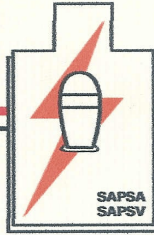


**The South African Practical
Shooting Association**



**Die Suid-Afrikaanse
Praktiese Skietvereniging**

Affiliated to the / Geaffilieer met die
INTERNATIONAL PRACTICAL SHOOTING CONFEDERATION

RANGE MASTER GUIDE

FOREWORD

This guide started out as a set of guidelines to the Range Master on how to manage a competition but took over and grew by itself to what you read below. There is intentional duplication with other SAPSA guides, manuals, etc as much of the information is applicable to many other competition appointments. This guide is intended to be complete by itself so that the minimum of reference to other documents is necessary.

This is, of course, only a guide and does not claim to be the one and only answer to the Range Master's questions. There is nothing that can replace common sense. Any and all inputs to improve this guide will be appreciated and can be directed to the SAIRO Executive.

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Acknowledgement

This guide has drawn extensively on existing SAPSA documents that have been edited, with lots of other stuff added. It escaped and has grown to cover much more than was originally intended. Sources have been indicated as far as possible.

Compiled and edited by Daan Kemp, 2007.

RANGE MASTER'S GUIDE

- Appendix A: Chepit's Tips
 B: Reshoots
 C: Course of Fire Vetting Checklist
 D: Range Master's Report
 E: Stage Walkthrough Format

CHAPTER 1: INTRODUCTION

A range master in IPSC is both a rank and an appointment. On the one hand it is the senior rank you can attain in IROA and SAIRO and on the other hand the most senior appointment at an IPSC competition is that of range master. This causes some ambivalence in the role of both as the range master of a match may be an ordinary RO with IROA and SAIRO range masters on his crew. This example may seem absurd but that is also the way that we develop the skills and capacity of the RO body.

With the above in mind the reader must realise that this guide is intended on the one hand for those ROs who have reached the most senior rank and on the other hand for those ROs appointed as the range master for a competition, from IPSC level I to level V, no matter how large or small.

On the one hand this guide aims to assist you in taking the next step in the natural progression of IPSC Officials, ie the transition from Chief Range Officer to Range Master. You will find that your responsibilities expand dramatically, although much of the work remains the same. This guide will address the roles and duties of various range officials, multi match management skills, the procedures of match planning and the guidelines and regulations of course design.

On the other hand this guide is also designed to provide the range officer with the knowledge and guidance to run and manage an IPSC competition as the range master of that competition.

The development of a Chief Range Officer to become a Range Master is vital for the continued safety and efficient conduct of IPSC shooting. Officials are the backbone of IPSC competition, and **good** officials always bring desire, enthusiasm, and commitment to the sport. There is a direct relationship between the quality of the officiating and the quality of the competition: the better the officials and the officiating, the better the match.

The ***International Range Officer Association*** and the many National Range Officer Associations, including SAIRO, were established to provide in this requirement for quality range officials. They are intended to provide the structure for the appointment, recognition, and administration of Range Officers. These organizations ensure that IPSC Range Officers are the best trained, the best qualified, and the best prepared range officials there are, all to a world wide standard.

Final thought: Remember the reasons why competitors shoot large important matches.

Proficiency. To see how they compare to the best. This is why it is important to show all the scores and have daily postings so competitors, no matter what level, can track their performance.

Friendship. To meet other people sharing the same interests. This happens naturally but creative

squadding can help, i.e. national teams with other national teams, and not with others from their own region, etc. This is one reason why a general lunch break is recommended.

Education. Learn more about the sport. For this reason it is important to consider what competitors will learn from this match and take back with them.

CHAPTER 2: ROLES AND RESPONSIBILITIES

ROLE OF THE RM

1. The role of the RM is defined in the IPSC rule book in Section 7.1.5:

7.1.5 Range Master (“RM”) – has overall authority over all persons and activities within the entire range, including range safety, the operation of all courses of fire and the application of these rules. All match disqualifications and appeals to arbitration must be brought to his attention. The Range Master is usually appointed by and works with the Match Director, however, in respect of IPSC sanctioned Level IV or higher matches, the appointment of the Range Master is subject to the prior written approval of the IPSC Executive Council.

2. As experienced Range Officers, you will take on new responsibilities on becoming a Range Master. Certainly, you will still act as the primary official (who does it all) at league and club matches but you will also be placed in charge of a complete range team in larger competitions or in charge of the competition. You will very likely be required to manage a number of stages and teams at Level III and higher matches. You will become a manager of sorts. Your job will include the planning and preparation of safe high-quality courses of fire as well as the direction of other officials and the smooth “on time” operation of a number of stages. Other officials will look to you to provide competent decisions on rulings they will have to make as part of your team. Experienced CROs are often appointed as Range Master at level I and II matches, providing experience and development.

RULES AND THE RANGE MASTER

3. All the IPSC Rules 2006 Edition relevant to the Range Master are quoted below. This is quite lengthy but will give you an idea of what the duties of the RM are. Some aspects are highlighted to indicate the specific authority of the RM. It is in many ways an eye opener to see what the RM’s duties actually are and what authority and responsibility he really has.

4. The rules are not in number order but start at the beginning of the competition and continues through it to arbitration and calibration. Only the relevant part of the rule is quoted to keep it as short as possible.

“Appointment

7.3.1 Match organizers must, prior to commencement of a match, appoint a Match Director and a Range Master to carry out the duties detailed in these rules. The nominated Range Master should preferably be the most competent and experienced certified Range Official present (also see Rule 7.1.5). For Level I and II matches a single person may be appointed to be both the Match Director and the Range Master. [Note: If we always appoint the most competent and experienced official when will the rest get the opportunity to be competent and experienced? There should always be an understudy that is appointed to learn]

7.1.5 Range Master (“RM”) – **has overall authority over all persons and activities within the entire range, including range safety, the operation of all courses of fire and the application of these rules.** All match disqualifications and appeals to arbitration must be brought to his

attention. The Range Master is usually appointed by and works with the Match Director, however, in respect of IPSC sanctioned Level IV or higher matches, the appointment of the Range Master is subject to the prior written approval of the IPSC Executive Council.

7.2.1 The Range Master has **authority over all match officials** other than the Match Director (except when the Match Director is actually participating as a competitor at the match), and is responsible for decisions in matters concerning conduct and discipline.

Match Officials

7.1.1 Range Officer ("RO") – issues range commands, oversees competitor compliance with the written stage briefing and closely monitors safe competitor action. He also declares the time, scores and penalties achieved by each competitor and verifies that these are correctly recorded on the competitor's score sheet (under the authority of a Chief Range Officer and Range Master).

7.1.2 Chief Range Officer ("CRO") – is the primary authority over all persons and activities in the courses of fire under his control, and oversees the fair, correct and consistent application of these rules (under the authority of the Range Master).

7.1.3 Stats Officer ("SO") – collects, sorts, verifies, tabulates and retains all score sheets and ultimately produces provisional and final results. Any incomplete or inaccurate score sheets must be promptly referred to the Range Master (under direct authority of the Range Master).

7.1.4 Quartermaster ("QM") – distributes, repairs and maintains all range equipment (e.g. targets, patches, paint, props etc.), Range Officer appliances (e.g. timers, batteries, staplers, staples, clipboards etc.) and Range Officer rations (under direct authority of the Range Master).

7.1.6 Match Director ("MD") – handles overall match administration including squadding, scheduling, range construction, the coordination of all support staff and the provision of services. His authority and decisions will prevail with regard to all matters except in respect of matters in these rules which are the domain of the Range Master. The Match Director is appointed by the host organization and works with the Range Master.

7.2.2 In the event that a Match Official is disciplined, the Range Master must send a report of the incident and details of the disciplinary action to the Match Official's Regional Director, the Regional Director of the Region hosting the match, and to the President of the International Range Officers Association (IROA).

7.2.3 A Match Official who is disqualified from a match for a safety infraction while competing will continue to be eligible to serve as a Match Official for the match. The Range Master will make any decision related to an official's participation.

7.3.2 References in these rules to Range Officials (e.g. "Range Officer", "Range Master" etc.), mean personnel who have been officially appointed by match organizers to actually serve in an official capacity at the match.

Stage administration

2.1.1 Physical Construction – Safety considerations in the design, physical construction, and stated requirements for any course of fire are the responsibility of the host organization subject to the approval of the Range Master.

2.3.1 Match Officials may, for any reason, modify the physical construction or stage procedure for a course of fire, provided that such changes are approved in advance by the Range Master.

2.3.3 If the Range Master approves any such action after the match begins he must either:

2.3.3.1 Allow the course of fire to continue with the modification affecting only those competitors who have not already completed the stage. If a competitor's actions caused the change, that competitor must be required to reshoot the altered course of fire; or

2.3.3.2 If possible, require all competitors to complete the course of fire as revised with all previous attempts removed from the match scores.

2.3.3.3 A competitor who refuses to reshoot a course of fire, under this or any other Section, when so ordered by a Range Official, will receive a zero score for that stage, irrespective of any previous attempt.

2.3.4 If the Range Master (in consultation with the Match Director) determines that the physical or procedural change results in a loss of competitive equity and it is impossible for all competitors to attempt the revised stage, or if the stage has been rendered unsuitable or unworkable for any reason, that stage and all associated competitor scores must be deleted from the match.

2.3.5 During **inclement weather**, the Range Master may order that paper targets be fitted with transparent protective covers and/or overhead shelters, and this order is not subject to appeal by competitors (see Rule 6.6.1). Such items must be applied and remain fitted to all affected targets for the same period of time, until the order is rescinded by the Range Master.

2.3.6 If the Range Master (in consultation with the Match Director) deems that **climatic or other** conditions have, or are likely to, seriously affect the safety and/or conduct of a match, he may order that all shooting activities be suspended, until he issues a "resume shooting" directive.

8.7.5 No person is permitted to enter or **move through a course of fire** without the prior approval of a Range Officer assigned to that course of fire or the Range Master. ..

