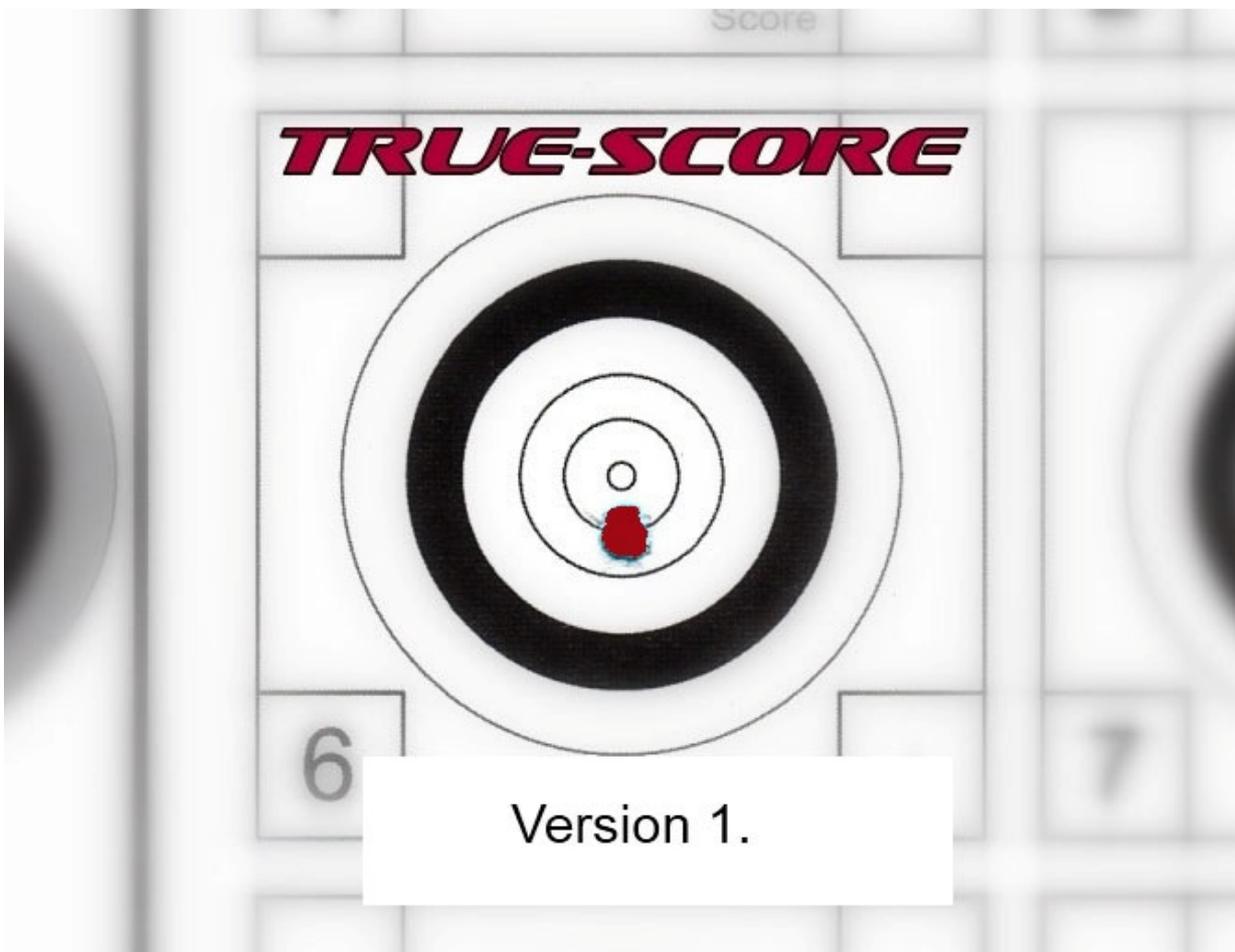


# Truescore user manual V1.8a

Author: Billy Chamberlain



## Table of Contents

1. Introduction.....	3
2. Equipment required.....	3
<b>2.1 Scanner</b> .....	3
<b>2.2 Black cover.</b> .....	3
<b>2.2 PC/Laptop.</b> .....	5
<b>2.3 Targets.</b> .....	5
3. How to install the application. ....	5
4. Pre preparation work.....	5
5. How to score a set of targets. ....	9
<b>5.1 Step One.</b> .....	9
<b>5.2 Step two.</b> .....	9
<b>5.3 Step three.</b> .....	9
<b>5.4 Step four.</b> .....	10
6. Typical errors or problems encountered. ....	14
<b>6.1Center not detected.</b> .....	14
7.....	15
8. General.....	16

