4:
I will implement this in the annual plan by:
TASK: Teaching Positive Attitude – Coach's words are important Now choose 4 different psychologically-based behaviours from the list that must be reinforced by the coach during training sessions and competitions. Give examples of the statements you would use to encourage the archer to think in these ways, e.g.: "They rarely attribute failure to other people or external factors."
Archery Example of coach statement to the archer: "Wind, what wind? Use the wind to your advantage. Feel strong and more powerful <i>because</i> it's there."
Behavioural Trait #1:
Example statement to the archer:

Behavioural Trait #2:
Example statement to the archer:
Behavioural Trait #3:
Example statement to the archer:
Behavioural Trait #4: Example statement to the archer:

**During the workshop**, review your choices and statements with the Facilitator. Discuss how the coach can use non-verbal communication (body language) as well.



### TASK 4: Application of the Theory – coaching and stress

The coach's personality and reaction to stress is also very important. Upon reflection, answer the following questions concerning your reaction to stress when you coach.

I can control my voice when I am angry?	YES	МО
2. I can control my voice when I am disappointed?	YES	NO
3. I can control my voice when I am excited or nervous?	YES	NO
4. I make sure my body language is "neutral" as much as possible.	YES	NO
5. My archers never know if I am upset.	YES	NO
6. There is sincerity in my voice and face when I give compliments.	YES	NO
7. I do not pace back and forth when the competition is tense.	YES	NO
8. I know how much stress I can take while coaching a competition.	YES	NO
9. My facial expression lets everyone know exactly what I'm thinking.	YES	NO
Date:		

No one is perfect. Coaches are human just like anyone else. Under elite competitive stress, you must set an example for your athlete(s). Make sure *your* house is in order, not just the archer's.

During the workshop, the Facilitator will discuss scenarios that could trigger an appropriate coaching response and an inappropriate coaching response.

### TASK 5: THE STATE I'M IN

Name:	Date:	
Athlete's version		
Answer these questions about how you	ı feel right now.	

I can feel my heart beat speeding up fast than usual.	YES	NO
2. I realize that I keep holding my breath.	YES	NO
3. I feel like I'm going to throw up.	YES	NO
4. My muscles in my back and neck are tight today.	YES	NO
5. It seems like I can't sit still very long today.	YES	NO
6. I feel like I'm in control of my shooting today.	YES	NO
7. I'm really looking forward to this training session/competition.	YES	NO
8. I'm not sure I can shoot good arrows today.	YES	NO
9. I'd rather be doing something else today than shooting arrows.	YES	NO
10. My hand is extra sweaty in the bow grip.	YES	NO
11. Other things than archery are bothering me today.	YES	NO
12. It's easy to concentrate on my shooting today.	YES	NO
13. Everyone around me today is friendly and helpful.	YES	NO
14. I don't feel very organized today.	YES	NO
15. I don't have enough time to get ready for the next tournament.		NO
16. My form feels really good today.	YES	NO
17. My heart rate seems normal today.	YES	NO
18. I feel ready and confident today.	YES	NO

### Coach's version (can be given to support group member e.g. Family members)

What do you see right now?	THE WAY I SEE IT	
what do you see right now:	Name:	
	Date:	

### The archer is:

Talking faster than usual.	YES	NO
Appears to be breathing irregularly.		NO
3. Pale.		NO
4. Looks tight through the back and neck area.	YES	NO
5. Moves around more than usual/faster than usual.	YES	NO
6. Appears easily distracted.	YES	NO
7. Looks relaxed at this training session/competition.	YES	NO
8. In my opinion has <u>in</u> consistent form.	YES	NO
9. Did not warm up in the regular way.	YES	NO
10. Appears to be sweating more than usual.		NO
11. Doesn't seem interested in picking up the bow and shooting.	YES	NO
12. Doesn't seem to be able to answer my questions about shooting.	YES	NO
13. Seems to interact with others well.	YES	NO
14. Seems forgetful.	YES	NO
15. Seems worried about little things.		NO
16. Has a nervous fidgety habit with hands/hair, etc.	YES	NO
17. Is aggressive towards people, especially fellow competitors.	YES	NO
18. Appears the same as always to me.	YES	NO



### TASK 6: Application of the Theory - Negative Stressors and Coaching

Think back to the last major event you coached. Below, briefly describe some elements of competition, which distracted you as the coach? Be as honest and aware of your personal tendencies as possible. Then describe your reaction to these distractions.

<del></del>	
Your reaction:	
i dai i dadiloni.	

Your reaction is known as a coping response. Some coping responses are appropriate because they fix the situation and produce positive results. Inappropriate coping responses are actions that produce no reduction in stress, no positive result. You may not be aware how inappropriate your responses are.

For most people, there is an internal belief that a chosen reaction is the way to deal with the situation and fixes the immediate problem. Or, some people develop a ritualistic belief that certain reactions worked before and they will work again. For more information on Coping and strategies, read ARCHERY CANADA's Coach reference manual for the context "Coaching Development".



### TASK 7: Coach's Self-assessment

This self-assessment allows the coach to reflect on current coaching practices. The items that are listed in the self-assessment are the evidences that an Evaluator will be looking for during assignments and observations to determine if the coach has the required abilities/competencies. The self-assessment form helps the coach identify areas of strength and areas for improvement. Rate your ability to support your athletes' use of mental skills in competition.

For each statement presented below, **circle the number that best represents whether you achieve the statement** (Never, Sometimes, Often, Always)

I	Never	Some- times	Often	Always
Develop focus plans with my athletes	1	2	3	4
Involve athletes in developing focus plans	1	2	3	4
Incorporate the training of focus into my practices	1	2	3	4
Integrate visualization into my athletes' training	1	2	3	4
Integrate dealing with distractions into my athletes' training	1	2	3	4
Develop outcome, performance, and process goals with my athletes	1	2	3	4
Incorporate the training of focus into the phases and periods of athletes' training plans	1	2	3	4
Debrief performance with my athletes	1	2	3	4



# TASK 8: Application of the Theory - Face the Stressors Head-on - Confidence Training

In the space below, list 3 stress-inducing situations or factors that have affected your archer either positively or negatively. Give the tournament level and conditions as well as the archer's reaction to the stress. Speculate as to the reason for this reaction.

Keep this information handy for the next section.

	_
Situation #1 (tournament level & conditions):	
Possible reason(s) for this reaction:	
Situation #2 (tournament level & conditions):	
Possible reason(s) for this reaction:	
Situation #3 (tournament level & conditions):	
Possible reason(s) for this reaction:	

Now that the structure has been established, the coach needs to look at method. Utilise the inventories for perceived stress found in the previous personality section. Discuss the findings with the archer.

If the archer is not aware of the physiological responses to stress, the coach should enhance the archer's biofeedback abilities. This can be done with biofeedback devices that have an audible beep when heart rate passes a prescribed limit, or with a simple heart rate monitor and watch read-out used in fitness assessment.

Videoing the archer is a great way to provide objective feedback to the archer and the coach. The archer can see the tension, body language and inconsistent form quite easily. Inappropriate Coping Strategies the archer has used for years in a superstitious fashion will be the hardest to break, and video will confirm the coach's observations. This technique should be used in conjunction with biofeedback training in order to internalise the process. When the archer is aware of the body's reaction to training and competitive stress, it is easier for the coach to offer remedies.

Next, the archer needs to identify the sources of the stress. Initially, it may be necessary to lead the archer by asking specific questions. When the archer becomes aware of these sources, the coach will need only to listen and write down the information. Have the archer fill out the SMART Goals Questionnaire, then add the following set of questions.

Name:			Date:		
Quest	Questions for the Archer Circle as many answers as apply:				
اممس	THIS IS HOW I FEEL				
I compete in archery:  a) because I love to shoot a bow  b) because I want to be recognized by others for being gifted  c) to please myself  d) to please my family  e) to please my coach  f) to get out of the house  g) to become world champion					
l really a) c) e) g) l)	the sound of the crowd wind close competitions new people working on my equipment	b) d) f) h) j)	sudden death shoot-offs rain lots of people travelling being close to home		
I really a) c) e) g) I)	the sound of the crowd wind close competitions new people equipment failures	b) d) f) h) j)	sudden death shoot-offs rain lots of people travelling judges		
I am afraid of:  a) not winning  b) being in first place c) looking stupid d) losing respect of fellow competitors e) seeing my name on the leader board f) never being able to shoot another arrow well g) running out of time to achieve my long-term goals.					
Other comments:					

Discuss these feelings with your coach.

<u>What should the coach do now?</u>
The archer and coach should be building quite a significant amount of information. Use results from THE STATE I'M IN, THE WAY I SEE IT, the SMART goals exercise, and THIS IS HOW I FEEL to decide which stressors are the most detrimental to performance. Write your conclusions below. Make sure they are yours and the archer's. Make the archer face all the fears.

Archer's Name:	Date:
The biggest stressor(s) seems to be:	
The archer's current response to this stress is:	
The archer's reaction is not a positive coping res	sponse because:
We are going to change this reaction by:	

continued

New technique to reduce stress:				
New thought pattern:				
Tackshar word				
Training goal:				
When does this new technique start?				
How often will it be practiced?				
How will success be measured?				
The archer feels in control now because:				



### iv) Exercise #1: Fear of failure

One of your top adult athletes is consumed with winning at all costs. You have spoken with this athlete and have discovered that the motivating force is "I'll show them." When the topic was continued further, you realise that the "them" was in fact the archer's parents.