Vendor Area

2.5.2 The Range Master (in consultation with the Match Director) must clearly delineate the **vendor area**, and he may issue "Acceptable Practice Guidelines" to all vendors, who are responsible for their implementation in respect of their own merchandise.

Stage briefing

3.2.1 A written stage briefing approved by the Range Master must be posted at each course

of fire prior to commencement of the match.

3.2.3 The Range Master may modify a written stage briefing at any time for reasons of clarity, consistency or safety (see Section 2.3).

Range

4.2.2.1 The face of paper no-shoots must include a sufficiently distinguishable non-scoring border. In the absence of perforations or other suitable markings, the Range Master must order that all affected targets have a replacement non-scoring border drawn or fitted thereon.

4.5.2 The competitor may request that Match Officials take corrective actions to ensure **consistency in respect of the range surface**, the presentation of targets and/or any other matter. The Range Master will have final authority concerning all such requests.

Firearms

5.1.3.3 The Range Master is the final authority in respect of the **classification of any sights** used in an IPSC match and/or their compliance with these rules, including the Divisions in Appendix D.

5.1.6 Firearms must be serviceable and safe. Range Officers may demand examination of a competitor's firearm or related equipment, at any time, to check they are functioning safely. If any such item is declared **unserviceable or unsafe by a Range Officer**, it must be withdrawn from the match until the item is repaired to the satisfaction of the Range Master.

5.1.7 Competitors must use the same handgun and type of sights for all courses of fire in a match. However, in the event that a competitor's original rifle and/or sights become unserviceable or unsafe during a match, the competitor must, before using a substitute rifle and/or sights, seek permission from the **Range Master who may approve the substitution** provided he is satisfied:

5.1.8 A competitor who substitutes or significantly modifies a handgun during a match without the prior approval of the Range Master will be subject to the provisions of Section 10.6.

5.4.6 If a Range Officer deems that a competitor about to make an attempt at a course of fire is **wearing inadequate eye or ear protection**, the Range Officer may order the competitor to rectify the situation before allowing the competitor to continue. The Range Master is the final authority on this matter.

5.7.1.1 A competitor who experiences a firearm malfunction while responding to the "Load And Make Ready" or "Make Ready" command, but prior to issuance of the "Start Signal", is entitled to retire, under the authority and supervision of the officiating Range Officer, to repair his firearm, without penalty, subject to the provisions of Rule 5.7.4, Rule 8.3.1.1 and all other safety rules. Once the repairs have been completed (and the provisions of Rule 5.1.7 have been satisfied, if applicable), the competitor may return to attempt the course of fire, subject to **scheduling** as determined by the officiating Range Officer or Range Master.

Chronograph

5.6.2.4 Should a **daily variance** exceed the allowable tolerance stated above, the Range Master will take whatever steps he deems necessary to rectify the situation.

5.6.3.11 If the Range Master deems that a match **chronograph** has become inoperative, and further testing of competitor's ammunition is not possible, the power factors of competitors which have been successfully tested will stand, and the "Major" or "Minor" power factors declared by all other competitors who have not been tested will be accepted without challenge, subject to any applicable Division requirements (see Appendices).

Division

6.2.5 **Where a Division is unavailable or deleted**, or where a competitor fails to declare a specific Division prior to the commencement of a match, the competitor will be placed in the Division which, in the opinion of the Range Master, most closely identifies with the competitor's equipment. If, in the opinion of the Range Master, no suitable Division is available, the competitor will shoot the match for no score.

6.2.5.2 A competitor who is classified or reclassified as above must be notified as soon as possible. The Range Master's decision on these matters is final.

Scoring

9.6.5 In the event that the Range Officer upholds the original score or penalty and the competitor is dissatisfied, he may **appeal** to the Chief Range Officer and then to the Range Master for a ruling.

9.6.6 The **Range Master's ruling will be final**. No further appeals are allowed with respect to the scoring decision.

9.6.8 **Scoring overlays** approved by the Range Master must be used exclusively, as and when required, to verify and/or determine the applicable scoring zone of hits on paper targets.

9.7.3 Should a competitor refuse to **sign or initial a score sheet**, for any reason, the matter must be referred to the Range Master. If the Range Master is satisfied that the course of fire has been conducted and scored correctly the unsigned score sheet will be submitted as normal for inclusion in the match scores.

9.7.6.5 If the identity of the competitor is missing from a score sheet, it must be referred to the Range Master, who must take whatever action he deems necessary to rectify the situation.

9.7.7 In the event that an original **score sheet is lost** or otherwise unavailable, the competitor's duplicate copy, or any other written or electronic record acceptable to the Range Master, will be used. If the competitor's copy, or any other written or electronic record, is unavailable, or is deemed by the Range Master to be insufficiently legible the competitor will be required to reshoot the course of fire. If the Range Master deems that a reshoot is not possible for any reason, the competitor will incur a zero time and score for the affected course of fire.

10.1.3 A competitor **disputing the application or number of procedural penalties** may appeal to the Chief Range Officer and/or Range Master. A competitor who continues to be aggrieved may

then lodge an appeal for arbitration.

Special dispensation and penalty

8.6.1.1 Competitors confined to wheelchairs or similar devices may be given **special dispensation** by the Range Master in respect of mobility assistance, however, the provisions of Rule 10.2.11 may still apply, at the Range Master's discretion.

10.2.11 **Special penalty:** A competitor unable to fully execute any part of a course of fire due to incapacity or injury may, prior to making his attempt at the course of fire, request that the Range Master apply a penalty in lieu of the stated course requirement.

10.2.11.1 If the request is approved by the Range Master, a minimum of one procedural penalty, up to a maximum penalty of 20% of the competitor's points "as shot" (rounded up to the nearest whole number), will be deducted from the competitor's score. For example, if 100 points are available in the course of fire and the competitor actually scores 90 points, the special penalty is a deduction of 18 points. However, the Range Master may waive any or all procedural penalties in respect of a competitor who has a significant physical disability prior to the competitor making his attempt at the course of fire.

Disqualification

10.3.2 When a **match disqualification** is issued, the Range Officer must record the reasons for the disqualification, and the time and date of the incident, on the competitor's score sheet, and the Range Master must be notified as soon as possible.

10.3.3 Scores for a competitor who has received a match disqualification must not be deleted from match results, and match results must not be declared final by the Match Director, until the time limit prescribed in Rule 11.3.1 has passed, provided no appeal to arbitration on any matter has been submitted to the Range Master (or his delegate).

10.4.9 Exception: When it can be established that the cause of the discharge is due to a broken or defective part of the firearm, the competitor has not committed any safety infraction in this Section, and a match disqualification will not be invoked, however, the competitor's scores for that course of fire will be zero. The firearm must be immediately presented for inspection to the Range Master or his delegate, who will inspect the firearm and carry out any tests necessary to establish that a broken or defective part caused the discharge. A competitor may not later appeal a match disqualification for an accidental discharge due to a broken or defective part if they fail to present the firearm for inspection prior to leaving the course of fire.

10.6.1 Competitors will be disqualified from a match for conduct which a Range Officer deems to be unsportsmanlike. Examples of unsportsmanlike conduct include, but are not limited to, cheating, dishonesty, failing to comply with the reasonable directions of a Match Official, or any behaviour likely to bring the sport into disrepute. The Range Master must be notified as soon as possible.

Drugs

10.7.3 Except when used for medicinal purposes, competitors and officials at matches must not

be affected by drugs (including alcohol) of any sort during matches. Any person, who in the opinion of the Range Master is visibly under the influence of any of the items described herein, will be disqualified from the match and may be required to leave the range.

Appeals and arbitration

11.1.3 Appeals – the Range Officer makes decisions initially. If the appellant disagrees with a decision, the Chief Range Officer for the stage or area in question should be asked to rule. If a disagreement still exists, **the Range Master must be asked to rule.**

11.1.5 Retain Evidence – An appellant is required to inform the Range Master of his wish to present his appeal to the Arbitration Committee and may request that the officials retain any and all relevant documentary or other evidence pending the hearing. ...

11.1.6 Preparing the Appeal – The appellant is responsible for the preparation and delivery of the written submission, together with the appropriate fee. Both must be submitted to the Range Master within the specified period of time.

11.1.7 Match Official's Duty – Any Match Official in receipt of a request for arbitration must, without delay, inform the Range Master and must note the identities of all witnesses and officials involved and pass this information on to the Range Master.

11.1.8 Match Director's Duty – Upon receiving the appeal from the Range Master, the Match Director must convene the Arbitration Committee in a place of privacy as soon as possible.

11.3.1 Time Limit for Arbitration Request – Written requests for arbitration must be submitted to the Range Master within one hour of the disputed incident or occurrence. Failure to present the required documentation within the time specified will render the request invalid and no further action will be taken.

11.4.1 Amount – For Level III or higher matches, the appeal fee to enable an appellant to appeal to arbitration will be US\$100.00 or the equivalent of the maximum individual match entry fee (whichever is lower), in local currency. The appeal fee for other matches may be set by the Match Organizers, but must not exceed US\$100 or equivalent in local currency. An appeal brought by the Range Master in respect of a match issue will not incur a fee.

11.6.1 Committee Decision – When a decision is reached by the Committee, they will summon the appellant, the official and the Range Master to present their judgement.

11.6.2 Implement Decision – It will be the responsibility of the Range Master to implement the Committee's decision. The Range Master will advise the appropriate match personnel who will post the decision in a place available to all competitors. The decision is not retroactive and will not affect any incidents prior to the decision.

11.6.3 Decision is Final – The decision of the Committee is final and may not be appealed unless, in the opinion of the Range Master, new evidence received after the decision warrants reconsideration.

Calibration/Testing of Poppers

1. The Range Master must **designate a specific supply of ammunition** and one or more firearms to be used as official calibration tools by officials authorized by him to serve as calibration officers.
3. Once the supply of ammunition and the designated rifles have been tested and approved by the Range Master, they are not subject to challenge by competitors.
4. The Range Master must arrange for **each popper to be calibrated** prior to commencement of a match, and whenever required during a match.”