## **1. Introduction.**

This purpose of this user manual is to help you understand how to use the Truescore program. This program is very elementary and by using it once or twice will give you the confidence to use it in future. It is a natural human behaviour to resist change and it will be natural if you are skeptical about this program in the beginning. I can guarantee you that after a couple of uses you will never look back and it will be the only program you use.

The program was developed and extensively tested in South Africa. Australia subsequently tested the program during their National championships and it was used with great success during the World Championships in Brisbane 2015.

The manual is broken down into small logical segments which will explain everything step by step. Lastly our philosophy is to as we learn and find better ways of doing things we share that amongst ourselves.

## **2. Equipment required.**

Truescore make use of a scanned image which is in a .jpg file format.  
The following is required to make use effectively of the program:

### **2.1 Scanner**

The .jpg file is the input Truescore requires to be able to electronically score a target. Any scanner that can scan at A3 size at 300dpi can be used. Scanning can be done to a memory stick if the scanner has the option, or the scanner can be directly connected to the workstation. The scanner is generally the biggest piece of equipment required and this is an area where alternatives can be explored such as the taking of photographs.

### **2.2 Black cover.**

A black cover is used to cover the target in the scanner. The reason for this is that the scanner projects white light through the holes that was shot. If the target is not covered then the background of the holes on the scanned images will be white and the program will not be able to detect the holes. The program needs to holes to be black. This cover is something you need to make yourselves and should be very inexpensive.

The size of the cover must at least be of A3. The inside must be black, however it must not be a glossy black since the glossy reflect light. Matt black works the best.



## **2.2 PC/Laptop.**

Any windows based workstation running Windows XP or higher. The application is not supported on Linux Apple iOS.

Java needs to be installed on the workstation. Either Java 7 or 8.

## **2.3 Targets.**

The Air Rifle and RimFire target to be used are very specific. The target is a color target (Blue and Red). The reason for the color is that the scoring program uses the scanned image of the target and the holes made by the pellets or RimFire ammunition are black after it is scanned and therefore the program searches for black areas. Therefore the traditional black and white targets will not work.

The sample file of the target that can be used for printing is attached. It is important that the target is printed 100% correct and square.

The paper must also be cut to exactly A3 size and 100% square. If it is skew the image will be scanned skew and you will encounter problems during scoring. The attached target which is in .pdf format is correctly sized and can be printed as is.

## **3. How to install the application.**

The application has no encryption and can installed directly. The "Install\_Truescore1.80.exe" file can be saved on your hard drive. Just double click on the file and the program will install. Installation is less than 30 seconds. The installation will install the application in the C drive. A new directory "Truescore" will be added with all of the subdirectories of which none must ever be deleted.

The two main directories that will always be used is "C: /Truescore/scan" and "C: /Truescore/scores". All files scanned and to be scored can be placed in this directory. You are welcome to make subdirectories or create other directories where you can store the scanned files. It does not have to be in the Truescore directory.

If Java runtime is not installed you need to install the Java run time first.

The folder "C:/Truescore/score" will be used by the application. Once a set of targets are done scoring, there is an option to export the file. A .CSV and .XLS file will be created and placed in this directory. Further explanation on this process will be explained elsewhere in this document.

