Dublin University Rifle Club
Working Draft
Version 1.0
Feb 16 2001

D.U.R.C. Range Officer Procedures Handbook

Contents

1 Introduction

Dublin University Rifle Club (D.U.R.C.) has always made operating safety it's primary concern. Towards this end, this booklet has been prepared. The objective is to provide a single authorative guide to procedures and methods for Range Officers (ROs) to use. Prior to this, training has been less methodical, with skills being passed onto Trainee Range Officers (TROs) over a period of many years. This lead to a situation where different ROs had different ways of doing things and this in turn led to ordinary members being confused over procedures because they had been taught different things by different people.

Therefore, this guidebook will list the procedures and duties of ROs. These procedures have been written as the simplification of the commonly used procedures, in order to give the simplest and most safety-concious approach to particular problems.

> As such, when training Lay Members (LMs) or shooting in front of them, you are expected to use *these* procedures, and not those you would use if shooting on your own. In other words, you as a Range Officer (RO) are expected to set a safe example, even if you feel these procedures are overly cautious in some cases.

If problems are found to exist in the practise of these procedures, or safer methods are documented, this handbook *must* be modified by the currently serving committee and approved by both the Chief Range Officer (CRO) and by a simple majority vote of the committee *excluding* the CRO. **It is not acceptable for** ROs **to simply change their procedures**

without this approval and documentation.

2 The CRO and the ROs

The structure has traditionally been informal. Basically, the ROs supervise LMs on details and report to the CRO. The CRO is responsible for documenting RO procedures, acts as a liason between the committee and the ROs, organising the RO Duty Roster and checking RO Reports.

3 Mailing Lists and Contact Points

The club's official webpage is at http://durc.tcd.ie/ and the old website of http://www.tcd.ie/Clubs/Rifle is simply a redirect to the new address.

The club's offical email address is rifle.club@tcd.ie and is the main email address for queries about the club from both inside and outside college.

The club's phone number is 01-6081281. However, it is a good idea for ROs to have the mobile numbers of the CRO and other ROs.

durc-internal-list@tcd.ie is the internal email list for ROs, TROs and committee. It is the best forum for debating points that concern ROs and which will take more than five minutes to discuss.

durc-list@tcd.ie is the main email list for the LMs and is used for announcements only. It is moderated, so that email sent to it will not be automatically sent to everyone.

The offical D.U.R.C. postal address is

DURC,
c/o DUCAC,

House 27,
Trinity College Dublin,
Dublin 2

4 RO-specific Events

There are three RO-specific events during the year. The RO dinner traditionally takes place at Christmas, after the end of Michaelmas term. The RO Christmas shoot is an invitational shoot for all ROs and external shooters invited by the club. It traditionally takes place on the first day the college reopens after christmas day. The RO knockout is a competition which takes place throughout a term (usually Hillary or Trinity term) which is open only to ROs and TROs who shoot in *all* disciplines.

5 RO Meetings

RO Meetings are held approximately three times a term - once in the first week of term, once in the last week of term, and where warranted, once in the middle of term. These meetings are not an appropriate forum for debate as the time for these meetings is strictly limited by the academic schedules of the ROs. Discussions on points raised in RO Meetings should be brought up either with the CRO or on durc-internal-list@tcd.ie. The Meetings are for announcements of developments in the club which the ROs need to be aware of, to introduce new ROs, revise RO procedures where necessary and to review any incidents since the last RO meeting that the ROs should be aware of.

6 RO Duty Roster

The RO Duty Roster is published every week (if changes have been made) by the CRO, usually at the end of the week. If you wish to swap nights with someone, first try to arrange the swap yourself. If that proves impossible, let the CRO know in advance so s/he can try to arrange it. But even if you can arrange the swap yourself, you *must* let the CRO know about the swap. Call or email him/her about it.

The roster is made up in the first week of term - let the CRO know what constraints your schedule has (days you cannot do RO duty, etc.) in that first week to prevent large-scale reorganising of the duty roster.