RESPONSIBILITIES

5. It should by now be abundantly clear that the Range Master has more authority than you thought but also has responsibilities much clearer than would seem at first glance. These responsibilities are the same no matter where you are in the world. The success of a competition lies in the way that the Rules are applied.
6. SAIRO's approach to appointing Range Masters for national level competitions is for as many range officers as possible to get the experience without sacrificing safety or the good management of the competition. This in itself requires that the most experienced person be appointed as Range Master, with an understudy to get the experience. The choice of Range Master lies primarily with the hosting province but approval is vested in the Regional Directorate [Appendix A to the Rules].
7. It is the custom in SAPSA that after appointment of the Range Master he has the responsibility to arrange the range officers. SAIRO assists in this but the primary responsibility for sufficient Range Officers for the competition now lies with the province and its range master for the competition. The Range Master must keep up to date with the movement of his Range Officers for the competition. Call those who haven't responded to the request for Range Officers. Rather be in the position of having to reduce the numbers applying than having to worry about unqualified personnel on the range.
8. The Range Master must ensure that the stage packs/RO boxes are prepared for each stage every day. This is done in conjunction with the stats staff.
9. Have a social function with all the range officers on the evening before the competition starts. Start the function with a short briefing in what is expected specifically at this competition. Go through each stage with the specific range officers to ensure that they understand what is expected, such as which way up on activators, etc. Those who can't make it that evening must be briefed the next morning before they start their stage.

CHAPTER 3: IPSC PRINCIPLES

It is essential for the RM to know what the principles of his sport is. This allows him apply the rules correctly and advise competitors appropriately. The principles start with the principles of IPSC, which comes from the IPSC Constitution.

“3. Principles/Objects

*The IPSC is established to promote, maintain, improve and advance practical shooting, to safeguard its principles and to regulate its conduct world wide in order to cultivate the safe and efficient use of firearms by persons of good character and in particular, but without prejudice to the generality of the foregoing, to achieve such objects by adhering to the following principles, which are established to define the nature of practical marksmanship and are embodied in the following words:- **Diligentia-Vis-Celeritas**, namely, Accuracy, Power and Speed. They are accepted by all members of the International Practical Shooting Confederation as conditions of membership.*

- 1. Practical competition is open to all reputable persons without regard to occupation, it may specifically not be limited to public servants.*
- 2. Accuracy, power and speed are the equivalent elements of practical shooting and practical competition must be conducted in such a way as to evaluate these elements equally.*
- 3. Firearm types are not separated, all compete together without handicap. This does not apply to the power of the firearms as power is an element to be recognised and rewarded.*
- 4. Practical shooting competition is a test of expertise in the use of practical firearms and equipment. Any item of equipment, or modification to equipment, which sacrifices practical functionality for a competitive advantage contravenes the principles of the sport.*
- 5. Practical competition is conducted using practical targets, which reflect the general size and shape of such objects as the firearm used may reasonably be called upon to hit in their primary intended use.*
- 6. The challenge presented in practical competition must be realistic. Courses of Fire must follow a practical rationale, and simulate sensible hypothetical situations in which firearms might reasonably be used.*
- 7. Practical competition is diverse. Within the limits of realism, problems are constantly changed, never permitting unrealistic specialisation of either technique or equipment. Courses of Fire may be repeated, but no course may be repeated enough to allow its use as a definitive measure of practical shooting skill.*
- 8. Practical competition is free-style. In essence, the competitive problem is posed in general and the participant is permitted the freedom to solve it in the manner he considers best within the limitations of the competitive situation as provided.”*

The IPSC constitution

IPSC RULES AND GENERAL PRINCIPLES

IPSC Rules form the basis of our sport, as does the rules for any sport. The Rules set standards for competition around the world and ensure safety in a sport that is intrinsically dangerous but at the same time inherently safe. We as officials organize and run these competitions so competitors may shoot an IPSC match anywhere in the world in a safe organized manner.

Knowledge of the Principles enables the RM to apply the rules correctly.

“The following general principles of course design list the criteria, responsibilities and restrictions governing course designers as the architects of the sport of IPSC shooting.

1.1 General Principles

1.1.1 Safety – IPSC matches must be designed, constructed and conducted with due consideration to safety.

1.1.2 Quality – The value of an IPSC match is determined by the quality of the challenge presented in the course design. Courses of fire must be designed primarily to test a competitor’s IPSC shooting skills, not their physical abilities.

1.1.3 Balance – Accuracy, Power and Speed are equivalent elements of IPSC shooting, and are expressed in the Latin words "Diligentia, Vis, Celeritas" (“DVC”). A properly balanced course of fire will depend largely upon the nature of the challenges presented therein, however, courses must be designed, and IPSC matches must be conducted in such a way, as to evaluate these elements equally.

1.1.4 Diversity – IPSC shooting challenges are diverse. While it is not necessary to construct new courses for each match, no single course of fire must be repeated to allow its use to be considered a definitive measure of IPSC shooting skills.

1.1.5 Freestyle – IPSC matches are freestyle. Competitors must be permitted to solve the challenge presented in a freestyle manner, and to shoot targets on an "as and when visible" basis. After the start signal, courses of fire must not require mandatory reloads nor dictate a shooting position, location or stance, except as specified below. However, conditions may be created, and barriers or other physical limitations may be constructed, to compel a competitor into shooting positions, locations or stances.

1.1.5.1 Level I and Level II matches are not required to comply strictly with the freestyle requirements or round count limitations (see Section 1.2).

1.1.5.2 Standard Exercises and Classifiers may include mandatory reloads and may dictate a shooting position, location or stance, however, mandatory reloads must never be required in other Long Courses.

1.1.5.3 Standard Exercises and Classifiers may specify shooting with the strong hand or weak hand unsupported. The specified hand must be used exclusively from the point stipulated for the remainder of the string or stage.

1.1.6 Difficulty – IPSC matches present varied degrees of difficulty. No shooting challenge or time limit may be appealed as being prohibitive. This does not apply to non-shooting challenges, which should reasonably

allow for differences in competitor's height and physical build.

1.1.7 Challenge – IPSC Handgun matches recognize the difficulty of using full power handguns in dynamic shooting, and must always employ a minimum caliber and power level to be attained by all competitors to reflect this challenge.”

RANGE OFFICER'S CREED

The range officer's creed is the epitome of brevity but at the same time clarity in how to act under all competition conditions. This is taken from the IROA web page.

“As an IPSC Range Officer, I shall conduct all competitions with the safety of the competitors, spectators and fellow Range Officials first and foremost in my thoughts and actions. I shall always be courteous while maintaining firm control over my range and areas of responsibility. I will always strive to be totally fair and impartial in my judgments.

- 1. Safety shall always be my primary goal, with efficiency and speed of the competition as secondary factors.*
- 2. It is a privilege and an honour to serve as a Range Officer and I shall act accordingly.*
- 3. It is my duty to assist all competitors in their attempts to accomplish their goals and not to hinder them by undue harassment and authoritarian behaviour.*
- 4. I shall put aside personal prejudices and act as an impartial judge at all times.*
- 5. I shall keep my opinions to myself and shall not be critical of any individual beyond the field of contest.*
- 6. I will thoroughly familiarize myself with all current regulations, match rules and attendant subjects.*
- 7. I will be firm and fair in all judgmental calls made during the course of a stage, and be prepared to state in a clear and concise manner my reasons for such calls to the particular competitor or any Range Official.*
- 8. During the course of a stage, my attention shall be clearly focussed on the particular competitor I am assigned to observe, and I shall not permit my attention to be misdirected or lax.*
- 9. Prior to and during a stage, I shall never consume any alcoholic beverage or narcotic. I understand that if I violate this rule, I may be suspended or barred from serving as a Range Official in the future.*
- 10. I shall confer only with my fellow Range Officers and Match Officials concerning the behaviour of any competitor and any decisions to be rendered.*
- 11. I shall exercise due consideration for the personal emotions of any competitor, and shall*

act in a manner so as not to embarrass or disturb the competitor any more than is absolutely necessary.

12. *I shall strive to never give even the appearance of wrongdoing.”*

The IROA web page

CHAPTER 4: RANGE OFFICER ASSOCIATIONS

INTERNATIONAL RANGE OFFICERS ASSOCIATION (IROA)

1. IROA was established as part of IPSC, as is SAIRO part of SAPSA. The purpose and goals of IROA are as follows:

“The Purpose and Goals of IROA

Establish international training standards for IPSC Range Officials.

Advise on aspects relating to the safe conduct of competition.

Advise on rules of competition and principles of good course design.

Provide assistance to Regions in establishing their National Range Officer Organizations.

Publish a periodic newsletter.

Maintain an organized world-wide team of internationally accredited officials.

Serve and support Level III, IV and Level V Matches.

Advise and set recommended minimum standards, and an annual maintenance program for IPSC Officials.”

The IROA web page

IROA Activities

2. To carry out the purpose and goals of IROA, the IROA management will carry out the following activities:

Consider and advise on aspects relating to the safe conduct of competitions and on IPSC rules of competition.

Define the criteria and requirements for Range Officers, Chief Range Officers, and Range Masters and establishes international training standards for IPSC Range Officials.

Establish an annual maintenance program to generate a sense of pride in being an IPSC official.

Define the criteria and standards for Range Officer and Chief Range Officer training.

Define the criteria and requirements for Administrators (instructors).

Provide assistance to Regions in instituting their National Range Officers Institute.

Provide a periodic newsletter available to all IPSC Officials.

Maintain an organized, world-wide "team" of internationally recognized officials.

Maintain and update an IROA manual for officials which would contain guidelines and policy for multi-stage match administration, arbitration proceedings, course and match design, etc.

Certify International Officials only.