## **4. Pre preparation work.**

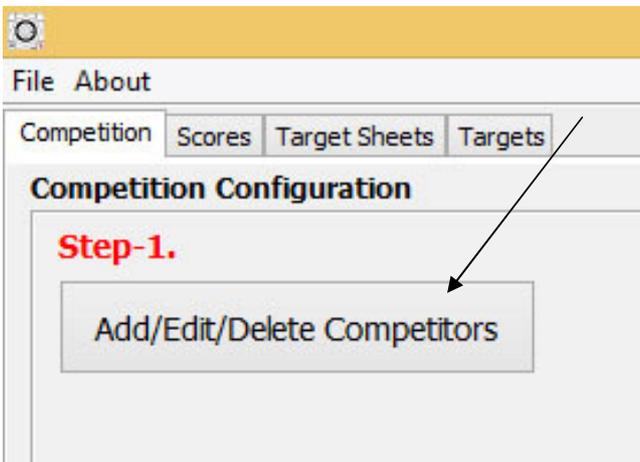
This section describes the preparation work that needs to be done before Truescore can be used. This in fact is a process that any shooting organization will do before a competition starts.

### **Ensure that all competitors are loaded in the shooters.txt file.**

The basis of the program are two elements and that is the shooter name and the shooter number. Every competitor must have a competitor number. This number must be allocated to the competitor upfront.

The shooters.txt file is located in the C:/Truescore/data directory.

You can either edit the file or enter the information in the file or you can open the program and use the Add/Edit/Delete Competitors function to add competitors.

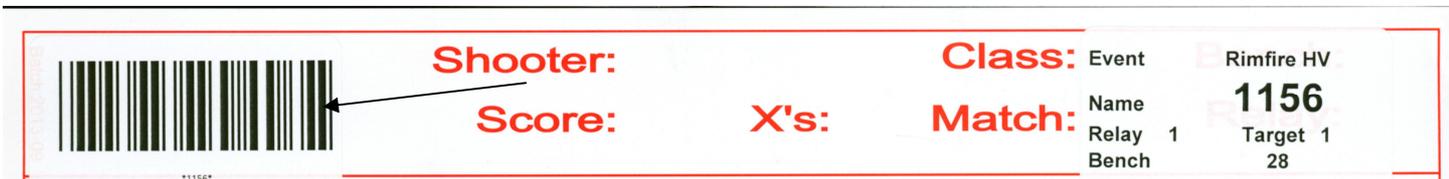


The file consists of four (4) fields; Competitor number, Competitor Name, Spare, Spare. The last two fields are at this stage not used but needs to either be defaulted (comma delimited) or can be populated with information such as gender or class. File example is 118, Billy Chamberlain, Male, Senior

This is done once off and once all your members are captured it remains there forever. If you wish to install the program on another computer just copy the shooters.txt file to the other computer. Once the installation is finished then you do not have to capture all the names again.

**Print barcode stickers for each competitor and stick them onto the targets.** This is optional. The program reads the barcode which consist of only the competitor number and this is used to identify and link the competitor's name. The barcode font must be **Code 39**.