In the space below, outline your strategy to improve this archer's mental approach to competing. Be sure to list which months, and for how long, you would teach new mental skills. Also justify how your goals would be SMART ones.

Strategy to improve this archer's mental approach to competing
Describe what course of action you would take regarding the archer's parents.
What mental skills does this archer need to learn?

### v) Exercise #2: Fear of success

You have been working with a top provincial-level archer for quite a few years. Every time the archer is performing well throughout the competition, there is a dramatic plunge in score for the last 10-12 arrows. When the subject is broached, the archer claims there is no anticipation of winning; there is no extra nervousness at the end. You, as the coach, have not noticed increased anxiety in the archer, but perhaps just a little "sloppy" form. The archer is in very good physical shape and there are no apparent physical limitations or injuries.

Could it be that this archer is afraid of success, and the ramification success brings? Describe below how you would go about testing the validity of this question.

hat mental skills need to be honed if this archer is to be "successful"?

### vi) Exercise #3: Making the team

Your young archer has a chance to make a Canada Games team and represent the province for the first time. There will be a series of 3 trials and each archer must shoot at least 2 of them to qualify. The minimum score ranges are slightly higher than your athlete shoots regularly, but it is not beyond reason that the archer could rise to the occasion and shoot the necessary scores.

Describe below how you would prepare this athlete mentally for the trials and the event. Remember to outline the time frame involved, the mental skills you would teach, and the method of assessment you would use to ensure those skills have been learned.

Preparation Strategy:	
Timeframe:	
Mental Skills I must teach the archer:	
Method of Assessment to ensure the archer has learned the new mental skills:	

### vi) Exercise #4: Planning for Success

Set aside one practice session with your archer and complete the following 4 exercises. Takes notes on your observations and archer reaction.

eli	1. If possible, invite an archer of equal or superior skill to a simulation head-to-head elimination match. If the invited archer is of a lower skill level, then calculate a reasonable handicap per end to add to his/her score.						
Your archer pretends to be in a shoot off at a world championship. If your archer wins, this round it means the next shoot off will be against the reigning world champion.							
What hap	pened?						
0 0							
	oin the archer 10 times in one direction. Then have the archer go immediately pick up the equipment and begin to shoot.						
to The goal							
to The goal	pick up the equipment and begin to shoot.  would be to come as close as possible to shooting an average score for the even though the archer feels completely disoriented.						
to The goal next end	pick up the equipment and begin to shoot.  would be to come as close as possible to shooting an average score for the even though the archer feels completely disoriented.						
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to The goal next end	pick up the equipment and begin to shoot.  would be to come as close as possible to shooting an average score for the even though the archer feels completely disoriented.						

3.	Have the archer walk to the line ready to shoot. The coach assumes the role of public announcer. In the first scenario the announcer praises the archer's ability and has every confidence that these shots will be fabulous. In the next series of shots, the announcer supports a fellow team mate and ignores the archer on the line or makes minimal comments that reflect little confidence in performance.					
What happened?						
-						
4.	As a homework assignment for your archer, plan every activity for an actual tournament day from wake-up time, to the field, to the end of the tournament, to the end of the day. Have the archer list the key thoughts and mental preparation that will take place along the way.					
What I	happened? Analyse the results. Discuss these with the archer.					
-						

### v) Case Studies:

Case Study 1 The best practice-archer in the world Jeremy has been shooting a recurve competitively for 8 years. He started when he was fairly young and now competes nationally in the junior men's division. He has been successful over those 8 years, but his scores in practice have always been much higher than his competitive performances. Some months there is a difference of 100 points between his practice FITA scores and his tournaments.

1.	In your opinion, what has caused this problem?
	<del>_</del>
2.	How would you reduce the point spread between practice and tournaments?
2.	How would you reduce the point spread between practice and tournaments?
2. 	How would you reduce the point spread between practice and tournaments?
2. 	How would you reduce the point spread between practice and tournaments?
2. 	How would you reduce the point spread between practice and tournaments?
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2. 	How would you reduce the point spread between practice and tournaments?
2. 	How would you reduce the point spread between practice and tournaments?

### Case Study 2 Target Anxiety

Becky is a club-level shooter who appears to have all the skills necessary to be an international-level shooter. She practices regularly, seriously and appears to enjoy the training environment at the club. She likes to listen to stories about great archers or international events.

For no apparent reason, Becky started missing the target completely during club shoots. Though she claimed there was nothing wrong, her form and timing of the shot were different. Her scores plummeted. Soon she could not get the string to her anchor position, hold and aim.

Becky is exhibiting some of the symptoms of target panic. In point form, list some possible reasons why this situation may have developed.
2. What would be your approach to help this archer? Where would you begin to rebuild?

# COMPETITION – DEVELOPMENT WORKBOOK



## PHYSIOLOGICAL PREPARATION







CHAPTER 4 - Reference Manual Pg. 205

TASK 1: Application of the Theory - Anthropometric Measurement

With permission granted from those involved, measure the upper body of at least one

archer using the chart below.

Arche	r Nan	ne:		_ Archer Age: Date:				
	Left side					Measurement (cm)		
1.	Fron	(6.1.)						
2.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \							
3.			to top of humerus (	upper arm)				
4.	From top of humerus to hollow in sternum (breast plate) under chin							
	Total:							
	Right side							
1.	Fron	n distal (furthest	) joint of first finger t	to bony part of wrist (thumb sid	de)			
2.	Fron	n wrist bone to p	point of elbow					
3.	Fron	n point of elbow	to top of humerus (	upper arm)				
4.	Fron	n top of humeru	s to hollow in sternu	m (breast plate) under chin				
				Te	otal:			
Now of structo	urally		Add: 3+4=	Are the measurements similar?		red /ES		
Lon	iac			Similar?	N	10		
Right		Add 1+2=	Add: 3+4=	Are the measurements	Y	/ES		
Side				similar?		10		
0.00					N	10		
		vou learn?	الأوام ولايم والمناد					
wnat	does	this tell you abo	ut the archer's abilit	y to achieve good body alignn	nent?			
Coaching Decisions: Does the archer body composition require special attention? Why?								

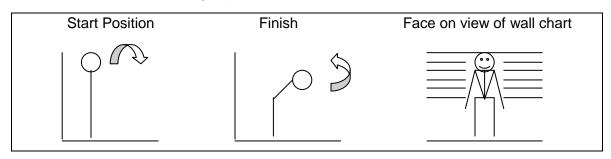


### TASK 2: Application of the Theory – Testing for muscle imbalance

How can the coach determine if an archer has muscle imbalance or not? There are some simple tests you can do in your club. Some simple tools and supplies will be required. If you are able to access one, a Dynamometer is a strength-testing device, squeezed in each hand, which is easy to use and understand. Just measure, and compare, the left and right hand grip strength. It is a good indication of overall muscle balance. Your local fitness centre or sports specialist may have one. You can use it in conjunction with the test below, but it is not essential.

### Test 1: Spinal column assessment

- 1. Tack up a piece of paper, approximately 1 meter long x  $\frac{1}{2}$  meter wide on a wall. With a magic-marker pen draw <u>horizontal</u> lines, evenly spaced, at regular intervals up the paper (approximately 10cm apart). These are the coach's reference marks.
- 2. Have the archer stand 2 meters away from a wall, <u>facing away from</u> the piece of marked paper.
- 3. The archer bends forward at the waist as if trying to touch the toes and SLOWLY raises the trunk until an upright position is achieved.



### What is the coach looking for?

The coach stands in front of the archer (face-on view). Use the lined paper on the wall as your guide. As the archer uncurls the spine into the standing position, compare the left and right sides of the spine against the background of the lines on the paper.

In theory, if the back muscles are evenly developed, the coach should see each line on the wall behind the archer's curved spine clearly. If only part of the horizontal line is visible on one side of the spine, there is imbalance. The coach may have to have the archer repeat this process several times. Record which segments of the spine did not match as the archer stood up.

### What did you learn?

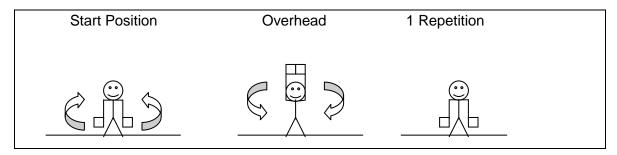
As the archer stood up, uncurling the spine, you may have spotted uneven development and recorded where along the spine this imbalance showed up. From there, the coach decides which muscle groups in that part of the back need to be developed in order to correct this situation. Strength training programmes, usually for trapezius, rhomboids and deltoids, need to be designed that strengthen the muscles on the weaker side. Maintenance and further strengthening should be done uniformly until the next re-test.

Now go on to Test #2.

### Test 2: Resistance

Note: This assessment should be done in the off-season or pre-competitive season and should be re-assessed at reasonable intervals during the training plan. Strength testing and effective training can be done anywhere, anytime with inexpensive free-weights and a little imagination.

- 1. Select a dumbbell weight. The archer should be able to execute a forearm curl easily. Use two dumbbells of equal weights.
- 2. The archer stands with feet shoulder-width, apart, with one dumbbell in each hand, extended arms, to the side. This is the rest position.
- 3. The archer SLOWLY performs an overhead fly movement until the weights touch over the middle of the archer's head. This is one repetition.



Now the archer repeats the action until "failure".

Failure is reached when the coach sees any of the following:

One arm rose slower than the other or;
The archer is struggling with one side of the body more than the other or;
The shoulders become elevated before the arms are waist-height or;
One shoulder elevates before the other.