International Range Master (RM)

Membership Requirements:

- Must be a current member of his Region.
- Must be a current working member of his Region' NROI and hold a rank of RM.
- Must be a current International Chief Range Officer.
- Must have accumulated a minimum of 55 match points at IPSC Level III or higher matches, including at least 1 Level IV or V as a CRO.
- Must have worked as a RM at 3 or more IPSC Level III or higher matches.
- Must be sufficiently fluent in English to be able to fulfil the duties of a RM in an internationally sanctioned match.

The IROA Member Handbook will provide more detail on IROA.

THE SOUTH AFRICAN INSTITUTE OF RANGE OFFICERS (SAIRO)

3. The particulars of SAIRO is covered in the Range Officers' Manual and will not be covered in detail here. The objectives of SAIRO in general are to promote, maintain, train, improve and advance officials for competitions and in particular to:

- a. Provide considered opinion and recommendations to the Association for implementation.
- b. Subject to the approval of the Association:
 - i. Consider and advise on aspects relating to the safe conduct of competitions and on the IPSC Rules of competition. However, the authority to recommend amendments remains with the Association.
 - ii. Provide assistance to member organisations in instituting their own Range Officers Institutes, when requested by the chairperson of a member organisation.
 - iii. Define the criteria and requirements for National SAIRO&I Officials in the form of a policy document, in accordance with the guidelines laid down by IROA.
 - iv. Have available training tools, i.e. course outlines, teaching aids, course material and exams, etc.
 - v. Define the criteria and requirements for course administrators.
 - vi. Register all Match Officials as members of SAIRO&I.
 - vii. Establish an annual maintenance program that will promote a sense of pride in being a Match Official and endorse a program of international recognition.
 - viii. Assist the SAPSA Executive Committee with approval of national courses

of fire. However, SAIRO&I do not have the authority to approve courses of fire as such.

- ix. Maintain and update an SAIRO&I manual for officials, which would contain guidelines and policy for multi-stage match administration, arbitration proceedings, course and match design, etc., in accordance with IROA guidelines SAIRO carries out the following:

Conducts range officer training seminars in accordance with international training standards.

Certifies national range officers.

Advises the Regional Director on aspects relating to the safe conduct of competitions.

Advises the Regional Director on Rules of Competition.

Maintains a register of all SAIRO officials.

Manages the SAIRO official maintenance program.

SAIRO Certification as National Range Master

****Qualification Requirements**

1. Must be a SAPSA member.
2. Must be a certified current CRO.
3. Must have accumulated a minimum of 35 level III and higher match points with at least one level IV or V match.
4. Must have worked as a Match Director or Range Master at a level III or higher match.
5. Must be recommended by the SAPSA and SAIRO Chairmen.
6. Must have candidacy upheld by a poll of the SAIRO board members.
7. Must have the unanimous approval of the SAIRO Executive.
8. Must have the approval of the SAPSA Executive.

Minimum Annual Maintenance Requirements

1. Must be a SAPSA member.
2. Must accumulate 9 match points per year, of which at least one must be a level III or higher match.
3. An RM certificate is valid for a period of three years. If an RM is not active for two consecutive years, his/her name will be marked as inactive in the RO database and will not be issued with a new RM certificate on expiry of the date on the certificate.

Any official not attaining their required maintenance match points for the calendar year may re-certify for the next year, at their level, by attaining 4 supervised match points.

* Provincial approval

** SAPSA approval

CHAPTER 5: MATCH PLANNING AND ADMINISTRATION

MATCH STRATEGY

1. Planning. The most important factor in organizing a large match is PLANNING. The value of proper planning cannot be over emphasized. Remember the 4 Ps - Planning Prevents Poor Performance.
2. Time required for Planning. The recommended period for planning per stage is two weeks per stage.
3. Elements of a Match. The elements of a match are always:

COURSE OF FIRE	See Chapter 6.
ORGANIZATION	Discussed further in this guide.
RECOGNITION	See the Club Administration Guide.
4. Meetings and Committees. A lot of communication and co-ordination is essential to the success of planning the match. This requires many committees if the match is of any size. The priorities of the first match meeting are:

SET COMMITTEES - what needs to be done?
SET PERSONNEL - who is responsible for it getting done?
SET TIME TABLE - within what time frame?

Any subsequent meetings will consist of ANY PROBLEMS AND REVIEW TIME TABLE. The various committees are described in the table below.

MATCH ORGANIZATION FOR LEVEL III TO V MATCHES

5. The officials should be organized and placed to provide consistency, back-up expertise and overlapping responsibilities. This requires a system that will provide rotating coverage on the ranges where the Range Officer may be required to cover a larger area (long courses and some medium courses). Consistency is provided through the permanent placement of officials on each range. This ensures that the competitors will face the same range conditions on day 5 as on day 1 and is of absolute importance. There is no other method which provides the confidence and reliability.
6. In larger matches, there is a certain degree of physical stress. It is normal for a range official to be appointed for oversight in an area of the match to assist the stage range officials in solving any problems earlier and ease the load of the Range Master.
7. A Level IV is 24 stages arranged in 4 areas while a Level V is 35 stages arranged in 5 areas. One area or group of stages is shot each day by a number of squads. The chronograph is not included in the stage total but is a squadded stage.
8. Range Officials required for a Level IV or V match

Range Master	2
Area Chief Range Officer	1 per area
Chief Range Officer	1 per stage
Range Officer	1 or 2 per stage
Score keeper	1 per stage
Stats	crew of 6-8 (including an IROA SO)
Quartermaster	1 or 2
Range crew	2 to 5

The officials list above provides considerable depth and versatility. Typically, the Range Officers and Score Keepers are provided by SAIRO. The rest of the officials for level III and higher are IROA. Smaller matches utilise similar systems by simply downsizing both the numbers and positions shown above. The structure, however, remains the same.

9. RM Equipment

The RM for the match should have the following with him:

- A copy of the appropriate Rules and an overlay.
- Several rolls of patches.
- A radio so that all can contact you.
- Complete copy of the amended and updated CoF and walk throughs.

10. How to Allocate CRO/RO to Stages

The Range Master is also responsible to allocate the range officers per stage. In this he must make sure that the experience is not concentrated in one area of the range but available all over. An IROA or SAPSA range master must be allocated per area, with the chief range officers covering any gaps

- Allocate a CRO per stage, first the IROA and then the SAIRO RM and CRO.
- Allocate the younger and more mobile ones to the longer courses but make sure that there is enough experience close by for advice.
- Place the most experienced ones on the stages most likely to cause problems.
- Pair up ROs who can work together and change them as required. Do not hesitate to reallocate ROs to improve stages, for development, etc.
- Allocate the Regional Director [if an RO] to a short stage with a competent assistant in case he is required for arbitration.

Put up the stage allocation per range officer in an easily visible place as soon as you get to the range.

11. RM Report and Debrief

The debriefing collates all the comment and input of the ROs about what went right and wrong in general and per stage, and what can be improved in general and in detail. Make certain that all the ROs know that there will be a debrief. It allows the ROs to cool off and defuse after some days of hard work. It affords closure so that what happened at the competition usually stays there and does not fester on.

Format of the Debrief

General. Ask for comments by all about general matters not stage specific. Allow them to talk and comment but keep control. This is not a bullshit session. Stop after a while and then go according to stage. Allow them to talk about the stage. It is intended that the debrief be placed on the SAPSA website in the SAIRO page for all to see and take notice.

Refreshments

Refreshments for the ROs at the debrief come from the entry fees. Co-ordinate with stats for the money and purchase of the refreshments. It should allow about two beers or soft drinks per RO, as a planning figure for money. Do not forget the non drinkers.

The RM Report

The report is intended to give feedback to SAIRO and eventually IROA about the performance of the ROs at the competition, as well as relevant happenings and activities. Include everything you think is appropriate but follow the guideline. See Appendix D for the format of the RM report. It includes the debrief of the ROs after the competition.

Send it to SAIRO within two weeks of the competition, together with the debrief.

12. Liaison with MD, Stats, Log/QM, Repair Crew

The Range Master must keep close contact with the other officials at the match, as he is responsible for all personnel at the match. Be careful to determine what the Match Director's responsibilities are before the match starts. E.g. log/QM and the repair crew will fall under the Match Director, as is the registration process. It can be argued that the equipment check may also fall under the Match Director as this is part of the registration process.

Check with stats regularly for anything to follow up from the score sheets.

13. RO allowance

You are responsible for the correct figures for stats to make up the pay sheet. Take personal responsibility for the ROs receiving their allowance.

14. Calibrate Plates

You have to calibrate the Poppers every morning before the first detail starts. Designate specific

ROs to calibrate if you can't do it yourself. Check the calibration ammunition and guns every day.

15. Manage the Chrono

Appoint a competent person to man the chrono. It is more important than it appears at first glance. Precision handling is essential at every step of the process.

Read the chrono instructions twice. Make sure the ROs in charge of the chrono also read it twice. Only the chrono staff shoot the gun.

Ensure that the shooter holds every gun the same way every time, on sand bag, etc.

Place the chrono in a box, as per photo.

Place the sky screens as per maker's instructions. Ensure that the chrono staff know this.

Have the scale available and weigh the bullets.

Ensure that the gun is level and an aiming point provides consistent reference for shot to shot consistency.

16. How to Handle the Check In, especially the Production Division

This is a very busy time and you must plan the day before how this is going to be done. Appoint your responsible ROs already then, possibly one or more of the senior ones that have competent ROs with them on the stage, so that they can carry on with setting up the stage while he is busy with the checking in.

You cannot be too strict with the check in for production division. Appoint a competent person, preferably an CRO or RM, to be nitpicking finicky.

Every competitor should come to the registration with his equipment on him. Check them before registration so that he is in order before registering.

17. How to handle DQ

Instruct the stage CRO that you be informed immediately of an DQ. Have the competitor wait until you get there. Go to the stage, talk to the RO and the competitor. Make sure that all the admin is done correctly. Make certain that it was indeed a DQ, if not reinstate the competitor. Remember that you as the RM have the authority to overturn a DQ decision if you investigate and find discrepancies, before it goes to arbitration. However, do not do this lightly.

18. What to Watch for during Walk By (Management by walking around)

Walk the same route every time so that you spend equal time at all the stages.