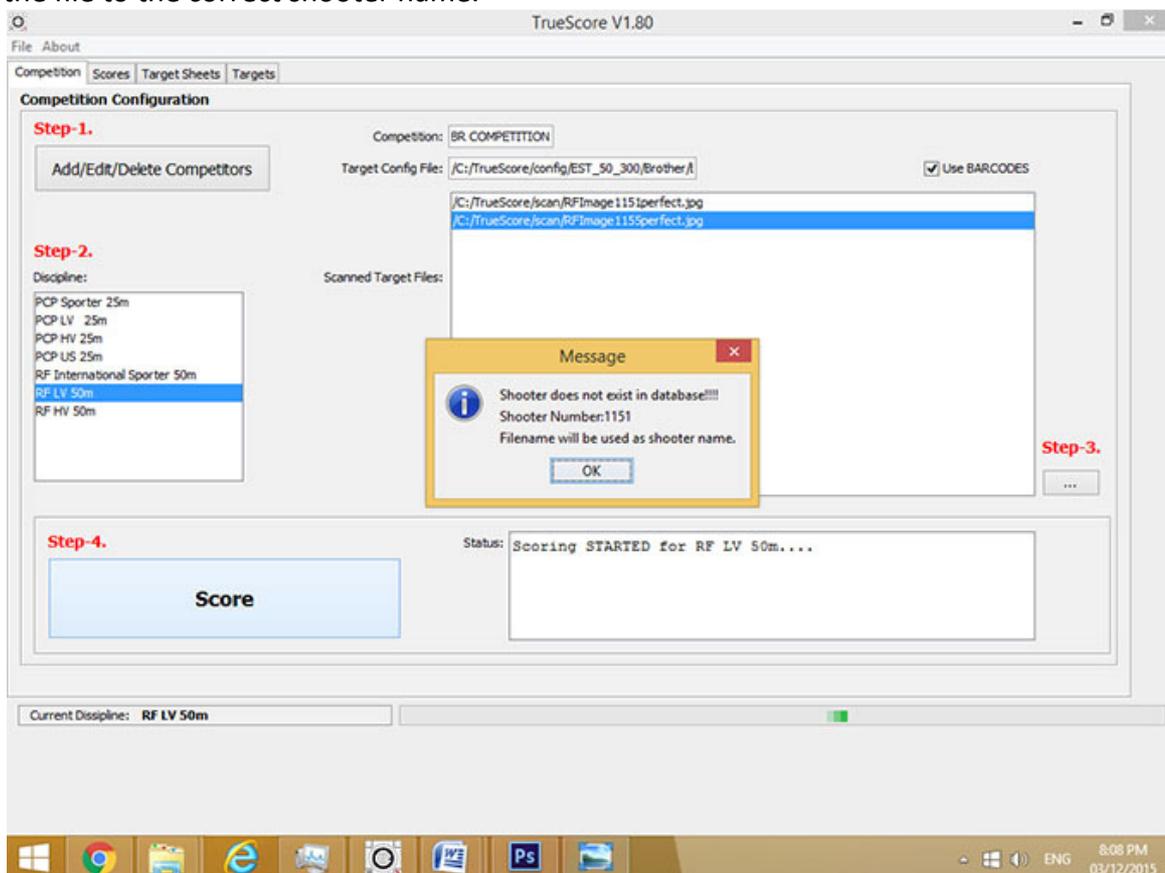
The use of the barcode is optional and you may find it difficult to print barcodes. If you decide not to use barcode it is important that you clearly write the competitor number in the space where the barcode would have been.



### Insert sample without barcode

The program will stop when it does not detect a barcode and will ask you to input a competitor number.

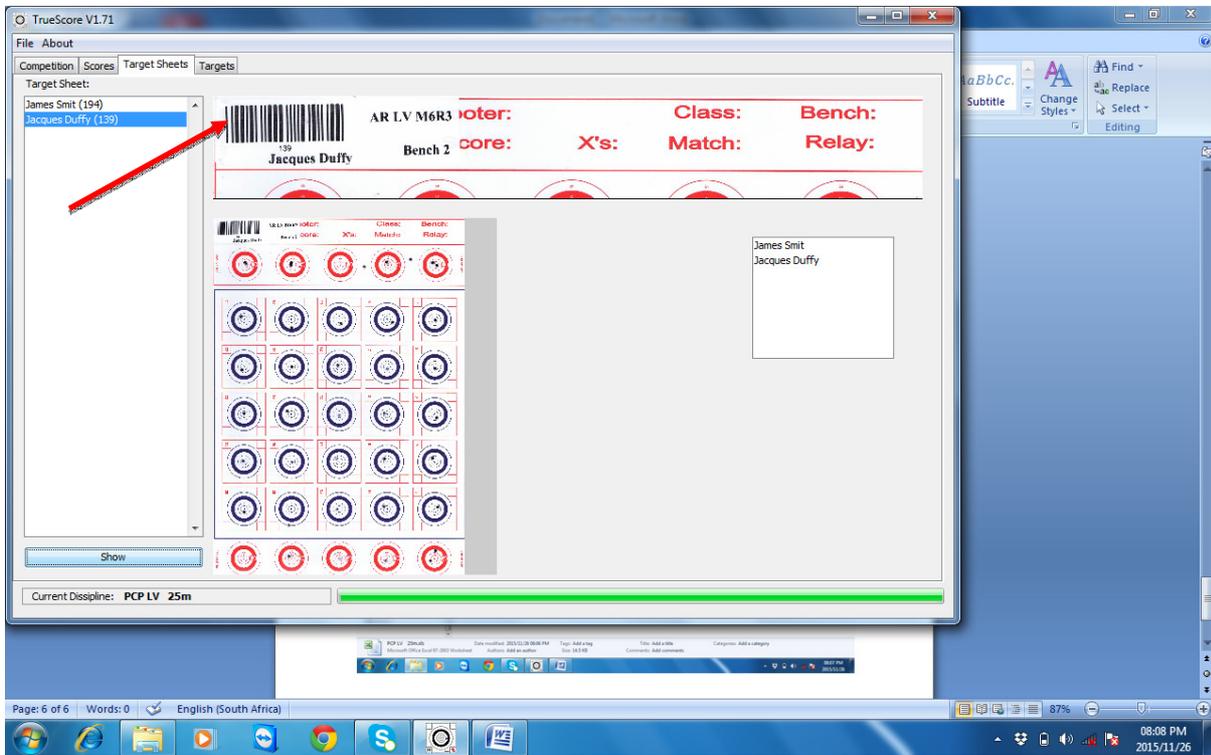
If you have a barcode, however if you have not created the shooter in the shooter database, you will receive the following message. Click OK. After the scoring you need to go to the “Scores” tab and rename the file to the correct shooter name.