The number of repetitions completed successfully may be recorded in the archer's logbook

### What did you learn?

No matter what the actual weight of the dumbbells, after a number of repetitions the coach should notice fatigue set in. The side that fatigues first, of course, is the weaker. Record your findings in the archer's logbook. The archer will need more strengthening exercises in order to reduce the imbalance. If the archer fatigues fairly evenly, no special training is required. Maintenance and further strengthening should be done uniformly until the next re-test.

Now return to the reference manual.



### PREP WORK FOR THE WORKSHOP

### TASK 3: Application of the Theory: Designing a Cardiovascular training session

In the space provided below, fill in a sample, hypothetical **cardiovascular** training session for an archer in the <u>Pre-Competitive Phase</u> of the Annual Plan. Suggest warm-up and warm-down exercises to complete the session properly. Use a pencil so that additions or corrections may be done.

Archer Name:	Date:			
Age: Archery	y Discipline:			
Warm-up Time allotment:				
List of Warm-up activities (include muscles of	groups engaged in the warm up activity):			
Warm-up Activity	Muscle Group(s) Involved			
Cardiovascular Activity:				
Aerobic Capacity Training:				
Sets: Reps:	Intensity (time limit):			
Alactic Capacity Training:				
Sets: Reps:	Intensity (time limit):			
Warm-down Time allotment:				
List of Warm-down activities (include muscle activity):	es groups engaged in the warm down			
Warm-down Activity	Muscle Group(s) Involved			

### What did you learn?

Discuss your ideas with the workshop Facilitator and make changes if necessary.



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### TASK 4: Application of the Theory: Assessment first: STRENGTH

Grip strength (as outlined in the anthropometric section) is one test, but two other measurements are important for an overall fitness assessment. Torso-strength and leg-strength are important for archers.

<u>Test a) - bent knee sit-ups:</u> can be performed on a floor mat The sit-up is really a "curl-up". The starting position requires the shoulders to be in contact with the floor mat. One repetition has been completed when the shoulder blades come off the mat completely, and then return to the starting position. Record the number of successfully completed repetitions to failure below.

Failure means the shoulder blades do not clear the floor mat completely.

Test b) - push-ups: testing for triceps strength on a floor mat From the starting position, the archer should be able to bend the arms to lower the torso to within 5 cm of the floor. Then the archer must push up to a straight arm position. This is one repetition. In order to complete a repetition successfully, the archer's head, spine and hips must be raised and lowered in a straight line. The archer must exhibit torso strength in order to repeat the exercise. No time limit should be used. Regardless of whether full-length or bent-knee push-ups are employed, the archer can be assessed to failure.

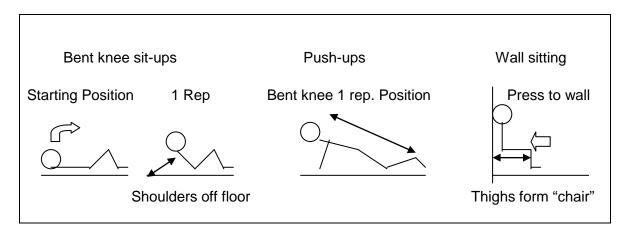
Caution: many male archers have been taught full-length push-ups as the only "true" way the exercise can be done. Unfortunately, not everyone is capable of doing this exercise safely. This type of push-up can cause low back pain when done improperly.

If you notice the hip/waist area sagging to the floor, or the body is not pushed up in one straight line from the top of the head to below the hips that is failure. Stop counting the number of repetitions done. Record the number of complete repetitions below.

<u>Test c) - Wall-sitting</u>: quadriceps strength testing in the club
Use this exercise to test quadriceps and hamstring strength if you do not have access to
a leg press machine. If you are able to access gyms with leg-press machines, set the
starting resistance so that at least 10 repetitions can be done with proper form. Then go
to failure, i.e. the legs can no longer be extended fully or the body position changes
during the repetition. Record the findings below. Watch that the archer does not hyperextend the knees at extension.

In the archery lanes or at home, the archer must assume a sitting position with the back against the wall touching from head to the base of the spine. The critical position, however, is the 90-degree knee and hip flexion. Viewed from the side, the archer should be in a sitting position on an "invisible" chair. The coach times how long this position can be held without trembling. Record your findings below.

Do not repeat these exercises since there will be lactic acid build up in the muscles and subsequent tests are not likely to reach the same measurements.



### Record your findings:

Exercise	# of reps completed	Time to failure
Bent knee sit-ups		N/A
Push-ups		N/A
Wall sitting	N/A	

### What did you learn?

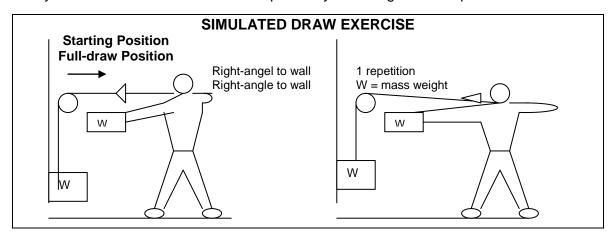
General strength is essential for performance. Torso-strength and leg-strength are the foundation for the upper body's ability to control the bow. Increased strength (without increased muscle mass) will provide greater archer stamina. If certain tests showed archer weaknesses, the coach needs to stress remedial exercises in the General Preparation Phase and Pre-Competitive Phase. Maintenance is important throughout the remainder of the annual plan.

Record all your tests and keep them on file. Your first series of tests are primarily a starting point for that individual. Soon you will have enough information to be able to track your archers' progress. In most cases, the re-assessment shows improvement which, in itself is a motivating factor for the archer during the annual plan.

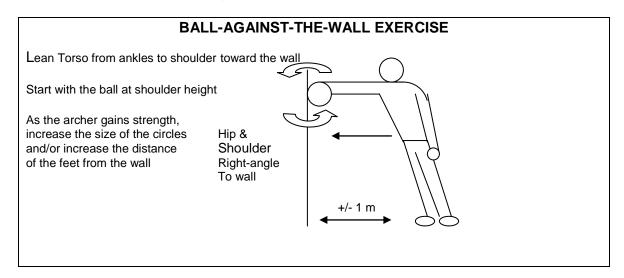
### THE TASK – Selecting Exercises for an Archer

Select some of the exercises listed in the reference manual as a starting point to build an archery specific strength-training session. Add a few of your own and try to make them archery-specific. Some examples of archery-specific exercises are shown on the next page. Use the form on the following page to complete the task.

**SIMULATED DRAW EXERCISE:** Using wall pulleys and various weight increments, the archer can simulate the drawing action of the bow while adding many more repetitions. By adding a stable mass weight to be held in the bow hand, the archer can simulate the total drawing and aiming action of shooting in the weight room. By varying the height of the pulley attachment and/or the body position relative to the pulling action, the archer can strengthen this position for various distances as well as uphill and downhill shots. And, as an important additional benefit, the archer can train the non-dominant side of the body to balance out the muscle development by reversing the hand positions.



**BALL-AGAINST-THE-WALL EXERCISE:** Use a soft volleyball or soccer ball. Stand approximately 1m from the wall (depending upon the archer's height and arm length. Keep the shoulder over the hip and lean against the ball with a flat palm. Using the shoulder girdle muscles to stabilise the body in this position, make small circles in both directions for 1-2 minutes. Repeat on the other shoulder.



## STRENGTH TASK PART 2: Designing a Strength-training Session

Now that you have decided which exercises to use, it is time to build a sample session. Fill in the form below and discuss your choices with the course conductor.

Archer Name: Date:					
Age:	Archery	/ Discipline:			
Warm-up Time a	allotment:				
List of Warm-up activities (inc	clude muscles g	roups engage	ed in the	warm up	activity):
Warm-up Activit	ty	Muscle Group(s) Involved			olved
List any cardiovascular training	ng during this s	ession:			
Strength Activities:					
Exercise		Resistance	Sets	Reps	]
					]
Warm-down Time a	allotment:				
List of Warm-down activities activity):	(include muscle	s groups enga	aged in	the warm	down
Warm-down Activ	vity	Mus	scle Gro	up(s) Invo	olved

Now turn back to the manual.



### TASK 5: Application of the Theory: Assessment first – FLEXIBILITY

Again, the archery coach has to establish a "ground-zero" before designing and implementing a successful strength-training programme. Tests for flexibility and strength should be included along with cardiovascular fitness in the battery of tests for assessment and re-assessment. These three fitness elements will give the coach a better overall picture of the archer's physical fitness level.

### Test 1: Flexibility

General flexibility can prevent injury. Many times as athletes become stronger, some muscle hypertrophy occurs. More stress is added to tendons and insertions. The stronger muscle, at rest, may actually be slightly shorter and restrict the range of joint movement. If joint stress during extension is too great or too sudden, the muscle and/or tendon could tear away from the bone insertion, leading to prolonged, even chronic injury.

In archery, imbalanced muscle development in the upper body can occur due to the unidirectional nature of the activity. If flexibility exercises are not incorporated into an archer's total training regime, the imbalance with increase with continued training. The degree of individual flexibility must be such that a full range of motion around shoulder joints and the neck is possible *without pain*. The archery coach should pay particular attention to flexibility and lack of pain in both shoulder girdles and rotator cuff muscle groups.

### Test a)- hamstrings as an indicator:

- A slow steady stretch forward in the seated "v" position can be used to gauge lower back and hamstring flexibility.