Competitors practising up and down on a stage where only the next one should be.

Handling of guns.

Handling of ammunition in the safe area.

Check long mags.

Check production division start correctly.

Check production division remain so.

Get ROs who have slack time to visit specific stages for specific purposes - check mags, production, draw ammo, etc.

Collect score sheets.

All equipment still working as intended the first day and placed correctly. Compare with the amended and updated CoF and walk throughs.

Check with stats after every walk by and hand in the score sheets collected. Collect any enquiries and deliver them correctly.

19. Scoring Challenges and Enquiries

The Rules are clear. The scoring challenge go up from RO to CRO to RM.

Be very sure that you take all the possibilities into consideration but do not award score because you feel sorry for the shooter. Be fair and consistent.

There is no such thing as the shooter gets the benefit of doubt, score only what you can see.

STAGE ADMINISTRATION FOR LEVEL III AND HIGHER MATCHES

20. Range Officials. At least three range officials are required to run an efficient stage, depending on the size and complexity of the stage. [See the table above for more detail]

Range Officer, watches the firearm and general safety. He issues range commands, oversees competitor compliance with the written stage briefing and closely monitors safe competitor action. He also declares the time, scores and penalties achieved by each competitor and verifies that these are correctly recorded on the competitor's score sheet (under the authority of a Chief Range Officer and Range Master). The primary Range Officer will carry the timer.

Chief Range Officer, has primary authority over all persons and activities in the courses of fire under his control, and oversees the fair, correct and consistent application of these rules (under the authority of the Range Master).

Scorer, watches for faults, range equipment failure and perimeter safety, organizes and controls the paperwork, sets and maintains the shooting order. Records the score on the score sheet and ensures that the score sheet is completed correctly and fully.

21. "On Air" and "Off Air" Time

"On Air" time belongs to the competitor from "Load and Make Ready" to "Range is Clear" (normally 1 - 2 minutes).

"Off Air" time belongs to the Range Officer. This time is used for all other activities such as scoring, patching, painting, repairing, etc. (4 - 5 minutes). A good rule of thumb is 10 competitors per hour or 6 minutes per competitor. It might be more for a long stage and less for a short stage.

Management tips. Announce the shooting order and get the next competitor on the line and briefed before the RO returns from scoring.

22. Stage Construction and Vetting

Rule 1.3 determines IPSC Sanctioning. The Regional Director, Range Master, Match Director, assisted by any other knowledgeable and competent shooters as determined by the organisers, vet and approve each of the stages before the first shot of the competition may be fired.

The Match Director must ensure that sufficient labour and material are available to fix, correct, set

up, change, etc any of the stage construction before the first shot is fired. ee Appendix C for the checklist.

CHAPTER 6: COURSE OF FIRE DESIGN

INTRODUCTION

1. Good course design can make or break any match. The principles set in IPSC Rule 1.1 General Principles are the basis of course design. Adhering to these principles in designing and vetting a course of fire will ensure that the course is challenging, interesting and fun. It is essential that an RM has at least a basic knowledge of course design to be able to:

design courses of fire for his club or province,
set up a course of fire that is safe in respect of containing all shots but also that there is minimal risk of injury to competitors,
set up a course of fire so that it is fun and challenging,
vet a course of fire to ensure that it is safe, conforms to IPSC Rules, and can be easily administered,
build in alternatives to cater for the beginner and expert,
safely and easily “range” it.

2. Course Designer's Mission

To create a course of fire that is safe, exciting, that fairly tests the competitors' skills and equipment.

3. Principal Courses of Fire

Note that any course of fire shall not allow the opportunity for more than the specified number of scoring hits from any single position of view or shoot all targets in the CoF from any single location or view. If a competitor is not required to move their feet, it is the same view. The recommended ratio in a match is 3 short courses/2 medium courses/1 long course.

4. The following broad differences between short/medium/long courses are presented for background information and must not be seen as replacing the Rules:

Short Course	Little or no movement with a maximum of between 5 to 9 rounds and no more than 2 shooting positions or locations.
Medium Course	Between 10 and 20 rounds and no more than 3 positions or locations.
Long Course	Between 20 and 40 rounds to complete and multiple shooting positions or locations.

5. Supplementary Courses of Fire

Standard Exercise	Virginia Count or Fixed Time scoring
	CoF with each string being a different challenge.

	Each string is scored and timed separately. Virginia Count strings must be scored and patched separately.
	Maximum of 24 rounds with each string being a maximum of 6 (or 12 rounds if a mandatory reload is specified).
	Maximum one Standard exercise allowed in Level IV or V competitions
Shoot-Off	Separate from the main match (see Rule 1.2.3).
	Process of elimination.
	Does not affect overall match results.
	Spectator appeal.
	A specified maximum number rounds and may include a reload, depending on the discipline.
Classifier	Courses of fire published by a Regional Directorate and/or IPSC that are available to competitors seeking a regional and/or international classification.
	Classifiers must be set up in accordance with IPSC Rules and be conducted strictly in accordance with the notes and diagrams accompanying them.
	Results must be submitted to the publishing entity in the format required (with the applicable fees, if any), in order for them to be recognized.

6. Scoring Methods

Comstock	Freestyle approach to measure individual performance.
	Total score (minus penalties) divided by time.
	No maximum on the number of rounds fired.
	Stipulated number of shots to score.
	Time stops on last shot.
Virginia Count	Allowed in Standard Exercises, Classifiers and Short Courses and only in Standard Exercises in Level IV and higher competitions
	Paper targets only.
	Timed the same as Comstock.
	Total score (minus penalties) divided by time.
	Fixed number of rounds to be fired.

	Time stops on last shot.
	Penalties for extra shots, extra hits.
Fixed Time	Allowed in Standard Exercises, Classifiers and Short Courses and only in Standard Exercises in Level IV and higher competitions.
	Paper targets only (they should disappear where possible).
	Stipulated number of shots.
	Fixed time.
	Total score of highest stipulated hits minus penalties.
	Stage results are not factored (ranked by actual score).
	No misses, penalties for extra shots, extra hits, overtime shots.

PLANNING A COURSE OF FIRE

7. The essence of planning a course of fire is Safety - Relevance - Clarity - Variety. Each aspect is discussed further below.

8. Safety

Each stage must be viewed with complete safety as the primary objective. Watch for safe angles of fire, potential ricochets, splatter problems, as well potential 90 degree muzzle problems and traps.

Safe direction, down range, side berms, and backstop (check what's behind the backstop).

Try to eliminate the possibility of ricochets. Also remember that splatter goes in all directions. Use splatter guards on steel where possible. Do not ever use steel targets that can turn or rotate when hit. They must only fall over. Do not use steel that has been cratered or holed. This will result in ricochets at unexpected angles.

The course of fire must not trick or trap a competitor into a safety infraction such as moving the muzzle past 90 degrees. Targets should "disappear" before the angle reaches 90 degrees. Check to make sure that the officials have room to do their job and that they do not have to back out of a "trap" area.

Range Safety Survey. A safe range must allow four things:

- it must STOP all directed rounds,
- stray shots must not be capable of damage,
- the design must permit spectator control,
- the range must be clearly marked as a danger area.

Berms and Backstops

The backstop is the primary impact area on a range. It should be at least 4 - 5m high and

constructed of bullet absorbing material. Be careful of rocky or debris laden material that can deflect bullets out of the range rather than absorbing them. Berms are earth barriers or walls designed to protect the surrounding area from direct fire.

Backstops and berms must be high enough and wide enough to stop any bullets that stray left, right or above the expected direction of fire. There should be a 10 degree 'safety fan' of berm protection above and beside all targets when shot from the most extreme angles of fire.

Safety Fan. Normal horizontal and vertical safety fans are 10 degrees. This angle concept requires more backstop or berm at 50 m than at 10 m. At 50 m the backstop should be 8 m or for every 2 m of down range distance, you should have about 40 cm of safety fan.

Effective Height. The effective height of a berm may be raised by lowering problem targets, however, you must then watch for ricochets off of the range floor. Use interim backstops to absorb bullets that pass through low midrange targets and in every case where the bullet does not strike the backstop or side berms directly.

9. Relevance

Course design sets IPSC apart from all other types of shooting sports. Our courses of fire must have a relevant purpose. First set the scenario, then place the targets to give life to the scenario.

Do not provide the written scenarios as part of the stage briefing, rather give the course designer's intention to the stage CRO.

Exercises vs. stages: El Presidente is a good exercise, but IPSC matches should consist of appropriate challenges not simple exercises that can be repeated and practised to perfection.

10. Clarity

Adhere to the "kiss principle" (Keep It Simple, Stupid). There is no need for gimmicks or tricks to make a stage interesting.

11. Variety

Free style approach - if you can see it, you can shoot it is the principle.

Matches should test a variety of gun handling skills, i.e., strong hand and weak hand.

Starting positions should be natural and clearly defined. Ask ourselves, "why are we starting like this?"

Do not be overly restrictive but try to create an easily understood and easily repeatable position.

12. Fault lines

Fault lines force competitors to shoot from behind barriers. These lines will define the limits of lateral movement by the competitor.

Fault lines used in this context may be positioned at any angle deemed relevant to the position of targets in the competitive situation. It is strongly recommended that they be of wooden planking/angle iron or other suitable material fixed in a continuous line and should be at least 2 cm.

high. This provides a physical reference to the competitors and helps to prevent inadvertent foot faults. These lines should be at least 1 metre in length and are deemed to extend in the direction they are laid to infinity.

Typically the requirement with regard to what constitutes a fault is defined as “no part of the competitor's body can touch the ground beyond the limits of the outside edge of the line”. ON but not OVER.

13. Charge lines

Charge lines restrict impractical competitor movement towards or away from targets. They are commonly used where barriers are not available and are particularly useful where you must keep a competitor away from steel targets. In this case they are set at least 8 metres from the steel targets.

Charge lines are constructed the same as fault lines.