If barcodes are used then the barcode must be stick in the left hand top corner of the target. It needs to be just inside of the red line of the target. The program only try to find the start character of the barcode on the inside of the red line.

Barcodes must be of font code 39. The preferred barcode height is 1.5cm however it can be a bit smaller in height. Bar width (X dimensions) .068cm, this will give you a total barcode length of about 6cm.

Conclusion, for a club competition you do not have to use barcodes but can write only the shooter number in the space of the barcode.



This image shows the position of the barcode on the target.

Once the setup is completed you are now ready to start the scoring process.

## 5. How to score a set of targets.

Once all the preparation work is done and the targets shot the scoring can be done.

What is important is to remember that each batch of scans will create an output file. It is important that you note this because **the output file name remains the same and it will override the previous file if you do not rename it after it was exported.**

### 5.1 Step One.

Scan all of the targets as described. Targets must be position exactly 100% aligned. If the target is scanned skew you might pick up trouble during the scoring process, however it is possible to correct the misalignment and this will be explained later. However you want to avoid this totally.

### 5.2 Step two.

Open the Truescore program if not already opened.

Copy the scanned targets to a predefined directory on your workstation. Best would be to keep the targets for differently relay separate therefore create directories as follows:

C:/Truescore/ARLV1, C:TruescoreARLV2, C:TruescoreRFLV1,C:/TruescoreRFLV2.

This is a personal preference and you need to do what works for you.

You can only score one target for the same person at a time, unless you allocate different competitor number to the different targets, e.g. Billy Chamberlain, 111 use this info for target 1 and Billy Chamberlain,112 for target 2.