#### How?

In the upright position, have the archer sit on a floor mat with legs spread to form a "v". The knees are straight, but not locked. Toes are pointed to the ceiling and the back is straight. The archer leans forward <u>from the hips</u>, with arms and fingertips extended. The head is held up with eyes looking forward, not down at the floor. Use the tape measure to record how many centimetres past the feet the fingertips protrude (negative values for those who can not reach the toes). Make sure this test is done slowly and steadily to the greatest <u>held</u> distance of stretch. Repeat several times and take the average distance. Record these values, and the average in the archer's file.

Caution: If the archer cannot sit upright on the floor with the weight resting on the bones at the base of the legs, there is general inflexibility. The archer will appear to be leaning backwards. This person will use the upper back in order to complete the test, not the long muscles in the legs. In this case, this position is "failure" and the archer would score "0". Immediate attention should be paid to this person's lack of flexibility. General warm-ups each day should include slow, steady stretches in the hip/lower back area.

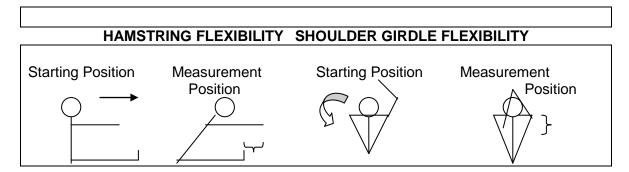
Assessment: this is just a starting point. The coach compares values for that particular archer during re-testing to ensure that flexibility has not been lost due to intensive shooting schedules.

### Test b)- shoulder girdle movement as an indicator:

A slow steady stretch of the fingertips down the back of the spine shows shoulder flexibility <u>and</u> muscle balance. Each side should have similar values.

The archer raises the right arm, bending at the elbow, and attempts to place the fingertips down the spine as far as possible. Measure the distance down the spine from the large spinal protuberance at the base of the neck to the fingertips. Repeat this action from the start position several times and record your findings. Take an average. Repeat the whole process on the left side. Record these values, and the averages in the archer's file. Compare left and right sides. In an ideal situation, the real value of each hand position should be identical. This will not happen unless the archer has trained properly in the past.

Assessment: this is just a starting point. The coach compares values for that particular archer during re-testing to ensure that flexibility has not been lost due to intensive shooting schedules.



### What did you learn?

The archery coach should be able to determine the general flexibility of the archer. The level of general flexibility will determine how much time is devoted to this fitness element during the General Preparation Phase of the annual plan. Since flexibility seems to be the hardest fitness element to attain, and the first to leave when training stops, those archers showing very little flexibility\* will need to continue to work on improvement and maintenance throughout the plan.

\*Very little flexibility could be defined as: the archer could not bring the finger tips in line with the toes in the v-sit; or the archer had over 2cm-difference in reach between the left side and the right side in the shoulder test.



### P. 246 - 257

# TASK #6: Application of the Theory: Assessment of Possible Injury caused by Archery Form

Watch the videotape provided during the workshop. Below, list the possible injuries, which could result, if this archer's form is not corrected.

1
1
2
3
4
Be prepared to explain your choices.



## TASK 7: Motor Behaviour - Application of the Theory

Discuss the pre-aim position with the archer. Ask what the archer sees through the aperture before drawing.

Write down the answer here:
Reduce the travel distance of the bowhand from pre-aim to aiming position at full draw as much as possible. The coach can record the archer's aiming pattern even without the use of highly sophisticated technology.
Videotape the archer from behind the string hand, focusing on the sight aperture movement and the bowhand. Film the archer shooting 12-15 arrows.
After each shot, verbally record the arrow position in the target while filming, e.g. High, right 10. This gives immediate feedback to the archer, and leaves a useful record to be studied later.
Record the results below:
a) videotaping from behind the string hand – general comments

b) arrow pattern and amount of sight movement

Árrow	Arrow Position in target	Movement Pattern of Aperture
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

c) Time taken to aim and amount of sight movement Next, with a stopwatch, time the archer from full-draw to release. Write down this time plus the arrow position in the target. Record group pattern and outside diameter of each group of 3 arrows. Repeat this exercise for 12-15 arrows. Look for any relationships between timing and better scores and/or groupings. The more consistent the timing, the better the results.

Record your findings and timing below:

Arrow	Outside diameter	Arrow Position in target	Time taken from
7 11 0 11	(3 arrows)	7 TOW T COMOT IT LANGUE	full-draw to release
1	N/A		
2	N/A		
3			
4	N/A		
5	N/A		
6			
7	N/A		
8	N/A		
9			
10	N/A		
11	N/A		
12			

Note any relationships between timing and group pattern below:

Discuss your findings with the workshop facilitator.

Now turn back to the manual.



#### P. 304

### TASK #8 Why make changes? What really matters?

The coach should analyse the strike patterns in the target at various distances and body angles. Start the archer in close to the target, aiming at any normal-sized target face.

Record at least one or two dozen arrows shot at each distance.

Biomechanical Analysis #1:	Stance
·	
Archer name:	Age:
Archer discipline:	
Equipment inventory (list bow weight, stabilisation,	and clothing among other things):
Weak Base of Support: Sometimes decidedly left-runing. The cause of the strike pattern may have to The coach does not need to employ expensive force. Here are some strategies the coach can use in the	o do with stance and center of gravity. e platforms to study this problem.
1. Inspect the footwear design the archer trains in a base of support when shoes have a flared sole as a in the heel and outside edge of the foot. Check the the tread.	opposed to a curved sole, particularly
Report your findings:	

2. Mimic drawing the bow. Without using real archery equipment, have the archer extend the bow arm with eyes closed and pretend to draw a bow towards the target. Hold the full-draw position. Quickly, the coach looks for sway or lean in the torso over 3-4 millimetres within 5 seconds after the eyes close. Then the archer relaxes. Repeat.
Report your findings:
3. Repeat #2 but with eyes open and the normal equipment (no arrow). When the archer has achieved the full draw position, the eyes close. Quickly, the coach looks for sway or lean in the torso over 3-4 millimetres within 5 seconds after the eyes close. Then the archer relaxes. Repeat.
Report your findings:
4. Use a carpenter's plumb line with a pen or sand. Place a sheet of paper on the shooting line. The archer stands on this piece of paper and attaches the plumb line to the back of the pants or quiver belt. Trace an outline of the feet position and their relationship to the target. Have the archer shoot 10-12 arrows, then step off the paper. Look for any movement tracings from the plumb line on the paper.
If the coach has access to a laser pen, affix it to a headband, pointed at the target while the archer stands at 10m or 18m. Watch for large movements while the archer stands at full-draw with the eyes closed.
Report your findings:

### Possible Solutions

If there was left-to-right sway observed in #2, #3, or #4, the archer's stance is unstable.

Sway can result during lifting and drawing the bow and/or during the aiming process. If either is noticeable and footwear is not an issue, the archer needs to change the stance to resist this tendency.

### 1. Widening the stance

Widening does not mean "opening the stance". It means increasing the distance between the two fee and it does two things:

- 1) It increase the Base of Support; and
- 2) It lowers the Center of Gravity.

When the archer tried this, I noticed:
Analyse the archer's posture.  Are the shoulders over the hips, hips over the feet?
Is the body weight shifted during the draw in order to compensate for the bow's mass weight?  Is the body bending at the hips as the eccentrics roll over?
Is this action causing the body sway? Is the archer not using enough torso and leg strength to keep the body aligned?
When the archer tried this, I noticed:

Continued

3. Is the stance: square, open or closed? Is this really an efficient stance for this archer's body type? Yes, an open (oblique) stance tends to make the archer feel stretched out and powerful, but is it causing instability? Is the closed stance likewise causing too much twisting in the lower back, causing sway and movement upon release? Experiment with the stance relative to the target to see what position gives the best results.

When the archer tried this, I noticed:
4. Other suggestions:
<del></del>

Continue with the next analysis.

Biomechanical Analysis #2: Shoulder Action

Watch and videotape the archer, face on, and posterior to the string elbow, from pre-aim to follow-through. Throughout the draw, the drawing elbow will move in an arc from in front of the archer's body at pre-draw, to the desired alignment at the anchor position \*.

\* The term "anchor" position is applicable at the basic form level, but at this level of proficiency, the hand resting on the face is a transitional reference point for the nock end of the arrow. At no time, should the anchor imply a stopping/starting position in the action of shooting the arrow.

