FIREARM RANGE INSPECTION CHECKLIST

DATE: _____

RANGE NAME: _____

Canadian Firearms Centre - Range Design and Construction Guidelines
September 1999

Section 1

☐ Take a GPS reading at Main Entrance to Range.

☐ How many ranges in this facility?

☐ How many members?

☐ Is there a main facility sign with contact info? 1.6 Pg 21

☐ Is there a Range Facility Status Sign? Located where? 1.6 Pg 21

☐ Is there Perimeter Signs and Fencing? Note: fencing not mandatory but preferable Pg 24

☐ Does each Range have its' own Range Safety Rules posted? Pg 24

☐ Does each range have its' own Warning System such as Red/Green lights or Flags? 1.8 Pg 25.

- Must have one or the other for **EACH** separate range. 1.8.1 Pg 25
- If flags are used can use either a main flag or Firing Line Flags 1.8.1 Pg 25

☐ Does each Skeet/Trap Field have a Flag warning system?

- Can have the option of one main flag or individual field flags 1.8.1 Pg 26

☐ Does the Sporting Clay Range have a Flag system? 1.8.1 Pg 27

- Must be located at the start of the course

☐ Is there mandatory use of eye/ear protection? 1.10 Pg 28

☐ Is there a teaching program in effect?

GENERAL INFORMATION

☐ Is there a Range/Club building on site?

☐ Is there a Liquor Licence? Rules posted about alcohol consumption and shooting?

- ☐ If licensed what is the License #
- ☐ Range Hours of operation? 24 Hour access?
- ☐ First Aid Kit available? Does each range have its own kit?
- ☐ Does the facility have a "Sign-In" sheet for persons using the range?
    - Is there one main sign in system or does each range have its own?
- ☐ Does this facility require a Land Use Agreement? Sec 1 Pg 13
- ☐ Is there a Range Property Layout Diagram available?
    - Copy of a survey, aerial photo, hand drawn diagram

CHECKLIST FOR OUTDOOR RIFLE RANGE

Section 2
For "Standard Range"

- ☐ Get GPS reading at centre firing line
- ☐ Take Magnetic Compass reading for direction of fire.
- ☐ Measure length of range
    - Firing Line to Backstop
    - Firing Line to Targets
- ☐ Measure width of range.
- ☐ Is the range baffled?
- ☐ Do Public Agents i.e.: police use it for training>
- ☐ Type of firearms used- Rifle? Handgun?
    - What caliber of bullets? Centrefire?, Rimfire?
    - Are shotguns used? Muzzle loaders? Calibers?
- ☐ Measure the backstop height- Chart Pg 31
- ☐ Measure the Backstop Crest Length- Chart Pg 35

- ☐ Measure the Backstop Crest thickness. Must be minimum 1.5 M. Pg 35

- ☐ Measure the Backstop surface slope angle. Must be min. 30 degrees. Pg 35

- ☐ What is Backstop constructed of? Any solid material must be covered with min. 1 M of soil. Pg 35

- ☐ Are there bullet catchers built into the backstop?

- ☐ Are there side berms?
    - Are they used for separating adjacent ranges of protecting adjacent ranges?
    - Must be min. 2.5m high, 1.5m crest thickness, 30 degree min. face slope and if used to separate ranges must join to at least one backstop. Pg 45
    - If the side berms are man made of hard material like concrete then they must be covered in Linatex or similar material. Pg 46

- ☐ Measure distance between Target Line and base of backstop Pg 38

- ☐ Are there intermediate backstops?
    - What distance from firing line?
    - Height, Width, Construction?

- ☐ Measure firing line distance to targets
    - Are individual firing line distances marked? How are they marked? Pg 41

- ☐ Are all Firing Points and Targets numbered? Pg 41
    - Where are numbers located?
    - Number of shooting lanes?

- ☐ Are steel targets used?
    - If so are they shrouded?
    - Is min. 10M firing distance from steel/hard targets followed? Is this posted? Sec 1.10
    - Are the steel targets regularly inspected?

What are target holders made of? Should be plastic or wood Pg 46

- ☐ What is Firing Point spacing? Measure centre to centre. Recommended distances are on Pg. 42 (1.5m Benchrest; 1.25m rimfire rifle; 1.60m centrefire rifle.

- ☐ Is the firing line on a raised platform?

- ☐ What is the depth of the firing line? See chart Pg 43 (3m benchrest; 3.5m rimfire rifle; 3.5m centrefire rifle.

- ☐ Is firing line parallel to backstop? No more than 10 degrees out Pg 43.

☐ What is firing line surface?

☐ Is firing line covered?
Check range floor

- Level, no large obstructions, no exposed rocks, metal or other ricochet material. No unsheltered water, streams, ponds etc.