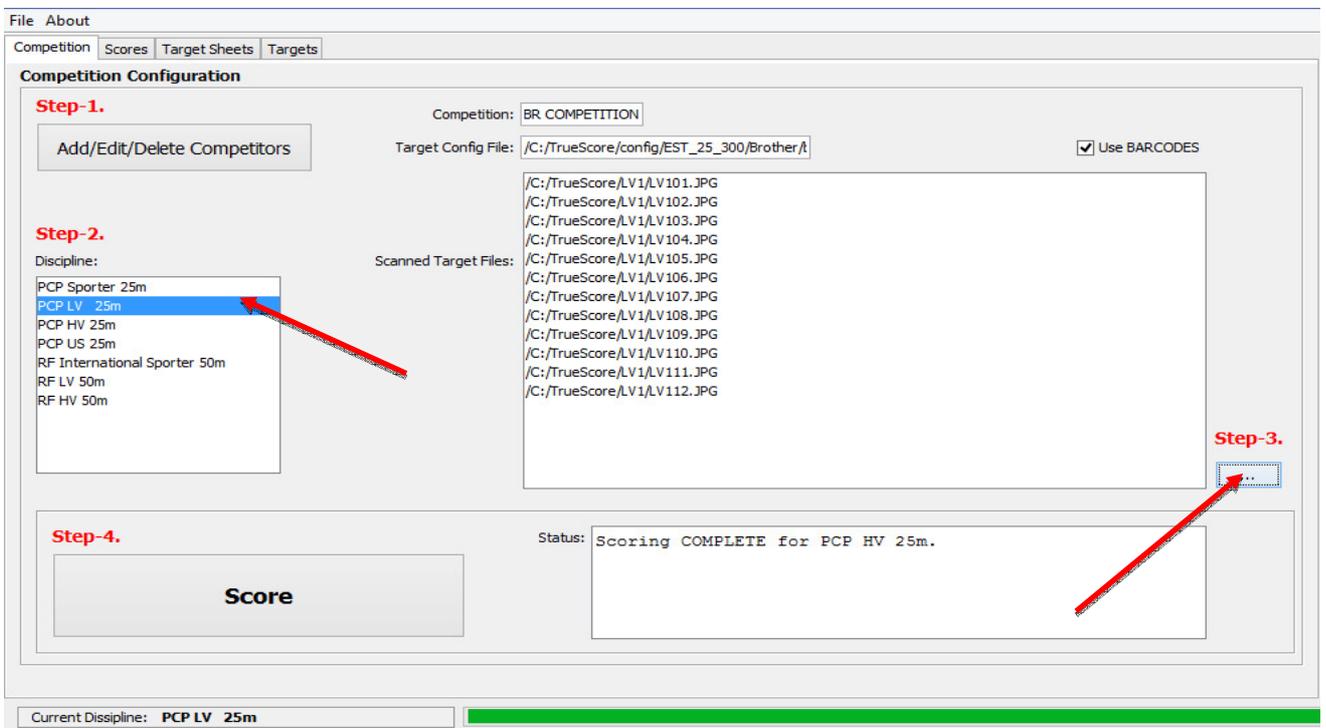
This is personal preference and you need to figure out what works for you.

Air Rifle and Rim Fire cannot be scored at the same time. Air Rifle must be scored together and Rim Fire together.

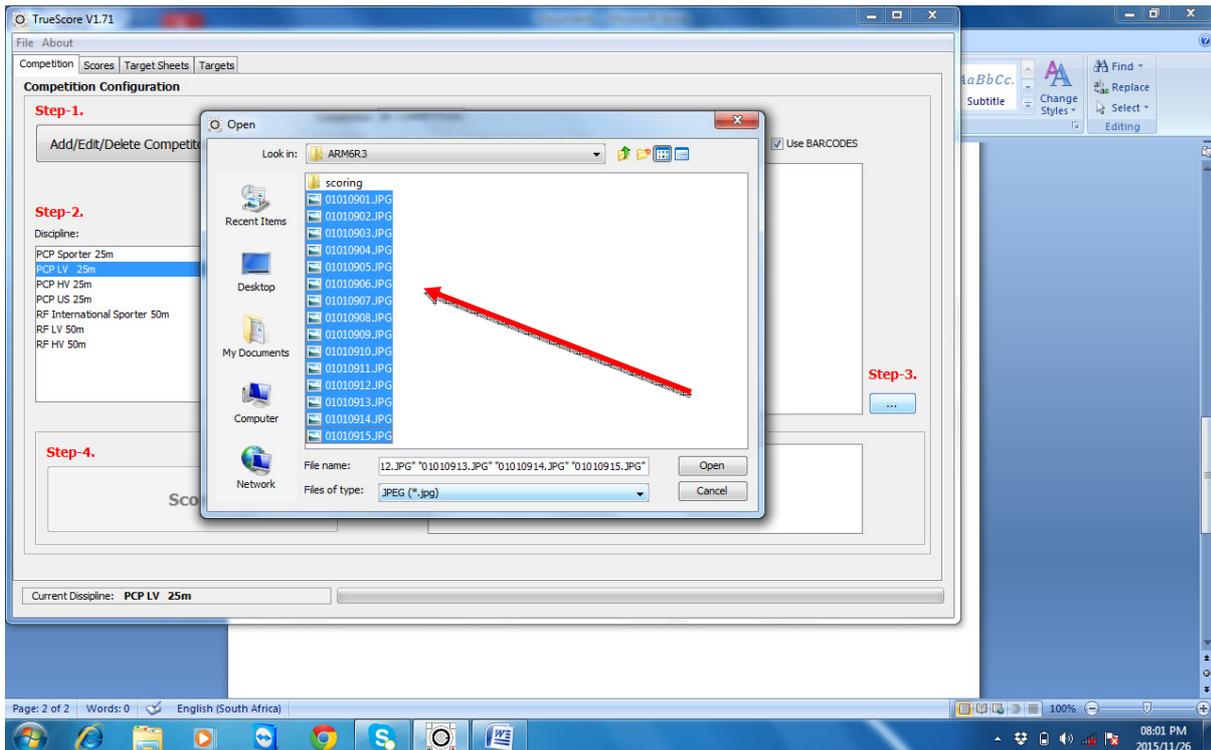
### 5.3 Step three.