Record your findings below:
When video-taping the archer face-on, I noticed the following:
When video-taping the archer posterior to the string elbow, I noticed the following:
Answer the following questions:
Is the point of the string elbow more or less behind the bowhand in the riser?
Report your findings:
What muscles did the archer use to achieve the full-draw position, and when?
Report your findings:

<ul> <li>What path did the hand/release aid take off the string at the instant of release and follow- through?</li> </ul>	
Report your findings:	
What did you learn? The archer applies force with muscle contractions that rotate bones into the full draw position. If the archer is not using the muscles in the right order i.e. from torso to shoulders to fingers, or if the muscle contractions around joints are not balanced, there will be poor alignment of the string elbow with the bowhand. The point of the elbow wi be lateral and away from the anchor position. Granted, this alignment is far more difficult to achieve for a finger-release archer than a release-aid archer, due to the demands to keep the string straight in the fingers. But alignment has more to do with Anthropometrics and the action of the scapula than equipment selection.	ill cult
Possible Solutions:  1. The coach can measure the position of the alignment. Have the archer come to ful draw with an arrow. Measure the distance between the hollow in the top of the boward shoulder to the arrow. Next, measure the hollow at the top of the string hand shoulder the wrist of the string hand. Now compare the values. There should be only a few centimetres difference in the value of the two measurements.	m
If the archer is able to position the bow shoulder directly over the hip on that side of the torso, and then, use the scapular muscles and rotator cuff on both sides of the spine to draw against that bow shoulder position. The alignment of the string-elbow should be more or less behind the bowhand.	C
If the archer has very short forearms compared to upper arm length, this position will be more difficult to achieve. <b>The coach works first with the position of the bow shoulder</b> . The archer has to establish the line of force to the target, and then pull against it, or stretch with it.	е
Comments:	

2. With the archer's permission, touch the muscles covering the shoulder blade (scapula) area on both sides of the spine while the archer shoots. If the archer does not wish to be touched, then ask the archer to wear a thin, form-fitting T-shirt for the practice session. Watch and/or feel the movement of the muscles in this area during the draw and follow-through. These muscles should contract first, before biceps and triceps. If they do not, the coach must slow down the process to re-teach the archer the more
efficient way to draw the bow and maintain adequate muscle contraction while aiming and finishing the shot. This exercise should be done up close to the target with the eyes closed.
Record your findings here:

- 3. The follow-through of both the bowarm and the string hand can tell the coach how the archer got into the full-draw position and what muscles were used. When the fingers or "head" of the mechanical release fails to stay in line with the bow shoulder, the scapular muscles and rotator cuff were relaxed at full draw and biceps took over to power through the shot.
- a) Use visual training aids to help the archer, as well as touching the string hand if permissible. Show the archer the videotape of the release and follow-through. The archer can not see that aspect of the movement pattern, so it may be quite a revelation.

Sometimes just viewing the tape has the biggest impact on the archer and the problem is solved within a few arrows.

Record your findings here:
b) A mirror, held up toward the archer at full draw, could be helpful also. The archer aims first, then watches the release in the mirror, making the release stay in close to the anchor.
Record your findings here:

d) Mental rehearsal, feeling the shot as the picture appears in the mind's eye is the final tool. Rehearsal and repetition will be very important. Patience on the part of archer and coach is important also as the archer learns the desired movement pattern.  Record your findings here:		- -
and coach is important also as the archer learns the desired movement pattern.	d) Mental rehearsal, feeling the shot as the picture appears in the mind's eye is t final tool. Rehearsal and repetition will be very important. Patience on the part of arc	- - ne ner
	and coach is important also as the archer learns the desired movement pattern.	
	Treasing field.	_
		_
		_
		_
		_
		- -
e) Other suggestions:		- - -

# Form Analysis Sheet #1

Date		Event	
Name			
Archer's part	iculars (age, style, right / left hand		
PRE SHOOT	ΓING:		
Consult"s No	otes		
Warm up	Lengt	h of Time	
Stretching	Other	Exercise(s)	
1. STANCE:			
Foot Placen	nent -		
a	Parallel Stance	d	Open (Feet Apart)
b	Oblique Stance e	Closed (Fee	et Together)
C	Reverse Oblique Stance	f	Feet Parallel
Weight Dist	ribution -		
a	Even	d	Weight On Front Foot
b	Weight On Toes	e	Weight On Rear Foot
C	Weight On Heels		
Lean and Sv	way		
a	No Lean	d	No sway
b	Leans Toward Target	e	Forward sway
C	Leans Away	f	Backward sway
Shoulder Li	ne		
a	Parallel	d	Level
b	Pointing to Right	e	Pointing Up
C	Pointing to Left	f	Pointing Down

#### 2. NOCKING THE ARROW: While being loaded on the string, the arrow is pointed: Upward Directly at Target C.\_\_\_\_ Other\_\_\_\_ b.\_\_\_\_ At Ground d.\_\_\_\_ Nocking process started before or after bow hand placement\_\_\_\_\_ 3. DRAW HAND AND ARM: String fingers placed on the string with bow pointed Directly at Target C.\_\_\_\_ Upward d.\_\_\_\_ b.\_\_\_\_ At Ground Other\_\_\_\_\_ 4. BOW HAND AND ARM: The archer uses: Medium (Normal) Wrist a.\_\_\_\_ Low wrist C.\_\_\_\_ b.\_\_\_\_ High wrist Bow Sling Type\_\_\_\_\_ Pre Draw -Initial draw of the string was: C. \_\_\_\_\_ Other Above Parallel Below Parallel d. \_\_\_\_\_ No Pre Draw Draw Started -Directly at Target Bow Moving (U)p or (D)own d.\_\_\_\_ **Above Target** b.\_\_\_\_ e.\_\_\_\_ Other C.\_\_\_\_ **Below Target**

### 5. THE DRAW Draw completed with bow pointed Directly at Target Bow Moving (U)p or (D)own **Above Target** e.\_\_\_\_ Other\_\_\_\_ b.\_\_\_\_ **Below Target Draw Hand Action -**Directly to Anchor Draw made with stop d.\_\_\_\_ e.\_\_\_\_ b.\_\_\_\_ Low and Raised to Anchor Overdraw f.\_\_\_\_ C.\_\_\_\_ One Continuous Move Other\_\_\_\_ KLICKER - (Recurve) Klicker set \_\_\_\_Y \_\_\_N On point of arrow \_\_\_\_\_ Consistent set \_\_\_\_\_ (Check Again After 50 Arrows) \_\_Smooth Draw to Klicker b. \_\_\_\_Stops at Klicker c.\_\_\_\_Watches Klicker 6. ANCHOR: Centre of Face c.\_\_\_\_\_ High Anchor

Floating (F) or Solid (S)

Tab Shelf

b.\_\_\_\_

Anchor Aids -

Side of Chin d.\_\_\_\_\_

Kisser Button [to Teeth (T) or Lips (L)] \_\_\_\_\_

Peep Sight

### 7. HOLD AND AIM:

<b>Bow Hand</b>	During Hold -			
a	Relaxed	C	Wrist push	
b	Movement During Draw and Hold			
Bow Hand	Wrist During Hold -			
a	Wrist Push	C	Movement	
b	Inside Centre	d	Outside centre	
Bow Hand	Fingers During Draw and Hold -			
a	Relaxed Open	e	Movement	
b	Forced Open	f	Clutching	
C	Holding Bow Lightly	g	Gripping Bow Tightly	
d	Thumb Relaxed	h	Thumb Movement	
Bow Arm I	Elbow During Draw and Hold -			
a	Straight	d	Locked	
b	Turned Out	e	Broken	
C	Rotated Down	f	Movement	
Bow Shou	lder During Hold and Aim -			
a	Extended to Target	C	Parallel to Ground	
b	Pushed Up to Neck	d	Movement	
Head Posi	tion During Draw and Hold -			
a	Positioned (B)efore or (A)fter anch	or		
b	Movement			
String (Dra	aw) Hand During Hold and Draw -			
a	Hook: (D)eep (S)hallow (F)inger Tps			
b	Back of Hand Straight			
C	Changes During Hold			
d	Finger Pinch			
e	Hand Turned Out at Bottom			
Weight on	fingers (appro	x %)		

String (Dra	w) Wrist During Hold and Aim -		
a	Straight to Knuckles	C	Bent In
b	Bent Out	d	Movement
String (Dra	w) Elbow During Hold and Aim -		
a	Parallel With Arrow	C	Below Arrow
b	Above Arrow		
When View	red From Behind -		
a	In Lne With Bow Centre	c Righ	t of Bow Centre
b	Left of Bow Centre		
8. RELEAS	E:		
a	Live	d	Straight Back
b	Static	e	Rotated from Face
C	Dropped hand	f	Moved Up
Release Ac	ctions:		
a	Head Movement	C	Eye Movement (Jump)
b	Bow Arm Dropped		
9. FOLLOW	/ THROUGH:		
Bow Arm A	Action After Release -		
a	Bow Moves Right	C	Bow Arm Drops
b	Bow Moves Left	d	Bow Torque
Body Move	ment Immediately After Release	_	
Body Position	on Held Until Arrow Hits Target	_	
10. RELAX	/ OBSERVE:		
a	Stops Sequence		
b	Immediately Prepares Next Shot		
c Sig	ns of Emotion		
d Us	es Optical Check		

### FORM ANALYSIS SHEET #2 - TO ASSESS ARCHER CONSISTENCY

	EXHIBITED GOOD FORM	EXHIBITED INCONSISTENT FORM	WHAT IS CAUSING THIS?
STANCE & POSTURE			
BOWHAND & GRIP, BOWARM & ELBOW, BOW SHOULDER			
DRAWING HAND, (fingers/release aid) ACTION OF THE DRAWING ARM			
ANCHOR POSITION, CONTACT/PRESSURE			
HOLDING & AIMING			
RELEASING			
FOLLOW-THROUGH			

### vi) Exercise #1: Biomechanical Analysis of an Archer

With the workshop Facilitator and the group, you will either view the Archery Canada's Biomechanical Analysis video **or** use view video clips using biomechanical analysis software **or** actual archers.

Be prepared to discuss your findings with the workshop Facilitator and other coaches. You will find that some other coaches may share your observations. You will find that some coaches may not share your plan to make improvements or agree on what to change. Learn from these discussions and grow from them.

You should create a profile for each of the archer's viewed, within the restricted angle the archer was filmed. If you missed something, or you were not sure, just ask the workshop Facilitator to view the video again.

Write down what you see on the Form Analysis Sheet #3 on the following pages. (see Appendix 5 -reference manual - to download copies of the Form Analysis Sheets)

Give some reasons why you think the archer's form is like this.

The final stage is rank-ordering your findings in terms of importance to the archer's improved performance while making the fewest possible changes.