Each week, the CRO will send out an email showing the duty roster for that week as well as points the ROs need to know for the week, such as weekend events, competitions, problems with the range or equipment, and so forth. This is sent to durc-internal and as an RO, you *need* to read it.

7 RO Duties

7.1 Start of night

First RO The first RO is responsible for signing out bolts, ammunition or pellets out of the locker in Front Arch. (S)He also does the necessary paperwork at the locker, and brings the keys (set number 16) to the range to open up.

Second RO The second RO should buy milk/biscuits as needed and bring them to the range.

Trainee Range Officer (TRO) The TRO should arrange to either arrive early and meet the first RO at front arch to observe the signing-out procedure, or to stay late and observer the signing-in procedure with the second RO. Observing both procedures on the same night is not considered necessary.

7.2 Range Setup

The two ROs and the TRO need to be at the range by 1730. Shooters have been instructed (both by ROs and in the Members Handbook) to turn up 10-15 minutes before shooting begins, so at that time at least one RO should be free to assist in selecting equipment or instructing. Thus setup needs to be at least mostly completed by then.

One RO should start the **RO Report** and count the float and ammunition and so forth. The other RO should start setting up the range - putting up targets or target changers, getting the rifles out of the locker and assembling them, and so on. The TRO is expected to assist and observe whereever possible during this.

7.3 During Details

The two ROs should alternate duties between each detail - one should supervise the people shooting on the range while the other handles paperwork and so forth outside. Alternating at the end of each detail reduces workload and fatigue levels.

The shooters should arrive on the range ten to fifteen minutes early. If they don't, a gentle reminder should be given that it takes time to get settled and outfitted before shooting. Should they arrive late, they may shoot but they may not run over into the next detail's time. If they arrive more than fifteen minutes late, they are not allowed to shoot. If they do not show, note it both on the RO report and on their datacards in the appropriate section.

When the shooter arrives, check his/her datacard. Ensure that they have no outstanding No-Shows. Issue them with ammunition - as a general rule, complete beginners or shooters just starting with the sling in .22 won't use more than 10-15 rounds, or 15-20 pellets in air rifle. Remind them of what jacket/sling/rifle they use and ensure the rifle is set up according to the settings on their card. Note that some shooters are competent enough to do this on their own, but keep an eye on them anyway.

Once the range is clear, take them into the range. If you have a complete beginner on the detail, make sure to give the Safety Briefing as set down later in this booklet. Remember to watch them more carefully as they are likely to be unsure of themselves.

While they are shooting, remember that you can't watch everything at once, but you have to be alert enough to catch deviations from the standard sequences. Watch for misfires,

watch where the barrels of the rifles are pointed.
Remember that coaching takes second place to safety at all times
If you have to short-change one shooters coaching to ensure that the other shooter follows safe procedure, do so without hesitation, and talk to both about safe procedures afterwards.

At the end of the detail, shooters should collect their brass, change their targets and leave gloves and ear defenders on the range. Go over their targets with them outside the range if you feel you can help.

7.4 End of Night

At the end of the night, both ROs and the TRO should tidy the range. For a .22 night, hang up the target holders and mats on the appropriate hooks. For Air Rifle, move the tables to the side of the range and tie the cables for the target changers to the appropriate hooks in the ceiling.

All rifles should be wiped free of sweat and grime at the end of the night - Air rifles should have one or two cleaning pellets fired through them. Free rifles should *not* be cleaned every night as it affects their accuracy.

Balance the money and ammunition counts on the RO report and ensure that the RO report is fully completed.

Ensure that the electrical appliances in the lounge are all disconnected from the mains with the exception of the fridge. Put any milk left over in the fridge.

Tidy the range up - sweep if dusty; take out the rubbish if the bag is more than two-thirds full; if you cook, clean up after you; and in general, leave the range clean and tidy for the next ROs on duty.