14. **Cooper tunnels**

Cooper tunnels will be constructed to any size using braced uprights supporting loose wooden slats overhead which may be dislodged by the competitor moving through the tunnel. Overhead material of any type shall not be heavy enough to present a safety hazard if dislodged.

15. Range Officer "traps and problems"

The Range Officer must watch the competitor's general safety, firearm, trigger finger and muzzle direction. The score keeper is responsible for spotting foot faults and other procedural.

16. "Ask yourself"

-Is it SAFE?

-Is the stage freestyle?

-Can you see only the targets to be engaged from each firing position?

-Can it be set up and run by someone else?

-Can all competitors shoot the course safely?

-Is it SIMPLE?

-Is it understandable to the Range Officer?

-Could the non shooting public or the media be upset by the scenario?

-Is there a way to short circuit the stage? Can the course designer's original intent be maintained or will a competitor find a "hole".

-Are the shooter's movements controlled with props, charge lines, and fault lines?

-Will any possible procedural penalties be easy to administer?

-What is the most likely protest? Can it be avoided?

Again, look for:

- safety,
- relevance,
- clarity,
- variety,
- freestyle,

- good props, furniture, good staging,
- reasonable scenario and starting position,
- runs efficiently (no waiting),
- fair to all levels of shooter skill,
- not a 'memory course',
- presents a realistic problem with multiple solutions,
- balance of shooting and athletic skill,
- watch for proper use of fault lines and charge lines,
- remember: if you can see the targets, you can shoot the targets,
- no possible shoot-throughs.

PRACTICAL COURSE DESIGN

"The challenge presented in practical competition must be realistic. Courses of fire must follow a practical rationale and simulate sensible hypothetical situations in which firearms might reasonably be used." J.Michael Plaxco

17. IPSC shooting interests people for many different reasons. For some, the appeal of the sport is that it offers the most realistic opportunity available to exercise one's skill with a firearm. For others, it's a pure shooting sport; the test of competition is greater in IPSC than in any other shooting sport. For years, there has been a clash between the "gamesmen" and the "martial artists" and ideally, it should work for both groups. Ultimately, we should have the same course of fire satisfy both defensive and competitive interests.

18. Course designers control the sport for practical shooters and they control the sport for shooters at the upper and lower levels.

COURSE DESIGN RECOMMENDATIONS

19. The key words are *realistic, reasonable, and sensible*. The situation represented by an IPSC course of fire has to be a realistic shootable problem. The shots required must be those that one could reasonably be expected to make with a firearm. The shots must also be ones that would be taken by a sensible person.

20. Many of the competition stages simulate situations that require the defensive use of a firearm. Defensive is the key word and should always be a key element in assessing the design of especially a handgun match stage. Many stages are designed so that the offensive use of a

firearm becomes the scenario. Having numerous hostage targets, especially those demanding pinpoint precision incorporated into a stage, turns the scenario into a SWAT task, not for the average handgun user.

21. Targets past 25 m should be full targets. Any time we shoot a target beyond 25 m in distance, the full target surface should be available for score.

22. Pepper poppers beyond 15 m distance should be full Poppers. We see the same thing with poppers as with paper targets; half-poppers at 25 m to represent a shoot/no-shoot target. That shot would never be taken in a true hostage situation.

23. Any time an upper box shot is required, the target should be at a maximum of 15 m distance. An upper box shot needs to be possible with a pistol and it should never happen past 15 m.

24. All targets should have at least half the full target available for score with the full A-zone showing. We see some scenarios where there is only 1/3 of the target's shoulder area available and just a corner of the A-zone open. With a rifle it would be an iffy shot. It shouldn't be taken with a handgun.

25. On each stage at least half the targets available for score should be full targets.

26. No more than 15% of the combined total number of targets for the entire match should be no-shoots or less than full targets. There is no way a person would go into a situation with 6-8 hostages and shoot it out. This is not a true defensive situation.

27. Windows should be 60 cm high, beginning 1.2 m from the ground. Windows when used as integral part of a course of fire, are designed to make the shooter come to a certain spot to engage targets. They should be both low enough and high enough so that both short and tall people can shoot through them with no handicap.

28. Low windows that are intended to make a competitor get down and shoot from an awkward position should begin a ground level, with a maximum allowable height of 1 m. If the idea is to have the shooter go down to shoot, both short and tall people should have to go all the way down to the ground.

29. The maximum running distance without shooting should be no more than 15 m. Some of the courses of fire place more emphasis on moving than shooting. An IPSC competition is first and foremost a shooting match, the match winner should be the one who can shoot best, not the one who can run fastest or jump highest.

30. The maximum height for any obstacle that needs to be jumped over, crawled over, vaulted, or scaled, should be 1 m.

31. Course designers should be aware of the stage factor potential of the course they're laying out. We derive stage factors based on what the time is that a course can be done and the number of points possible. The factor is derived by Comstock calculation (points divided by time). For instance, if a time on a stage is 6 seconds and the points possible is 30, that's a 5 factor stage.

If we put a 1 over the factor number to make it a fraction, then that tells us, in seconds, what one point is worth. In a 5 factor stage, for example, you have .20 seconds to shoot an A instead of a C for the same score; vice-versa, you must be .20 faster with the C hit rather than an A hit for the same score. We feel that the optimal stage factor is between 4 and 6. A "push stage" is one that factors to 5, which is the best blend of accuracy and speed. A stage that factors higher than 8 is too speed-oriented; a stage that factors below 3 is too accuracy oriented. It should be noted that stage factors will vary greatly with shooter's skill levels; the factors stated above are based on an A class shooter's ability.

THE EFFECTS OF BAD DESIGN

32. Cause of Bad Design. A course can be bad for a number of reasons. It can be one that is not really shootable, or it can be a circus-type match with a carnival atmosphere, or it can come from a designer who just wants to put something out there to induce as many mistakes from as many shooters as possible. If their premise is that if they make a stage really hard that the good shooters won't be able to do as well on it, they're just kidding themselves. There will be a bigger separation in skill levels when a stage is made complex and hard to shoot. The really good shooters will always win, and the more difficult a stage is, the larger the gap will be between the Super Squad and the other shooters.

33. Target Distance/Size. Extending the distance of the targets on a stage and giving the shooter a smaller target area available for score hurts the lower level shooters much more than the top shooters. Over and over again we see the separation of skills comes from distance. For instance, in IPSC standards the difference between Master and A class will be pretty small. If the time limits are tough to make, then there's more separation. On typical long courses and short courses with shots under 15 m it's common to see A-class shooters beat Masters. Again, the separation of skill is distance.

34. Surprise Course. The idea of surprise courses results in another backfire in that course designers think that an unknown quantity will hurt the good shooters. They act on the premise that good shooters have the time and inclination to set up the stages and practice them, and that's the reason they do better. These course designers don't realize that there are very few things they can set up on a shooting range that world class shooters haven't seen or done before.

35. Circus Stages. In general terms, stay away from circus stages. A lot of things can be done with stages to make them difficult that don't have to be complex and involved that they turn into a carnival shooting gallery. Some stages we see at championship matches are like stepping into a video game where they are really testing who has the best memory or who had the chance to rehearse the stage most times.

DISPOSABLE STAGES

36. We see stages get thrown out of competition every year. When a stage is thrown out, that means it doesn't factor in the overall match results. Poor course design is the root of this problem. Some of the stages just allow too much grey area for applying the rules. Every stage should be so designed so that it's clearly evident as to how the rules apply.

37. At major events we are all experienced competitors. Then it becomes the shooter's

responsibility to know the course of fire. Because everyone gets a chance to read the course of fire, this helps eliminate the possibility that one RO will make a mistake or that a competitor will make a mistake - and that the stage will be thrown out.

EFFECTS OF GOOD DESIGN

38. When a competitor walks away from shooting a stage, you want to hear him telling how well he did, not how poorly he did, or how many shots he dropped, and how many procedural penalties he had. As well as realism, the course designer has to keep in mind that we want people to have fun. That's the bottom line. A shooter should have a good experience on the stage. How good is it? It should be relative: good, better, best.

39. A course of fire should be designed so that it shows a competitor his weaknesses and his strengths. If someone had a dissatisfying performance, he needs to walk off the line thinking constructive thoughts or reflecting on an appraisal of his skills - "I need to work on my strong-hand or weak-hand or reloading...." and the course of fire showed him that.

40. Another way to think about this: a poor performance should be the shooter's fault and the shooter should know that. Poor performance should never be blamed on the stage design. Blaming the stage leads to frustration, which leads to unhappiness with the sport, which leads a shooter away from the sport of Practical Shooting. A bad performance should always be the one the shooter can learn from, not the frustration of just saying "I don't need this".

41. This course of fire must:

- include all the correct elements,
- use the standard stage format,
- be fully documented with a scale drawing,
- include Range Officer information,
- include written out Range Officer's briefing (walk-through),
- include the score sheet,
- include a work order and list of materials needed,
- include a list of items need to run the stage, i.e., staple gun and staples, etc.

42. Remember to check your final design:

-from the shooter's point of view ... is it clear what is expected of the shooter?

-from the RO's point of view ... can I run this stage without getting trapped? Do I understand the scenario and how the props relate to it? Can I run a shooter through in four minutes or less?

-stage crew ... can we set this stage up with a minimum of problems?

-stats office ... will it be clear how this is scored? Will special penalties, conditions, times, hits, misses, etc be clear to me? Is the score sheet clear enough that the score keeper can fill it out correctly? Have I made arrangements to get the completed score sheets to the stats personnel in a timely manner?

Remember! Safety, Relevance, Clarity, and Variety

RANGE EQUIPMENT AND USE

43. Range equipment refers to all the barriers, walls, barrels, timer, lights, bells & whistles we use to create the stage for the production. As designers, that is exactly what we are doing, creating the production of an event.

44. The more realistic and different the event, the more fun the competitors are going to have. Remember that in working with range equipment, your goal is to recreate a small part of the real world where a "hypothetical situation in which a firearm might reasonably be used" takes place.