### **FORM ANALYSIS SHEET #3**

	ner's Name: I Assessment Note any of the following:
1.	Inconsistency in form:
	i)
	ii)
	iii)
	iv)
2.	Form Which Detracts From Performance:
	i)
	ii)
	iii)
3.	Biomechanical Inefficiencies:
	i)
	ii)
	iii)
4.	Equipment Inefficiencies: i)ii)iii)
Revi	ew the video or have the archer shoot again.
	ondary Assessment
i)	
ii)	
iii)	



### Task #9 - Nutrition and Tournaments

\_\_\_\_

Read each of the 3 scenarios. Based on information in the reference manual pgs. 49 to 56, respond to the question below each scenario.

### Scenario A

**Nutrition before competition.** Two hours before a competition, you go into the cafeteria, where they're serving Italian, Canadian, and Chinese food. You're waiting in line behind one of your athletes and her parents. The athlete orders a large slice of pizza, double cheese and pepperoni, a diet drink, and a cold macaroni salad. For something different, the athlete decides to put hot peppers and anchovies on her pizza. For dessert, she takes a slice of Black Forest cake with whipped cream.

As the coach what can you do at this point? What might you haver done prior to this happening?	

### Points to Consider

**Digestion period:** The time between eating and competing (less than two hours) will probably not be long enough for digestion to complete. In addition, the meal contains too much fat, which takes a long time to digest.

### Choice of foods:

Pizza contains carbohydrates, but in this case the fat content will likely be fairly high (pepperoni and double cheese).

Macaroni salad is high in fat and should not be consumed in a pre-competition meal. Furthermore, because of the risks of food poisoning, eating this kind of food in a fast food restaurant is not recommended.

If the athlete is not used to eating spicy food or anchovies, these foods should not be included in a pre-competition meal. These foods could be hard to digest and produce unexpected reactions, especially in conjunction with pre-competition nerves.

Black Forest cake with whipped cream is high in fat and should not be eaten before competition.

As a general rule, this meal contains too much fat and not enough carbohydrate.

**Hydration:** It is a good idea to include a drink with the meal to ensure being hydrated. A diet soft drink, however, is not a source of carbohydrate, and its carbonation may cause discomfort. The athlete needs 400 to 600 mL of fluid.

### Scenario B

**Nutrition between competitions:** Your team is taking part in a tournament in a sport centre where there's only a small snack bar. At the snack bar, they have only fast food, candy, chips, bottled water, soft drinks, and coffee. You know the place well, as you're often in the sport centre. You have only two hours between the first and second competitions, so your athletes won't have time to go home.

foods available.	арргорпаце
What could you do?	

Values the Cook know the small have and are aware that there are few appropriate

### Points to Consider

The amount of carbohydrate consumed should be relative to the archer's body weight and in accordance with the suggestions on of the Reference Manual pg.269. As there are only two hours between competitions, athletes should eat only once during this period.

Assume you athlete is between 45 and 50Kg. Refer to the food choices are all good options? In this particular case, it is better to consume foods containing only 50 g of carbohydrate than to eat foods containing both carbohydrate and proteins. The other option is not, however, a bad choice. Some athletes may prefer carbohydrate in liquid form.

### **Hydration:**

The recommendations on pages 265 - 268 concerning the quantity of fluid to consume each hour during activity should be followed. Even though rehydration is important, the quantity of fluid drunk must be relative to the amount of fluid the body can absorb. Re-hydration can continue during activity, as long as the guidelines in the table are respected.

Bottled water and tap water are the best choices. Other commercially produced drinks may also be good choices. However, athletes should avoid coffee because of its dehydrating effect; non-diet soft drinks contain carbohydrate, but they are also carbonated and may contain caffeine; this makes them less desirable between competitions.

If athletes are young, they may prefer commercially available sport drinks to water.

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### Scenario C

Your archer has stood out in the sun all day in hot weather. The archer is exhausted by the end of the session. On the way home, you all stop at a supermarket to get some food to help recover before practice the next day.

What would be your	recommendation?		

Points to consider

### Digestion time:

As quickly as possible after the end of the practice, athletes should rehydrate and eat food high in carbohydrate and low in fat.

The consumption of small quantities of foods high in carbohydrate should continue until the next meal.

# COMPETITION – DEVELOPMENT

# **WORKBOOK**



**CHAPTER 5** 

**TECHNICAL CONSIDERATIONS** 





## **CHAPTER 5 -- Reference Manual pg. 358**



P. 371

### **CHECK LIST OF ARCHER'S EQUIPMENT NEEDS**

Complete the following task and submit it to your workshop Facilitator. Use the following chart to determine what aspects of the archer's equipment must be addressed. Work through the checklist, always moving from the basic needs towards the finer points.

Check off each item if and when you are satisfied that the equipment matches your archer's skill level and discipline. If the archer is involved in more than one discipline, photocopy the checklist for each discipline.

CHECK LIST ARCHER'S NAME:			
ARCHERY DISCIPLINE:			DATE:
Equipment listing	Acceptable	CHANGE IT	COMMENTS
BOW			
(correct eye-dominance/hand assumed)			
1. It is the correct draw			
length for the archer.			
2. It is within the draw			
weight range needed.			
3. It is the appropriate			
length for the archer.			
4. It is the appropriate			
length for the discipline.			
5. The archer can control			
the mass weight.			
6. The archer can control			
the draw weight.			
		OLIANOE IT	COMMENTO
Equipment listing	Acceptable	CHANGE IT	COMMENTS
ARROWS			
There is sufficient draw			
weight for aluminum sizes.			
2. There is sufficient draw			
weight for carbon sizes.  3. There is sufficient draw			
weight for aluminum/carbon			
sizes.			
4. The alloy compliments			
the discipline's needs.			
5. The alloy compliments			
the archer's expertise.			
<ol><li>They are the correct</li></ol>			
length.			
<ol><li>They are the correct</li></ol>			
spine. (Experimentation)			
8. Point weight is correct.			
(Experimentation)			
9. Fletching is appropriate			
length & weight.			
10. Fletching is appropriate			
for the discipline.			

Equipment listing	Acceptable	CHANGE IT	COMMENTS
STABILISATION			
Torque is present			
through the long axis of the			
bow.			
2. Stabilisation of some			
kind is required			
3. Discipline rules on			
stabilisation have been			
checked.			
4. Torque reduced through			
long axis of the bow.			
5. Stabiliser length is			
appropriate for the archer.			
6. Weight distribution on			
rods is efficient.			
7. The added mass weight			
assists the archer.			
8. The added mass weight			
enhances performance.			
9. The archer can control			
the added mass weight.			
10. All stabilisation is			
necessary and practical for			
performance.			
Facilities and Battle at	A	CHANCELE	COMMENTS
Equipment listing	Acceptable	CHANGE IT	COMMENTS
ACCESSORIES			
1. Arm guard (if worn)			
allows string clearance.			
2. Clothing guard helps/is			
not needed			
1.3. Bow sling is appropriate	ĺ		

Equipment listing	Acceptable	CHANGE IT	COMMENTS
ACCESSORIES			
1. Arm guard (if worn)			
allows string clearance.			
2. Clothing guard helps/is			
not needed			
3. Bow sling is appropriate			
length for best bow reaction			
upon release.			
Footwear provides			
support and stability.			
5. Tab/release is reliable			
and efficient.			
6. Tab has been			
customized to archer's			
hand. <b>OR</b> Release			
style/spring tension allows			
good upper body tension			
and control.			
7. Quiver does not			
interfere with performance.			
8. Clothing is appropriate			
for discipline needs.			
Equipment listing	Acceptable	CHANGE IT	COMMENTS

BACK-UP EQUIPMENT (as archer's budget permits)		
1. The archer owns		
duplicate bow.		
2. The archer has sufficient		
arrows.		
3. The archer owns extra		
stabilisation.		
4. The archer has exact		
duplicates of accessories.		

Now turn back to the reference manual.



#### P. 381

### Test #1:

- 1. Using the arrow alloy and material of your choice, fletch up 12 straight arrows for the archer.
- 2. Divide the arrows into 3 or 4 groups and install 3 or 4 different point weight configurations (if available).

For example: aluminum arrows can have 7%, 8% and 9% POB point weights

carbon/carbon composite arrows can have bulge one-piece, break-off

one-piece and/or insert + screw in point weight choices

When there is a great selection to choose from, consult the manufacturer's spine chart and purchase those combinations, which create either a weaker or stiffer arrow (remember increasing point weight weakens the arrow).

#### Steps to perform:

First, have the archer shoot these combinations through a paper-tuner or bare-shaft tune to ensure the nocking point is correct. These combinations will mean re-positioning the nock locators for each arrow choice.

Next, record the strike patterns each group makes in a target from various distances. Have the archer shoot at least 30 arrows in order to have an accurate sampling.

For example: 10, 20, 30, 40 and 50 meters/yards for 3-D archers

COMMENTS: (This will be totally subjective on the coach's part)

Answer the following questions for each combination.

30, 50, 70 (and 90) meters for target shooters

10 and 18 meters/20 yards for indoor and Ski-Arc specialists

Date: \_\_\_\_\_\_ Arrow: \_\_\_\_\_

Point weight and combination: \_\_\_\_\_\_

For each distance record:

Lateral misses: The archer's strike pattern left and right went from the \_\_\_\_\_\_ ring to the \_\_\_\_\_ ring.

Vertical misses: The archer's strike pattern up and down went from the \_\_\_\_\_ ring to the \_\_\_\_\_ ring.