The second RO should then ensure everything is locked up and take the bolts and ammunition or pellets and the RO report up to front arch. **Do not forget to return the keys to security in front arch.** Not to do so sets off all sorts of security alarms after midnight.

8 Procedures

8.1 Safety Briefings

The first thing to note about safety briefings is that they must be memorable. Humans do not recall long lists of detailed instructions well. Therefore there are three main points to make during the Safety Briefing - stick to this format.

1. **Bullets are Lethal**
   A .22 round is lethal at ranges of up to one mile. Tell the shooters this. More than that, show them the backstop, the damaged points on the range where stray rounds have done damage, and impress upon them the damage that these rounds can do. They must not ever point a rifle anywhere other than downrange for this reason.

2. **Trust the RO more than yourself**
   You as an RO have more knowlege and experience than they do - don't see this as being something to be modest about, when a shooter starts in D.U.R.C. there is an expectation that the RO knows enough to keep him/her out of serious danger. But you have to remind them that if you give an order on the range it has to be followed for safety reasons.

3. **Firing sequence**

   - Open the bolt with your hand fully open and fingers and thumb held away from the rifle
   - Load the round into the breech and slide it forward until it is fully loaded into the barrel

- If shooter is not in position, get them into position now
- Close the bolt, keeping the hand fully open and making sure to keep fingers far from the trigger
- Aim
- Squeeze trigger gently
- Round goes off
- With open hand, open the bolt and eject the spent casing

Should anything depart from this sequence, the shooter MUST call the RO immediately

8.2 Misfires

> Remember, while this is perhaps not the most efficent method for dealing with misfires, it is the official D.U.R.C. procedure and you are expected to follow it when training LMs or shooting with them.

Should a misfire occur, the first priority is to react quickly to stop the Lay Member (LM) from attempting to correct the problem themselves. That they should not do so should be strongly stressed in the Safety Briefing, but watch for this mistake anyway. Once they have been stopped from taking action themselves, follow this procedure :

1. **Wait** for 10-15 seconds.
   The most likely cause of such a 'misfire' is that the LM *did not correctly cock the bolt. However, the possibility of a slow-burning primer is a real one and must never be ignored. During the 10-15 seconds, you can stress once more to the* LM *that misfires do occour and that at all times they should call the* RO *rather than attempt to fix the problem themselves.*

2. **Recock Bolt**
   Remember to keep your hand open and held in such a way that if the round goes off, it's backward motion will not break your fingers. Also remember that the round may go off without notice so maintain a constant watch on where the barrel of the rifle is pointing.

3. **Attempt to fire**
   Let the LM *get into position and attempt to take the shot - again, watch where the barrel points as they get into position.*

4. **If the round fails to go off, Wait 10-15 seconds, remove and disposeof it**
   Carefully, with your hand over the breech to prevent the round being ejected onto the ground, eject the round. Get the other RO *to continue to watch the* LMs*, take the round outside and dispose of it, according to the appropriate procedure.*

Do not attempt to rotate the round.

Do not recock the bolt several times.

Though both of these are valid methods for dealing with misfires, they require the LM to either know too much, or completely forget what the RO is doing during the procedure. Better to stay with the simple procedure and not confuse the training.

8.3 Round Disassembly/Disposal

Disassembly of a live round is not an overly hazardous procedure, providing that you take sufficent care while doing it.