STANDARD OUTDOOR HANDGUN RANGE SECTION 3

☐ Measure distance from firing line to target

☐ What is backstop height? If max. firing distance is 15m or less the B.S. H is 3m; 15-25m then B.S.H is 4m and 25 plus is 6m high. Sec 3.2 Pg 49

☐ What is Backstop **crest** length? Must exceed the outside edge of target holders. See chart #10 Pg 51

☐ What is Backstop crest thickness? Must be min. 1.0m Pg 51

☐ Measure Firing Point spacing. See chart 8 Pg 51

☐ Measure Firing Point width. Chart 9 Pg 51

FOR "NO SAFETY AREA RANGE" SECTION 4

*Direction of fire is into a natural or man made imposing feature that prevents overshoots and ricochets.

☐ What is the imposing feature i.e.: mountain, man made object

- What is the height? What is required height? See Pg 55-56

FOR "GALLERY RANGES" SECTION 5

* For ranges utilizing people under a covered protective area at the target line to raise/lower targets.

TRAPSHOOTING AND SKEET RANGES SECTION 6

☐ Take GPS and Compass reading for each separate field

☐ Is there proper signage?

SKEET RANGE:

☐ What is the half circle radius? Should be 19.2m Sec 6.3.2 Pg 80

☐ How many shooting stations? Should be 7 with an 8th station in the centre of the field. Pg 80 Sec 6.3.2

☐ Measure distance between High and Low Houses. Should be 38.8 m Pg 80

☐ Are there manual or automatic trap throwers?

☐ If manual thrower then check both houses

- For pellet proof material construction
- The houses must have warning sign inside instructing the operator about safety. See Pg 83
- Each house must have a Yellow flag mounted to a short pole to be used by operator. See Pg 83

☐ Check each shooting station Pg 83

- Must be clearly marked
- Must be level and provide firm footing under adverse weather
- Should be 90cm square

☐ Is there a post to verify target flights of clay targets?

- Should be located 5.5m forward of Station 8 Pg 84

☐ Are there adjoining skeet/trap fields? If so are the divided by a Barrier Wall Pg 84

- See Pg 86 Chart 32 for wall specs.

TRAP RANGES:

☐ Single trap house with manual or automatic thrower?

☐ If manually operated, the trap house must be pellet proof, have no windows or openings and have a warning sign inside for the operator and a yellow flag that operator can signal shooters with to cease firing Pg 89.

☐ Check shooting stations. Must be clearly marked, level and provide firm footing. Should be 90cm square. Pg 89.

FIELD FIRING SKEET RANGE:

☐ Are shooting stations abreast of the operator? Pg 89

☐ Are shooting stations level, firm and 90cm square Pg 89

SPORTING CLAY RANGES SECTION 7

☐ Take GPS and compass reading at each station

☐ Are there Safety rules, perimeter signage, range in use signs?
☐ Does Range Operator have small scale site plan of the range area?
- This is a requirement Sec 7.2 Pg 91
- Does plan show stations and their safety zones.
- Is the Plan posted at a common place at the range or in the clubhouse?

☐ Measure V.A. of Fire for each station. Is it classed as Low, Medium or High? See Chart 10 Pg 92

☐ Measure H. A of Fire for each station. Take a bearing to the right side then a bearing to the left side of the station. Degrees between is H.A.F.

☐ What size of shot shell is being used?

☐ Do any safety areas overlap another stations area, walking trails areas of human activity?
- If so, then a flag, beacon or warning system designed as in Sec 1.8 shall be installed Sec 7.4 Pg 93

☐ Is each shooting station numbered and referenced on a site plan? Sec 7.5.1 Pg 94

☐ Are there shooting stalls?
- If so should be 2m-2.5m high and 1m wide. Full lattice on sides and ½ lattice on front. Pg 95 chart 35
- Be clearly numbered and referenced to a site plan

☐ Check operator stations. Pg 98
- Are they protected?
- Is there a yellow flag at each operator station?

BAFFLED HANDGUN AND RIFLE RANGES SECTION 8

☐ Are firing points fixed?

☐ Are baffles ricochet proof- clad in timber Sec 8.2 Pg 103

☐ What is Range Type- I, II, Other? Pg 103 Chart 11

☐ Is Backstop crest visible beneath any baffle (Shouldn't be) Pg 107

☐ Does backstop crest length exceed left and right flank, side berms?

☐ Does backstop have a cover? See Pg 107 also Chart 41 on Pg 104

Does the backstop have built in bullet catchers? (Optional) Pg 108
☐ Do all baffles prevent bullet penetration? How are they constructed?