With a flexible measuring tape obtain the outside diameter of the total group of 30 shots: \_\_\_\_\_ (inches/centimeters).

1. Did the arrows appear to straighten out quickly as they left the bow?	YES	NO
2. Did the arrow appear to fly tail low as it left the bow or travelled in the air	YES	NO
3. Did the arrow appear to fly tail high as it left the bow or travelled in the air?	YES	NO
4. Did the arrow appear to wobble in the air?	YES	NO
5. The arrow appeared to keep its line during flight from the bow to the target?	YES	NO

Finally, take all your measurements and comments. Assess which set up appeared to be the most consistent, accurate and appeared to have the best arrow flight. If you have exhausted all the possible point weight combinations available to the archer, start fine-tuning your chosen set-up.

## REMEMBER in order of operation:

Now return to the reference manual.

- 1. Experiment with center shot position.
- 2. Work with launcher height or shape of the arrow rest arm.
- 3. Experiment with cushion plunger pressure or launcher-spring tension if applicable.

Overall comments and assessment:



# Test #2: One possibility

With your archer's present set-up, have the archer shoot 3 ends of 6 arrows at the closest and then the longest distances in the chosen discipline (other than Ski-Arc). Record the outside diameter of each group (i.e. altogether 6 groups).

Remove the string and put 10 twists in it (shortening). Replace the string. Repeat the process above and record results on a separate sheet.

What did the coach learn?

Upon comparison, if the outside diameter of the group decreased then the slightly shorter string is more efficient. If the coach and archer feel that the change is significant, the experiment could be repeated with 15 and/or 20 twists in the string. When the results have been compared and the most efficient string length has been chosen, the coach should evaluate the arrow flight in case a small change in nocking point occurred.

Comments and observations:
Test #2a: Another scenario  With your archer's present set-up, custom make a string with two less (or two more) strands than usual. Repeat the first part of the experiment above with the regular string, then switch strings for the comparison.
What did the coach learn?
Again, it is the smaller outside diameter of the group that indicates whether or not the change was advantageous. As above, look at arrow flight to correct any porpoising.
Comments and observations:
Now turn back to the reference manual.



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### **Test #3:**

Note: The greater the archer's shooting consistency, the more finely tuned the system can become.

Regardless of the type of bow used by the archer, obtain as many as possible of the following stabilisers for the long rod fixed to the back of the bow:

24-26" aluminum stabiliser
28-30" aluminum stabiliser
28-30" carbon or carbon composite rod
28-30" carbon or carbon composite rod
30-36" aluminum stabiliser
+30" carbon or carbon composite rod

Keep the number and distribution of rod weights the same throughout the process.

For each stabiliser rod listed above, fill in the following chart.

Save the target faces from several sessions (30 arrows for each) and record the general strike patterns for each. Note any persisting patterns.

Use 6 new regular indoor target faces and have the archer shoot 30 arrows at each face with each type of stabiliser (one set up to each face) over the course of a week. Have the archer shoot from the standard Indoor shooting distance.

Stabiliser material:	Length:	Date:
Record the following information fr Lateral misses: The archer's strike the ring.		
Vertical misses: The archer's strike the ring.	e pattern up and down went fron	n thering to
With a flexible measuring tape obt(inches/centimeters)		otal group of 30 shots:
After all 6 faces have been shot ar each and every stabiliser.	nd recorded the coach should co	ompare the figures for
Comments:		

# Test #4: Release Spring Tension

Make sure the archer is completely comfortable with the present set up.

Videotape the archer's anchor position, anchor position pressure and posture face-on while shooting 12-15 arrows.

#### Look for:

- any finger movement
- hand jerk of the release off the string
- pressure in the knuckles and
- any forced movements, which show anticipation of the shot

Record arrow groups in the target.			

Change the spring tension in the release aid SLIGHTLY to a lighter setting. Videotape the archer again as before and record arrow groups, too.

#### Look for:

- less finger travel on the trigger,
- hand jerk of the release off the string,
- pressure in the knuckles, degree of anticipation

What should the coach look for?

If the archer's timing is very inconsistent and form became erratic, you took off too much spring tension. Increase the tension a tiny bit.

If there appeared to be less anticipation, and the groups improved, the archer probably had too much spring tension in the release aid.

## Test #4a: Loop length

In a true back tension release the release rope length is adjustable. Videotape the archer from behind the string elbow at full-draw. Ensure the camera angle is able to pick up the archer's body alignment with the target. If the point of the archer's string elbow is not in line with the bowhand, yet the bow's draw length is correct, the problem may be in the release rope length. Particularly, reduce the length of the rope if the elbow position is over-drawn or pointing behind the shoulders.

The other loop length to consider is the loop behind the string. Repeat the experiment above if the archery is using currently, or has changed to use this extra loop. Again, look for the alignment of the point of the string elbow with the bowhand and the target.

Record arrow groups i	n the target.		
Comments:			

Turn back to the reference manual.

# **Equipment Selection, testing and evaluation**



b)	The outdoor shooter		
Write	down the archer's information:	NAME:	
Date:	Draw length:	Draw weight:	
Arrow	Size/Type:	Arrow length:	
TASK Set up - - - - Look t	a video camera and film the archer: shooting the shortest distance requires shooting the longest distance requires viewed from behind the string elbow viewed from the archer's back	red for the age category v at full draw	
Aimin	g stability at full draw		
Bow r	eaction toward the target		_
String	reaction upon release		- - -
Arrow	rest reaction (tight focusing is require	ed)	-

Write down observations for each. Discuss these with the archer. Break down variables into the following topics to be analysed further: Mass weight of bow and stabilisers while aiming - does it help? Did the bow reaction go towards the target without a lot of torque? Does the arrow appear to leave the string and arrow rest smoothly? Does the archer appear to be in control of the equipment at all times?

the archer, then carefully record and store your findings.	ne benefit of
	<u></u>
If there are changes to be made list them below and rank them in important why your choice was made.	e. Detail

Slate these changes into the training chart during the equipment sessions as outlined in the annual plan.

## Exercise #2: The field archer

If possible, find a field course with variable terrain. If not, the coach will have to be inventive and create the slopes and altered body positions needed for this exercise. If the archer is allowed to use a level in the sight aperture, ensure it is correct before you start.

#### TASK:

Set up a video camera and record the archer:

- shooting uphill
- shooting downhill
- shooting across contours (these should start with small changes in grade to steeper ones)
- viewed from behind the string elbow at full draw so that the target, terrain and archer are visible
- viewed from the archer's back

#### Look for:

- aiming stability at full draw
- bow reaction toward the target

Write down observations for each. Discuss these with the archer. Break down variables into the following topics to be analyzed further:

-	Mass weight of bow and stabilisers while aiming - does it help? - when?
-	Did the bow reaction go towards the target without a lot of torque (uphill, downhill, etc.)?

- Does the archer appear to be in control of the equipment at all times?
If the answer to all of these questions implies that the set-up is working to the benefit of the archer, then carefully record and store your findings.
If there are changes to be made list them below and rank them in importance. Detail why your choice was made.

Slate these changes into the training chart during equipment sessions outlined in the annual plan.

## Exercise #3: The 3D archer

This is a very simple test of the archer's equipment, but really accurate. It requires a lot of walking by the archer and careful recording. If the same arrow can strike the same aiming spot every time, then the 3D archer will have a consistent set-up on a round which demands that the first arrow, the only arrow, strike the middle of the highest scoring area.

Mark a small dot on a piece of white paper. Make it about the size of a "loonie". Stick the piece of paper on an Ethafoam matt, or 3D target and place the target at 30 meters/yards.

Over the period of a week's training take samplings of accuracy: Using a straight, properly fletched arrow from the archer's existing set-up, have the archer shoot the same arrow, from the same position at the same dot 18 times. Remove the piece of paper and note the distance it was shot at.

Repeat this process at 2 other distances, one longer and one shorter than 30 meters/yards.

Analyse the strike pattern:

- first look at the shape of the pattern in each piece of paper, looking for lateral misses
- next compare the shape of the pattern on all 3 pieces of paper
- lastly compare the outside diameter of all 3

Report: list your findings below and indicate whether or not the reliability of the set-up is adequate and, if not, what can be changed in order to improve the strike pattern, e.g. Launcher position, arrow spine, point weight.


Note: this tuning exercise could be used by bowhunters, too. Substitute practice-points for broadheads. Reduce the number of arrows shot at each piece of paper. Reduce distances to known hunting accuracy range.

## Exercise #4: The Ski-Arc archer

Alter the screw-in, or glue-in points, as required for blunts.

Ensure that stabilisation meets rule requirements.

Attach the slings and have the archer dress for the actual tournament event.

Mark a small dot on a piece of white paper. Make it about the size of a "loonie". Stick the piece of paper on an Ethafoam matt, or 3D target and place the target at 18 meters.

Over the period of a week's training take samplings of accuracy:

Using a straight, properly fletched arrow from the archer's existing set-up, have the archer shoot the same arrow, from the same position (kneeling or standing) at the same dot 18 times. Remove the piece of paper.

Analyse the strike pattern:

-	first look at the shape of the pattern in each piece of paper, looking for la	atera
	misses.	

misses.	
Record your findings:	
If there is a lateral pattern, the equipment is not forgiving enough. Look at cushion	

plunger setting.

Now repeat this procedure but use groups of 4 arrows shot from the different required shooting positions. Repeat the test throughout one week of training. Use video as well to ensure that the equipment does not interfere with the archer and the archer's clothing does not interfere with the set-up in these positions.