Challenging, but fair

45. The shooting problem should be straightforward. We are not in the business of trying to trick competitors into procedural or disqualifications. If your design produces a large number of either, you have forgotten some of the basics.

CHAPTER 7: ARBITRATION/PROTEST PROCEEDINGS

1. Arbitration requires that there be an arbitration request or appeal. It is much more preferable to use your Chief Range Officers, Range Master, or Match Director to settle disputes before they escalate to a formal request.

Rule 11.1.3 Appeals – the Range Officer makes decisions initially. If the appellant disagrees with a decision, the Chief Range Officer for the stage or area in question should be asked to rule. If a disagreement still exists, the Range Master must be asked to rule.

2. In this escalation of appeal it is entirely possible for the CRO or RM to re-instate a competitor. In the case of the competitor wishing to appeal...

Rule 11.1.4 Appeal to Committee – Should the appellant continue to disagree with the decision he may appeal to the Arbitration Committee by submitting a first party appeal.

3. How to handle arbitration.

Make certain that you follow the Rules scrupulously. The main actors in this are the MD and the arbitration committee. Once you have handed this over to the MD you can carry on with your work.

RULES

Rule 11.2.1 Arbitration Committee – At Level III or higher matches the composition of the Arbitration Committee will be subject to the following rules:

11.2.1.1 The IPSC President, or his delegate [ie the Regional Director], or a certified Range Official appointed by the Match Director, (in that order) will serve as Chairman of the committee with no vote. [This usually the Regional Director]

11.2.1.2 Three arbitrators will be appointed by the IPSC President, or his delegate, or by the Match Director, (in that order), with one vote each.

11.2.1.3 When possible arbitrators should be competitors in the match and should be certified Range Officials.

11.2.1.4 Under no circumstances must the Chairman or any member of an Arbitration Committee be a party to the original decision or subsequent appeals, which led to the arbitration.

Rule 11.2.2 Arbitration Committee – For Level I and II matches the Match Director can appoint an Arbitration Committee of three experienced shooters who are not parties to the appeal and who do not have a direct conflict of interest in the outcome of the case. The arbitrators should be certified Range Officials if possible. All committee members will vote. The senior Range Official, or the senior shooter if there are no Range Officials, will be the chairman.

11.1.2 Access – Appeals may be submitted to arbitration in accordance with the following rules for any matter except where specifically denied by another rule. Appeals arising from a disqualification for a safety infraction will only be accepted to determine whether exceptional circumstances warrant reconsideration of the match disqualification. However, the commission of the infraction as described by the Range Official is not subject to challenge or appeal.

11.1.5 Retain Evidence – An appellant is required to inform the Range Master of his wish to present

his appeal to the Arbitration Committee and may request that the officials retain any and all relevant documentary or other evidence pending the hearing. Audio and/or video recordings will not be accepted as evidence.

11.1.6 Preparing the Appeal – The appellant is responsible for the preparation and delivery of the written submission, together with the appropriate fee. Both must be submitted to the Range Master within the specified period of time.

11.1.7 Match Official's Duty – Any Match Official in receipt of a request for arbitration must, without delay, inform the Range Master and must note the identities of all witnesses and officials involved and pass this information on to the Range Master.

11.1.8 Match Director's Duty – Upon receiving the appeal from the Range Master, the Match Director must convene the Arbitration Committee in a place of privacy as soon as possible.

11.3 Time Limits and Sequences

11.3.1 Time Limit for Arbitration Request – Written requests for arbitration must be submitted to the Range Master within one hour of the disputed incident or occurrence. Failure to present the required documentation within the time specified will render the request invalid and no further action will be taken.

11.3.2 Decision Time Limit – The Committee must reach a decision within 24 hours of the request for arbitration or before the results have been declared final by the Match Director, whichever comes first. If the Committee fails to render a decision within the prescribed period, both a first and third party appellant (see Section 11.7) will automatically succeed in their appeal, and the fee will be returned.

11.4 Fees

11.4.1 Amount – For Level III or higher matches, the appeal fee to enable an appellant to appeal to arbitration will be US\$100.00 or the equivalent of the maximum individual match entry fee (whichever is lower), in local currency. The appeal fee for other matches may be set by the Match Organizers, but must not exceed US\$100 or equivalent in local currency. An appeal brought by the Range Master in respect of a match issue will not incur a fee.

11.4.2 Disbursement – If the Committee's decision is to uphold the appeal, the fee paid will be returned. If the Committee's decision is to deny the appeal, the appeal fee and the decision must be forwarded to the Regional or National Range Officers Institute (RROI or NROI) in respect of Level I and II matches, and to the International Range Officers Association (IROA) in respect of Level III and higher matches.

11.5 Rules of Procedure

11.5.1 Committee's Duty and Procedure – The Committee will study the written submission and retain on behalf of the organizers the monies paid by the appellant until a decision has been reached.

11.5.2 Submissions – The Committee may require the appellant to personally give further details of the submission and may question him on any point relevant to the appeal.

11.5.4 Witnesses – The Committee may hear Match Officials as well as any other witnesses involved in the appeal. The Committee will examine all evidence submitted.

11.5.5 Questions – The Committee may question witnesses and officials on any point relevant to the appeal.

11.5.7 Inspect Area – The Committee may inspect any range or area related to the appeal and require any person or official they regard as useful to the process to accompany them.

11.6 Verdict and Subsequent Action

11.6.1 Committee Decision – When a decision is reached by the Committee, they will summon the appellant, the official and the Range Master to present their judgement.

11.6.2 Implement Decision – It will be the responsibility of the Range Master to implement the Committee's decision. The Range Master will advise the appropriate match personnel who will post the decision in a place available to all competitors. The decision is not retroactive and will not affect any incidents prior to the decision.

11.6.3 Decision is Final – The decision of the Committee is final and may not be appealed unless, in the opinion of the Range Master, new evidence received after the decision warrants reconsideration.

11.6.4 Minutes – Decisions of the Arbitration Committee will be recorded and will provide precedent for any similar and subsequent incident during that match.

11.7 Third Party Appeals

11.7.1 Appeals may also be submitted by other persons on a "third party appeal" basis. In such cases, all provisions of this Chapter will otherwise remain in force.

EFFECT OF COMMITTEE DECISION

4. The committee's decisions are final and affect only the complainant and any subsequent similar incident. Decisions are not retroactive.

5. Decisions may set a precedent for the future and could result in rule changes.

6. The committee's decisions must be recorded (minuted) and posted.

COMMITTEE GUIDANCE

7. The only guidance required are the newest versions of the IPSC Rules, the IPSC Principles, the stage briefing, and *Common Sense*.

COMMITTEE PROCEDURES

8. Validity. The chairman must first verify the validity of the protest as follows:
- a. Check the time. Was it submitted within the required time frame?
 - b. Fees. Was the required fee attached?
 - c. Is the protest an issue that can be arbitrated? Does it fall within the rules and definitions?
 - d. Is there a solution? Is there a remedy if the arbitration is upheld?

If the answer to any of these points is no, do not proceed with the arbitration.

9. Procedure. If the protest is valid, the arbitration proceeds as follows:
- a. The committee will convene the arbitration proceedings in an appropriate place which provides complete privacy and adequate seating and tables for the committee's use. The chairman will insure those necessary items such as pens and paper as well as rule books are available.
 - b. The chairman oversees the proceedings without a vote.
 - c. Each member then reads the protest without comment or discussion.
 - d. The committee's goal is to work without limitation to reach an **Unanimous Decision**.
 - e. The committee will interview any witnesses and view the site or location of the protest if necessary.
 - f. The order for the witnesses:
 - Complainant.
 - Range Officer or officials involved.
 - Any other relevant witnesses.
 - g. There will be no discussion until all the evidence has been given.
 - h. Each witness must be allowed to present their evidence in their own words, following which each member in turn will be allowed to ask questions. After each member is finished, the chairman will call for any follow-up questions.
 - i. A member will take the minutes of the proceedings and to summarize the decision for posting.

10. Witness Procedure

- a. Proceed to call the witnesses in order as above.
- b. The chairman will welcome the witness and formally introduce each of the committee members.
- c. The chairman will then define the protest under consideration and confirm that the witness is involved in the issue in question.
- d. The chairman will ask the witness to describe what happened in their own words and without any committee interruptions.
- e. The chairman then calls for questions from the members, one at a time and in order as well as any follow-up questions. The chairman will ask each member in order if they are finished and move to next.
- f. When all the members have had a chance to question the witness, the chairman will thank the witness, excuse them and advise them that they may be recalled for further questions or to be advised of the committee's decision if appropriate.

11. Decision Procedure

- a. When all witnesses have been processed, the chairman will assist and direct the committee through the process of deliberation. Once an unanimous decision has been reached, the chairman will recall the complainant and the Range Master and possibly the official involved and advise them of the decision before it is posted. This takes the form of a brief description of the decision. Committee members should be silent during this process and discussion will be limited.
- b. The Range Master will then ensure that the decision is posted in a place available to the competitors and implement any action resulting from the decision.

12. The Arbitration process must be conducted in a formal but a friendly manner. When the decision is reached, it is final. Further discussion should be discouraged. The decision will stand in all cases unless the Range Master receives new and compelling evidence which he believes supports reconsideration of the issue.