Select the class you want to score e.g. PCP LV 25. The reason why you need to select this, is because the export file name will include as part of the file name the class e.g. PCPLV25 or PCPHV25.

Do not select RimFire when you want to score Air Rifle or Air Rifle if you want to score RimFire.



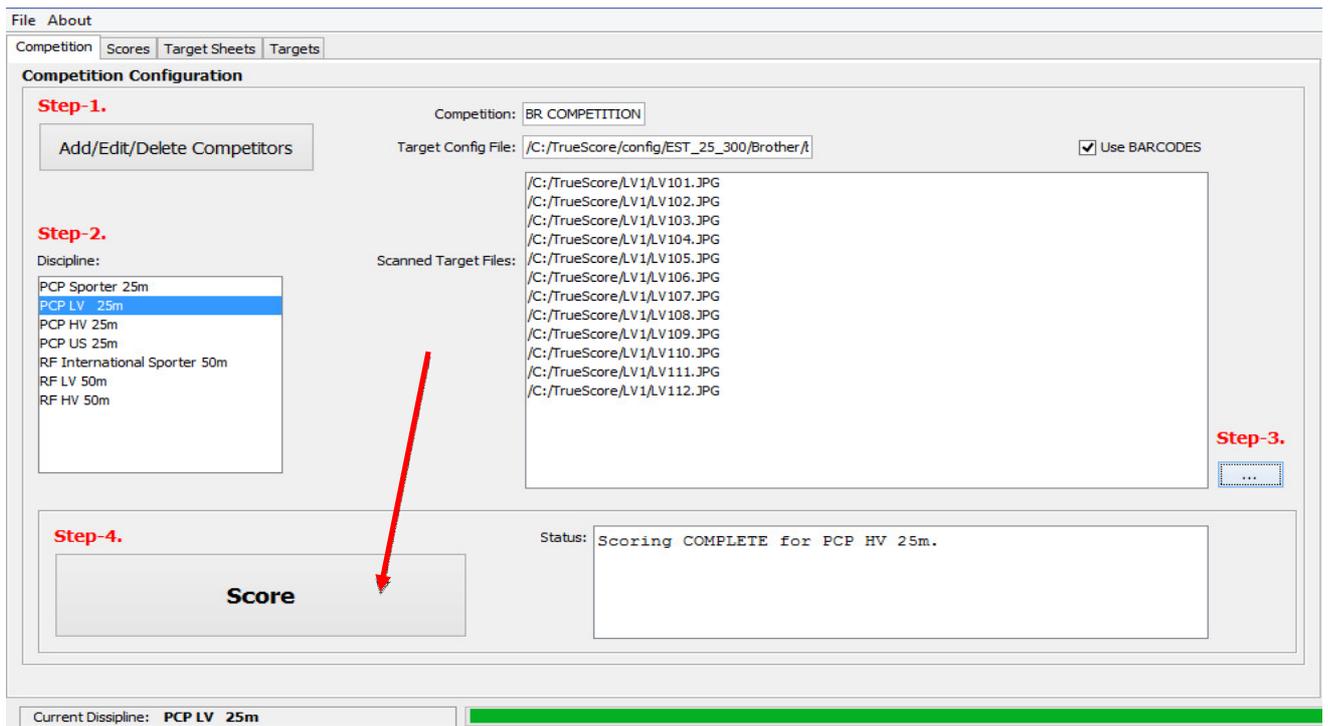
Once the discipline is selected click on the “Step 3” button.  
Select all the images you have scanned that you want score and then click “Open”.