1. **Remove the round to the bathroom**
   It's not totally necessary to leave the range, but it is not a good idea to disassemble the round in front of other LMs *if it can be helped, from the point of view of a little knowlege being a dangerous thing.*
2. **Hold brass with fingers, grip lead with pliers**
   Never ever grab the brass with the pliers as the primer in the rim may still be active and a pliers is more than sufficent to detonate the round.
3. **Tweeze the lead out of the brass**
   Take your time, don't apply huge amounts of force. The bullet is designed to come out of the brass after all. Simply tweeze the lead back and forth a few times.
4. **Tip the powder down the sink and wash away**
   The powder itself isn't very dangerous - none of our .22 bullets have more than a tiny amount in them. It's the enclosed environment of the bullet that causes the explosion. We wash it down the sink or toilet just as a convienent way to get rid of it safely. Don't throw it in the bin on the range as it is an unnecessary fire hazard.
5. **Run water into brass**
   This ensures that all the powder and the primer is wet.
6. **Crimp the TOP of the brass with the pliers**
   *Be very careful here to deform the **OPEN** end of the brass and not the end with the primer.*

7. **Deform the lead bullet**
   Not really necessary except as a legal thing - reloading is strictly illegal so you have to render all the parts of the round useless.

8. **Throw lead and brass in bin**

9. **WASH YOUR HANDS**
   This is not an optional part of the procedure. The bullet is made of a lead/arsenic/antimony alloy which is toxic, the propellant in the round is toxic and the wax on the round is usually not terribly tasty. Hence, wash your hands to prevent accidental ingestion.

8.4 Rifle Assembly/Disassembly

The individual rifles that D.U.R.C. owns will have their own quirks for assembly and disassembly. At some future date we may document these. Until then, observe their assembly/disassembly and learn from the other ROs. There are however, a few general points to note :

- Check the last three digits of the serial number on the barrel match those on the end of the bolt
  Target rifle bolts are matched to their individual barrels, and even if you could fit one bolt in another barrel, you would damage both in doing so.
- The last thing added to a rifle during assembly, and the first taken away during disassembly, is the bolt.
- Immediately after inserting the bolt, insert a breech flag. Rifles should not be left without a breech flag normally, and never when they have a bolt inserted.
- Assemble the rifles at the start of the night - trying to assemble a rifle for someone during the night will cause delays.
- Check under the sights - usually the number of the gun (7,8,etc) is engraved on the underside of the sights.
- Sights (and bolts and triggers) are somewhat delicate and quite expensive. Treat them gently. Remember, nothing about a rifle requires much strength to assemble. If it isn't assembling easily, something's probably wrong.

8.5 Rifle Cleaning

Cleaning of rifles is a debated topic. Some feel that cleaning disturbs the barrel of the rifle, others feel that build-up of residues has the same effect. Since it is a time-consuming procedure, smallbore rifles are rarely cleaned at D.U.R.C. *and usually by someone that knows how - if you wish to learn, ask an* RO. *If you don't know, don't clean the bores. This does NOT however, apply to the exterior of the rifle, which must be cleaned every night to prevent rusting.*

Air Rifles

For Air Rifle, fire two cleaning pellets down the barrel. Remember that these pellets can cause damage at close range so fire them downrange.

Smallbore Rifles

Don't clean the bore of smallbore rifles unless you know what you are doing. Ask a more experienced RO if you don't know how to clean a rifle.

All Rifles

The exterior of all rifles must be wiped down after each night - pay close attention to the barrel, trigger, handgrip and cheekpiece, and ensure no sweat remains on these areas, as fingerprints on metal will eventually rust the metal, as has allready happened to one Air Rifle.

8.6 Alcohol/Narcotics

This is covered in the Safety Regulations. It is mentioned in the initial safety lecture at the start of term. It is also common sense, so no-one should turn up under the influence of anything. But if they do, they cannot under any circumstances shoot. If you miss their condition when they arrive on the range but notice it during a detail, they have to stop shooting immediately. This is a serious thing - members have been expelled in the past for breaking this rule.

8.7 Emergencies

In case of injury, first dial 999 on your mobile phone if you have one, and then dial 1999 on the range phone to let front arch security know of the situation. Apply First Aid if you know how.