Record your findings for group consistency for standing:

Record your findings for group consistency kneeling:
Compare:
If there is inconsistency, re-evaluate the archer's body position, alignment to the target, and postural stability in the two positions, looking for differences. Assess the bowhand pressure consistency and the archer's ability to feel the pivot point of hand and bow through the ski gloves.

## **Case Studies:**

1. The effects of weather

Julie shoots competitively on the senior 1440 target round, in the junior girls' compound division. Though she practices in all sorts of weather conditions, she never seems to score well in crosswind. Her form seems to be good, but she always complains about her release never wanting to go off while she's aiming.

What equipment factor could be causing Julie's problems?	
What could the coach teach Julie to do in windy competitive conditions?	

# 2. The effects of physical tension

During practice sessions, John's recurve shooting was always terrific. He had great flight and groups were consistently tight. However, during a competitive event he complained about the crazy arrow reaction he could see. He never noticed his arrow flight during practice, and as far as he is concerned, his form felt good even though his groups opened up.

<u>Strictly from an equipment point of view</u>, and not psychological tournament anxiety, is there something the coach could change in the set-up, which would allow John to compete more effectively.

-

# 3. The young archer

Amanda is 12 years old. She is a competitive recurve archer, holding 24# at her draw length of 27". She has grown quite a bit since last outdoor season. In assessing her equipment needs for the next indoor season, what must the coach take into consideration? What problems could arise?

Cover the following topics:

draw length
bow length
draw weight
draw check position
arrow selection
.——————————————————————————————————————
arrow length

# COMPETITION – DEVELOPMENT WORKBOOK



**CHAPTER 6** 

# **SPECIALISED TRAINING**





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# TASK #1: Sport-specific demands During Puberty

Use the form below to identify areas that need planning and extra training.

# JUNIOR ATHLETE PROFILE ATHLETE NAME: SEX: M/F DATE OF BIRTH: \_\_\_\_\_ PRESENT AGE: \_\_\_\_\_ BOW MANUFACTURER: TYPE: compound recurve longbow WEIGHT: peak weight \_\_\_\_\_ holding weight \_\_\_\_ DRAW LENGTH: MASS WEIGHT: (without stabilisation) \_\_\_\_\_ (with stabilisation) \_\_\_\_\_ CHOSEN DISCIPLINE: Target Field 3D Ski-Arc PRESENT AGE DIVISION FOR EACH DISCIPLINE \_\_\_\_\_\_ LONGEST DISTANCE SHOT NOW IS: NEXT AGE DIVISION IS: \_\_\_\_ . NUMBER OF MONTHS UNTIL ARCHER WILL SHOOT IN THIS AGE DIVISION IS: . . LONGEST DISTANCE IN THIS AGE DIVISION IS: \_\_\_\_\_

## QUESTIONS:

QUEUTIONO.			
Does the archer have enough bow draw weight	a) :	aluminum arrows	YES/NO
to shoot accurately at the new, longer distance using:	b)	carbon arrows	YES/NO
doning.	c)	using carbon/aluminum composite arrows	YES/NO
2. Does the archer need to increase muscle strength and/or endurance in order to shoot accurately at the new, longer distance?			YES/NO

NEXT AGE DIVISION IS: . NUMBER OF MONTHS UNTIL

LONGEST DISTANCE IN THIS AGE DIVISION IS: \_\_\_\_\_

ARCHER WILL SHOOT IN THIS AGE DIVISION IS: \_\_\_\_\_.

Formulate your plan of action.

# **ACTION PLAN:**

List the most important changes which must be m	ade and when.
Goal:	
Time needed:	Deadline date:
Goal:	
Time needed:	Deadline date:
Goal:	
Time needed:	Deadline date:
List the challenges to making these goals and dea	adlines:

# Task #2: Specific Youth Training Challenges

# **Parent-Athlete Scenario**



Out-of-the-blue, with no prior warning, you receive a phone call from your archer 2 days before the major event in the annual plan is to take place. The archer's parents have punished "unacceptable" behaviour by grounding the archer. All extracurricular activities are cancelled as the archer is not allowed to leave the house (except to attend school) for the next week.

How would you handle this situation?
Coach-Athlete Scenario  After the major event of the annual plan is over and the active-rest period has begun, you arrange for your coach-archer-parent meeting. The archer has very little to say but agrees that everything is fine.
However, a week after the meeting, you hear through the grapevine that the archer is happy that the annual plan is over and he can "start working on stuff he really wants to work on" with his archery.
How would you handle this situation?
Coach-Parent Scenario In the beginning of the season, the archer's father was highly motivated, attended practices, seemed eager to be helpful. As the season wore on, the parent became more aloof, only dropped off the archer at practice and stopped communicating with you personally.
How would you handle this situation?



# viii) Exercise #1: Elite Wheelchair archer preparation

You coach a 26-year-old female paraplegic. She shoots target rounds with her recurve bow. You have agreed together that her major goal is to qualify for International Paralympic Committee world championships in two years. Her scores are very close to qualification levels, but more work is needed. She lives in Montréal. The championships will be held in Stoke-Mandeville south of London, England in mid-summer.

Provided the athlete remains healthy, identify key training and preparatory goals for the 2-year plan. Use the following headings as foundations for your long-term plan.

Dhygiaal Eithaga:
Physical Fitness:
<del></del>
<del></del>
<del></del>
Psychological Preparation:
- Cychological Formation
<del></del>
Travel & climate considerations:

Lead-up & Test Tournaments:
Medication and Dietary Needs:
Equipment preparation:
Equipment testing:

Comments:
<del></del>
Exercise #2: Shooting on slopes
This exercise is useful preparatory work for outdoor simulation and shooting. You will need: a video camera, notebook, blocks/steps/obstacles to create slope.
With your archer and a video camera, work indoors to establish the vertical position for both body and bow. Next, change the archer's footing with steps, blocks, obstacles either fixed or moveable.
Re-record the archer shooting to check both body and bow position. Record your findings.
Move the blocks (your pretend slope) to change the variable from uphill to downhill to contour shooting. Note any difficulties the archer has to maintain the upright, vertical position.
Correct the archer's body and bow position. Give specific training exercises for the archer to improve the body and bow position relative to the target.

# Exercise #3: Estimating Distance



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Through practice and experimentation, mark the archer's sight in 5-meter increments, and then using a fine waterproof marker, *calibrate it for every meter in between 5 and 60 meters*. Make sure the sight marks are accurate, in meters, not an arbitrary numbering system employed by the sight manufacturer.

Start at an intermediate distance for the round such as 35 meters. Put the sight mark on 37 meters and shoot. Note how much higher the arrow impact was than it should have been. The archer must remember what a two- or three-meter error looks like in the target face or on the animal. Repeat this process, but this time set the sight for 33 meters. Note how much lower the impact was than desired. The same results can be obtained by keeping the sight on 35 meters and walking forwards until the arrow does not strike the middle, and backwards. Record the distance and the arrow placement in the butt.

Do this same exercise for archers using fixed pins as sighting aids and *study the gap* between pins. This is particularly important for 3D shooters. Not only will this teach the fixed-pin shooter where to aim, the pins also "frame" the animal for distance estimation.

Repeat this whole exercise at the longest legal distance for the round and the shortest since the sight marks appear to "invert" when the target is very close.

Now, set out a target at an unknown distance. Make sure you do not walk straight back from the target to the archer (pacing off distances is one of the popular "strategies" in distance estimation). Give the archer adequate time to estimate the distance. Regard the archer's form as the shot is made. Note any problems or movements during the release. Depending upon where the arrow hit, have the archer tell you where the next arrow should be aimed or how much the sight should be moved, and why. Shoot the second and third arrow if necessary until the center of the aiming point is hit.

Repeat this exercise at a variety of distances with a variety of target butt sizes.

Overall Comments:	

Now return to the manual.



# Exercise #4: Travelling

Your athlete is travelling to shoot a major event in Banff, Alberta. Your athlete is attending university at Dalhousie (Atlantic Canada). Identify three key training concerns you as the coach must deal with for adequate preparation:

<b>1.</b> 
2.
3.
Briefly describe the actions you would take in order to prepare the archer for this major event.
1.
2.
3.



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## ix) Case Studies

1. The Windy Day

A male recurve archer starts a tournament day with perfect weather conditions. However, by lunchtime the wind has picked up to approximately 15 knots. The wind is blowing from left to right across the field.

Immediately, the archer has trouble aiming and completing the shot. Suggest ways that will:

- a) help the shooter finish through the tournament and
- b) train the archer to handle windy conditions better in the future.


## The 13 year old sensation

The female archer you coach has just broken every national distance record for her age group. Her parents are pushing you to train her to shoot the senior rounds and make the national team. Her draw length is currently 26". She holds 30# shooting her 64" bow. She appears to have stopped growing rapidly, but is a good 2.5-cm shorter than her mother.

What coaching decisions must be made about this girl's archery career? How you will you answer the demands the parents are making and why? What progression would you prefer to follow?

<del></del>	

# 3. Match /Set Play versus Qualifying Round

Your national level male compound shooter is very successful shooting the regular FITA round at local and national tournaments. In particular, his 70-meter scores are extremely competitive and consistent. However, every time he shoots the individual elimination rounds, average scores per end drop 5-6 points.

What strategies and training techniques would you employ to correct this problem?	

# 4. Estimating distance with fixed pin sights

The female compound shooter you have been working with has trouble estimating distances on the 3D rounds beyond 35 meters. Currently she is shooting with 3 fixed pins.

What aiming techniques could she employ to help her estimate the longer distances better? Explain your reasoning.

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