APPENDIXES

APPENDIX A

CHEPIT'S TIPS FOR STAGE PLANNING AND CONSTRUCTION

1. Cover your stage briefing with clear plastic and tape behind one of the clipboards. They'll normally last till next year's match, and if you're lucky enough, just change the stage title and you can use it again (hmmmm...). You don't want to keep unfolding and folding them in your pocket per squad as if you're running a daily-double number racket in your stage.
2. To the RMs, don't be satisfied with 2 extra tackers just to find out only 8 tackers are working for a 14 stage match. Also, give ample tacker staples not just enough for 6 targets to tack on. Likewise, don't give out unreliable or non-working timers. Also, please give each stage, 'The Box'. And hey, don't forget to smile always, everyone needs it.
3. Use wire cables only as activator lines. Never use nylon or guy wires. Nylon stretches and delays 'reaction time' specially during in the early afternoon. Guy wires get bent and get you easily agitated. Always have the cable lines run in a straight line as much as possible from the activator to the releasing device.
4. Grease up all the line area in the wire cable that will pass through a pulley or corner, make sure the pulley is on a proper angle. Putting connections on the ground is better having them on top of the activating door but make sure you cover the lines with PVC pipes and don't tangle the shooter.
5. Don't put a low stiff barrier like a piece of wood lower than the hip as a fault/charge line behind a door where the shooter would still have forward momentum while opening it. This causes shooters to fall forward because of the forward momentum yet they can't brake themselves because of the barrier. Just put a big prop behind the door to visually remind them. Fault lines on doors are not needed unless for safety reasons.
6. Doors are better off and safer being opened towards the shooter rather than being pushed thru. I have seen a shooter that smashed to the door because it didn't open and subsequently broke 180.
7. Only have a maximum of 2 activator lines attached to an activator be it a popper, door, window, etc. More than 2 creates big problems and unwanted delays, not to mention irritation.
8. If you want a shooter to shoot through a window make sure it is wide enough for wadies to take a peep, tall enough so that a 2 m shooter won't have a backache, and low enough for Chepit to hang his arm over it. This also avoids brushed elbows and shoulders.
9. Never put targets close enough where a shooter can almost kick them. This creates powder and wax blast that can sometimes blast the entire A zone away not to mention all the patches. The minimum distance a close target can get is 5 metres, anything closer you might as well give the shooter a sharp knife.
10. Avoid putting targets immediately behind and below a window wherein you can even spit

at them. At that point, if he was a real person, he could have bitten your arm already.

11. If you have a prop partially covering a target make sure you have a hardcover mark on the area of the target that is covered by the prop. This clearly delineates the scoring against the non-scoring specific portion.
12. If you do have low targets make sure you put sandbags immediately behind it. No matter how soft the ground is, the bullet will still find its way to a kitchen window, rooftop, or car windshield.
13. Steps and ladders must be covered so that the foot can never go through the steps thus breaking his leg. Likewise, the steps must also be wide enough to allow some traction.
14. Don't use see through materials such as screens as hard cover when you have a swinging target behind it. A hit on the wall in front of the swinging target must be very visible so that it may not be counted as a hit.
15. Put metal plates behind a wall or prop that intends to cover a swinging target. This way there won't be any shoot-through.
16. Wooden platforms and planks must have very rough surfaces so that even if it rains it doesn't get slippery. You can either put upside down nailed bottle caps for ultra traction, nailed down small pieces of wood, serrate the surface, etc.
17. Have wide doors for wide people, don't skimp on its width just to save wood. Have at least another 10 inches of space between shoulders. Remember these shooters are running 127 kph while opening it. Some 180s have been caused by narrow doorways.
18. Avoid having vertical or horizontal slots too close to each other as it already hampers the shooting performance of a good shooter, if he can shoot it at least 2 feet away from the prop. You don't want a stuck front sight in your prop nor having to change slots per shooter because the slide can't even pass through.
19. Make sure the boundaries of the safety area are very defined and small in parameter. Have festive crowd control lines, not the yellow ones with the 'police' marking on it, unless it's for real. Make sure you put charge lines where you don't want shooters to pass through a 'wall' as its intended design.
20. Make sure you have the big clear plastic wrappers for the targets in case of rain. Once you have the targets placed ready for the first shooter, cover all targets including no-shoots so that the next day you'll be more relaxed and have more time to make last minute debugging if needed.
21. Whenever possible, have moving targets rather than disappearing. Modify disappearing targets in such way that at least the head part still appears when it settles down or stops moving. You eliminate big problems with it.
22. Always have 2 more targets that can be engaged while the activator is still activating the

swinging target. This will cater to the better shooters that do not have to wait.

23. On swinging and running targets, attached plywood shaped into an IPSC target behind the target. This will make it more stable with less breakage and not folding the target board.
24. Don't put boxes on windows, doors, or on ports. They are going to shoot through there anyway. Boxes are only to be seen in a starting position or if not at all.
25. Angle targets with a hardcover/prop where if the shooter did break 180 while engaging the target, the prop will be hit, then you have a stronger evidence on your call. Position the prop and target so that the shooter will not be able to see the target while breaking 180. The lip of tyre rims and drum have been notoriously reported to have spun a bullet back up range. Try to deform it halfway so that it will break the centrifugal action.
26. Put a popper in front and ahead of an IPSC target if they are to be placed close to one another. This will eliminate splatters piercing the target board. Space them at least 8 feet apart.
27. Use a lot of sponsor streamers, banners, billboards, etc. They make the range festive in ambiance and your sponsors happy. Drink sponsors usually have a bunch of them readily available if you ask.
28. Always have 2 carpenters ready in case there is anything to be done like a broken door, window, detached wire connections, etc. You don't want any unnecessary delays in your match.
29. Make sure that all the cut targets, hard covers, and no shoots have already been done with enough supply at least 3 days before the RO match. A reasonably large portion of the A in each targets must at least be exposed to the shooter if it covered by a prop, hardcover, or no shoot. The shooter must be given that opportunity to score the maximum stage points.
30. To the RMs, when you give the stage supplies to the CRO, make sure you give him everything he needs so that you don't want to see his face for supplies till he closes his stage in the afternoon. You'd like to see and ask him if he needs anything or making sure the stage is running fine. That way you keep everybody smiling and happy.

Range Master Chepit Dulay of IPSC Philippines, as posted on the Global Village.

RESHOOTS

There seems to be many incorrect reasons given in order to justify appeals for reshoots. The following list, as authorised by the rule book, might be useful:

1. Modified Course of Fire. Depends on RM's decision under Rule 2.3.3.1. and Rule 2.3.3.2.
2. Range Equipment Failure. Depends on RO decision under Rule 4.3.1.6, mandatory under Rule 4.6.2, Rule 9.1.5.2 and Rule 9.1.6.2
3. Loss of Eye or Ear Protection Mandatory if Rule 5.4.3 applies
4. Suspected Squib. Mandatory if Rule 5.7.6.2 applies.
5. Interference. Depends on RO decision under Rule 8.6.3.
6. Target Issues. Depends on RO decision under Rule 9.1.3 and Rule 9.1.4.
7. Scoresheet Issues. Depends on RM's decision under Rule 9.7.5 (also see Rule 9.7.6).
8. Faulty Timer. Depends on RO decision under Rule 9.10.1 or Arbitration decision under Rule 9.10.2.
9. Arbitration Decision . Mandatory if so ordered under Rule 11.6.1.
10. Calibration Issues . See Rules Appendix C1, Points 6c, 7b and 7c.

Range Master Vince Pinto of Hong Kong, as posted on the Global Village.

COURSE OF FIRE CONSTRUCTION AND VETTING CHECKLIST

1. Briefing. Rule 3.2
 Scoring method.
 Targets (Type & Number).
 Minimum number of rounds.
 The firearm ready condition.
 Start position.
 Time starts.
 Procedure.
 Moving targets: remain visible or not?
2. Type of Course. Rule 1.2.1. This is different for rifle, shotgun and handgun. The principles, however, remain the same.
3. Safe angles of fire
 Safe angles of fire should be taken into account, including possible ricochets.
 DQ traps (like 90 degrees)?
 Can all the competitors shoot the course safely?
4. Minimum distances for Metal Targets. This differs between rifle, shotgun and handgun. Check to see that it is adhered to for the specific discipline.
5. Target placement
 Prevention of shoot-through.
 Target type and placement marked on stands, stands fixed or marked.
 Paper targets at not more than 90 degrees from the vertical.
 Hardboard, wood or plywood backing for close shotgun slug/buckshot targets.
6. Charge and Fault lines
 Charge and fault lines should rise at least 2 cm above the ground level.
 Charge and fault lines should be fixed firmly in place.
 Fault lines should be a minimum of 1 metre in length.
7. Alternatives?
8. See only the targets to be engaged from each shooting position?

9. Is there a way to short circuit the intention?
10. Are the shooter's movements controlled with props, charge and fault lines.
11. Are procedural penalties easy to administer?

RANGE MASTER'S REPORT

The following are the headings to be used for the Range Master's report after any match or tournament. Use appendices for any lengthy contents. Add any other information that might be relevant.

List of ROs at the match as an appendix.

Short report on ROs if necessary.

Number of stages and shots.

Number of competitors. Breakdown open, mod, std, prod.

Check-in done and results.

Problems with competitors.

Problems with the stages, props, range and facilities.

Working of chrono.

DQs and why.

Any arbitration.

Feedback about the stages and in general, after the match. Include stats in the feedback.

Climate, weather if necessary.

STAGE WALK THROUGH FORMAT

Stage 1

Passages

Good morning/afternoon my name is _____ from _____.

I am working stage 1 with _____ from _____ and _____ from _____.

This is a Comstock-scored Long stage comprising 14 Classic targets, three nonshoot targets and 4 Classic Poppers. The course will require a minimum of 32 rounds.

The competitor will commence the course of fire standing in box A, hands at sides. The competitor's gun will be loaded and holstered.

On the audible start signal, the competitor will draw and shoot at the targets and poppers, all in any order as seen, whilst remaining in the demarcated area. The targets require a minimum of 2 hits each and the poppers must be down to score.

PP1 activates Swinger T3. Swinger T3 remains visible and will carry miss penalties.

PP3 activates Runner T5. Runner T5 disappears and will not carry miss penalties.

Time stops on the last shot fired. Penalties are as per current IPSC rules.

A number of flags as well as the (demarcated area, line of the wall, corner, window, doorframe, etc) of the course will indicate the 90 degree line. NO LATITUDE WILL BE GIVEN PAST THESE POINTS. On this stage muzzle direction is imperative. No warning will be given that the muzzle of your gun is approaching this point ...

_____ will now demonstrate the start position; no variation of this position will be acceptable.

Do you have any questions regarding this course of fire?

You have five minutes to examine the stage.