In case of fire, remain calm - get the LMs out of the building and away from the fire. **DO NOT** attempt to rescue rifles, equipment, paperwork **or ammunition**. Remember, the buildings office houses explosive pressurised cylinders in the building we occupy – so risking your life to prevent .22 rounds from cooking off is not a wise decision. **Get Out, Get the fire brigade out and Stay Out**. Call front arch from luce hall or some other building if you don't have your mobile in your pocket.

Note that things like pipes bursting and electricity failures are not emergencies - they happen infrequently on the D.U.R.C. range due to the age and condition of the building. Call Front Arch on 1317 and let them know what's gone wrong. Usually, you will have to finish shooting for that night and put a notice on the door to that effect.

8.8 Tidying the Range

Every RO should tidy the range every night they are on duty. Make sure that brass is tidied up, that rubbish is in the bin and that cups are clean at the end of the night. If the rubbish bags are full, take them out and replace them. Clean out the coffee filter if necessary. Put milk in the fridge or throw it out.

Leave the ROs Desk in a tidy state for the next ROs on duty.

8.9 Encouragement of Shooters

Remember that the LMs are the life of the club - so encourage them whereever practicable. Encourage them to attend competitions, congradulate them for improvements in position or score. Talk to them when they're on the range about the sport and try to get them interested in going to competitions and so forth. Anyone shooting over 50 in air and over 70 in free rifle is quite ready to start going to competitions. Remember that they don't have to pay for going to competitions - we handle all the paperwork, we pay the entry fees, their ammunition is free, there's usually a social beverage or two after a shoot, we arrange lifts or public transport to and from the competition and there's the possibility of prizes. So there are many reasons to try competitions and little to lose but a sunday or a saturday. If groups should come down to shoot and some have to sit around drinking coffee while some shoot, that's a good thing and to be encouraged as it gives a good social side to the club.

9 Coaching

Coaching is to be covered in the upcoming RO training course.

Safety Regulations

1. Never, under any circumstances, point a rifle - ***whether loaded or not*** - at anyone.

2. Except when actually engaged in shooting, the rifle bolt must be kept fully open and the rifle unloaded. Where appropriate, magazines should be removed. Air Rifles should remain uncharged, unloaded and with the action open until shooting.

3. Target changing may be carried out only with the permission of the Range Officer who will ensure, having called a ceasefire - that all actions are open. Where target changers are used for Air Rifles, it is deemed polite to refrain from changing targets if someone at the firing point is shooting.

4. Members will not commence shooting until the Range Officer has given the ”Commence Fire” instruction. They must stop immediately once the ”Cease Fire” instruction is given.

5. Members must ensure that the rifle is pointing downrange at all times.

6. No member may remove a rifle from the firing point, unless directed to do so by the Range Officer.

7. In the event of any problem arising with a rifle, e.g. a round failing to detonate, call the Range Officer. Never attempt to deal with the problem yourself. He/She has been trained to handle it safely.

8. Rifles must be carried with the bolts or actions visibly open and in a safe manner. E.g. by the center of gravity of the rifle and not slung over a shoulder.

9. .22 rounds must be kept in the blocks provided and used only as required. These rounds are rimfire and so may detonate if dropped on a hard surface.

10. Smoking on the range or near ammunition is prohibited.

11. The consumption of alcohol before shooting is expressly prohibited. Any member who arrives at the range expecting to shoot is required to be free from the influence of alcohol or any other controlled substance, and will not be permitted to enter the range unless free from said influences.

12. Only Range Officers and those actually engaged in shooting may be present on the firing point during a detail. No one shooting on a detail may leave the firing point without permission from a Range Officer.

13. Members are required to familiarise themselves with the Club's General Regulations.

General Regulations

1. All members, before they are allowed to shoot, must

    - Have joined previous to that detail,
    - Have attended either the Safety Meeting held at the start of Michaelmas term, or one of the weekly Safety Briefings, and have satisfied the Instructor that they are familiar with the Club's safety regulations.