☐ First baffle shall be no more than 5m forward of a firing line and no "blue" sky visible beneath the first baffle Pg 109

☐ Measure height, width, and check type of construction material

- Face of baffle toward shooter must be clad with min 5cm planking or similar material Pg 110
- Baffle shall run the width of the range Pg 110

☐ Are there ground baffles? Measure there height, width, thickness

☐ Are signs present to state that "No targets are to be placed on Baffles?"

INDOOR RANGES SECTION 9

☐ What type of firearms are used and calibers of ammunition?

☐ What type of ventilation system?

☐ Is there a Lead Contamination Plan? Pg 121- (Recommendation)

☐ Is range cleaned regularly? What method? Pg 121

☐ What are Vertical and Horizontal Angle measurements for walls and ceiling at firing line?
See Table 13, Pg 122 (Vertical: Rim fire rifle: 10d, Rim-fire Hand-gun 15d, Centre fire Rifle/handgun 15d) (Horizontal: 6d, 10d, and 15d)

☐ Any doorways/access points forward of the firing line that can be opened from the exterior? Pg 122

☐ Are Range waiting rooms/observation room's doors sealed to prevent lead infiltration? Pg 125

☐ Check floor. Is it clean, free of any projections, angular surface that could cause bullet backsplash? What is it constructed of? Pg 125

- ☐ Measure ceiling height at firing line and at target holders. Must be min. 60 cm at firing line and min. 25 cm at targets Pg 125 & 126

- ☐ Is there emergency lighting in the active range area-Mandatory. Pg 127

- ☐ Is there a Range Rules Sign in the waiting area or near the access door? Also should be a sign in the active range area stating- Wear ear protection, No smoking, No food or drinks in active range area. Pg 127

- ☐ What are target holders constructed of? Should be wood or plastic. If metal then metal parts have to be covered with wood **or** angled to prevent ricochets. Does the range have a target carrier system? Not required Pg 127

- ☐ Take Firing Line Measurements. Distance from Firing Line to Targets and Backstop.

- ☐ Are there multiple firing lines? Are the distances painted/marked on the range floor? or walls? Pg 128

- ☐ How many Firing Points
    - Spacing between Firing Points. Recommended 1.0m centre to centre Pg 128
    - Are Points and targets numbered? Sec 2.3 Pg 41

- ☐ Is there a Firing Line Range Officer area? What are the measurements? Pg 128 and Sec 2.3 Pg 43 or Sec3 Pg 51

- ☐ Does the firing line exceed outside edge of target lane by 0.5 m. Pg 128

- ☐ What is distance between adjacent firing points? Recommended 1.0m Pg 128

- ☐ Are the firing points separated by partition? **Not required but recommended**. Pg 128

- ☐ Construction of walls, ceiling floor- type of material? See min. thickness requirements on Pg 129

- ☐ Are there overhead or side wall baffles?
    - Are they clad in timber of firing line side? What thickness? (5cm Pg 129)
    - Are baffles within 10m of firing line angled? (Should be 25-30d Pg 129)
    - If steel baffles then what thickness? (Min 5cm Pg 130)

- ☐ Is P.Z. inspected regularly by Range Operator? (Required to be). Pg 130)

- ☐ Inspect the bullet trap. Pg 131
    - Are steel edges cleanly abutted with no gaps?
    - Are seams backed with 10cm steel plate?

- Are there any exposed screws, bolt heads? They must be flush.
- Are steel edges beveled and have thickness of **not more than 1.5mm.**
- **If a Single Steel Plate design** then: Pg 131-133
  -must be angled at 45d or less in direction of fire
  -must meet min. thickness (Table 16, Pg 133)
  -sand trap must be min. 10cm deep.
  -can only use C.F and R.F handguns and R.F. rifles
- **If a Vertical Steel Plate design** then: Pg 133-135
  -can only use R.F. rifle or handgun with lead bullets
  -must have min. 4-6 mm thickness Pg 133
  -must be enclosed in a wood or sheet metal container
  -must have backsplash curtain min. 30cm in front of it.
- **If a Venetian Blind** design then: Pg 135
  -plates shall be angled not more than 45d
  -lip of each plate must be higher than the base of the one below it.
  -should have backsplash curtain.

☐ Is the Bullet trap inspected regularly**?** Shall be Range Operator Pg 135

☐ Is there the mandatory warning light system? Pg 137
-can be a "Warning Range in Use" sign
-can be Red/Green Light system
- can be Red/Green beacons.
-must be visible to shooters on the range

☐ Check ventilation system. Pg 138
-air supply should be behind firing line
-should be air ducts along firing line less than 2m above floor
-exhaust ducts should be 5-6 m ahead of firing line and at the bullet trap.

☐ First Aid kit, emergency phone and numbers.