2. Booking of details :

    - Details are booked on the grids provided at our front gate noticeboard. Each detail is of 30 minutes duration.
    - You may not book more than one detail per week in Michaelmas term unless otherwise informed by the Club.
    - Unless you are otherwise informed by a Range Officer, you may not book more than one detail per day.
    - Squad training sessions are not counted as details, and so a squad member may attend squad training and book a detail in the same week, even in Michaelmas term.
    - Members may, if they expect details to fall vacant, turn up on the range in the hope of getting a free detail. Whether he/she does will depend on the R.O., who will advise in accordance with the Committee's directions.

- Members are required to turn up at the range at least 15 minutes before their detail is due to start. Those who arrive late for their detail forfeit their shooting time. Later details will not be delayed to account for lateness.
- Should a member be more than 15 minutes late past the start of his or her detail, that detail will be vacated. Should the member be more than 30 minutes late, it will be noted as a no-show.
- If two consecutive details fall vacant, the R.O. may terminate shooting for the night.
- Unless you are sure that you can turn up, do not book a detail.
- Should you have booked a detail and you subsequently find that you cannot attend, delete your name from the grid as soon as possible, thus enabling someone else to take your place. Failure to turn up for a detail which you have booked will lead to your shooting privileges being revoked until such time as a suitable apology is offered. You may not book details until after this apology is offered.

3. Wilful damage to club property is a serious offence and will be treated as such.

4. Most items of Club equipment, especially the rifles, are precision instruments. Members must ensure that they treat the equipment with the care and respect it deserves : e.g. don't use excessive force in opening and closing of rifle bolts.

5. Unless otherwise directed, members should replace equipment in it's proper place after use. This includes washing of mugs after coffee. This does not include removing rifles from the firing point after your detail unless directed to do so by the Range Officer.

6. Each member is expected to clean up his/her shells and change his/her targets after the detail.

7. Club files are confidential and may be consulted by Range Officers or Committee Officers only. Should you wish to see your records, you are entitled to do so, but a Range Officer or Committee member must retrieve them for you.

8. Scoring is the job of the Range Officer / Statistics Officer and will be carried out in accordance with I.S.S.F. / N.R.P.A.I. / N.T.S.A. rules.

9. Ammunition will be issued through and recorded by the Range Officer on duty only.

10. Members are expected to pay for ammunition each night at current rates.

11. Members must comply with all reglations and all lawful directions or instructions of the Range Officer(s) while on the range.

12. Access to the range, whether by a member or non-member, is at the discretion of the Range Officer, who may withdraw that permission at any time subject to Article 15B of the Club constitution.

13. Actions deemed by the Range Officer(s) to be in breach of the Safety Regulations or General Regulations may be punished by suspension or expulsion from the Club and/or by prosecution as outlined in Articles 15C, 19A and 19B of the Club Constitution.

14. Requests for letters or recommendations re firearms certificates will only be given consideration by the Committee in cases of the applicant being an active member of at least one year's standing. The Committee reserves the right of refusal.

15. In addition to the D.U.R.C. Club regulations, those contained in the Firearms Acts currently in force also apply to members.

16. The omission of regulations or directives from these regulations (Safety and General), does not mean that others cannot be enforced. The Committee reserves the right to add to or alter the regulations of this Club.

17. Members who have suggestions / queries may voice them by :

    - discussing the matter with a Range Officer
    - contacting the Committee
    - posting their suggestions or queries on the general email mailing list maintained by the Club

D.U.R.C. Committee, 2000

Acronyms

LM Lay Member

LMs Lay Members

RO Range Officer

ROs Range Officers

TRO Trainee Range Officer

TROs Trainee Range Officers

CRO Chief Range Officer

D.U.R.C. Dublin University Rifle Club

U.C.D.R.C. University College Dublin Rifle Club

W.T.S.C. Wilkinstown Target Shooting Club

F.S.C. Fassaroe Shooting Club

R.R.P.C. Rathdrum Rifle and Pistol Club

D.R.C. Dublin Rifle Club

Notes