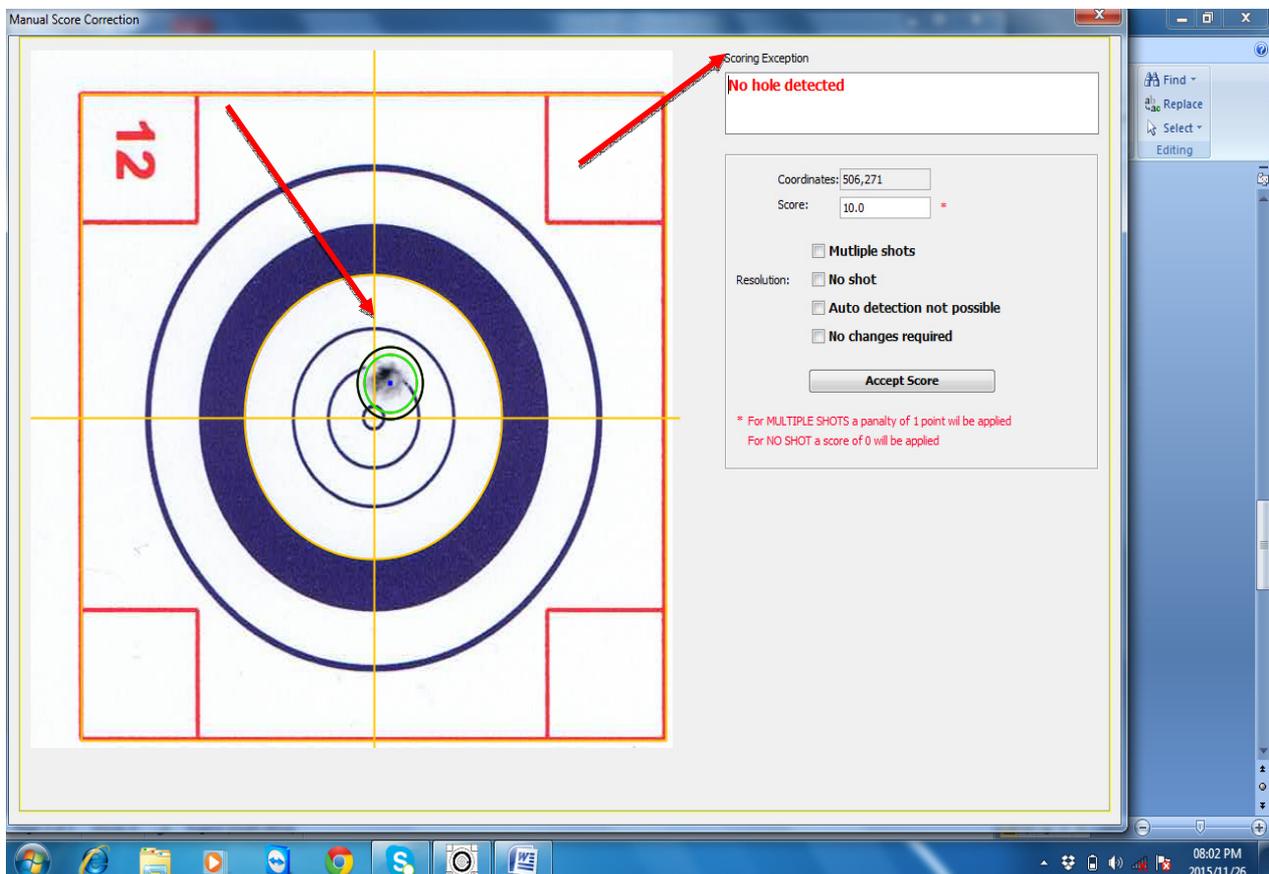
#### 5.4 Step four.

Once you have selected all of the images it will appear in the window.  
Click on the “Score” button.

Scoring will now start.

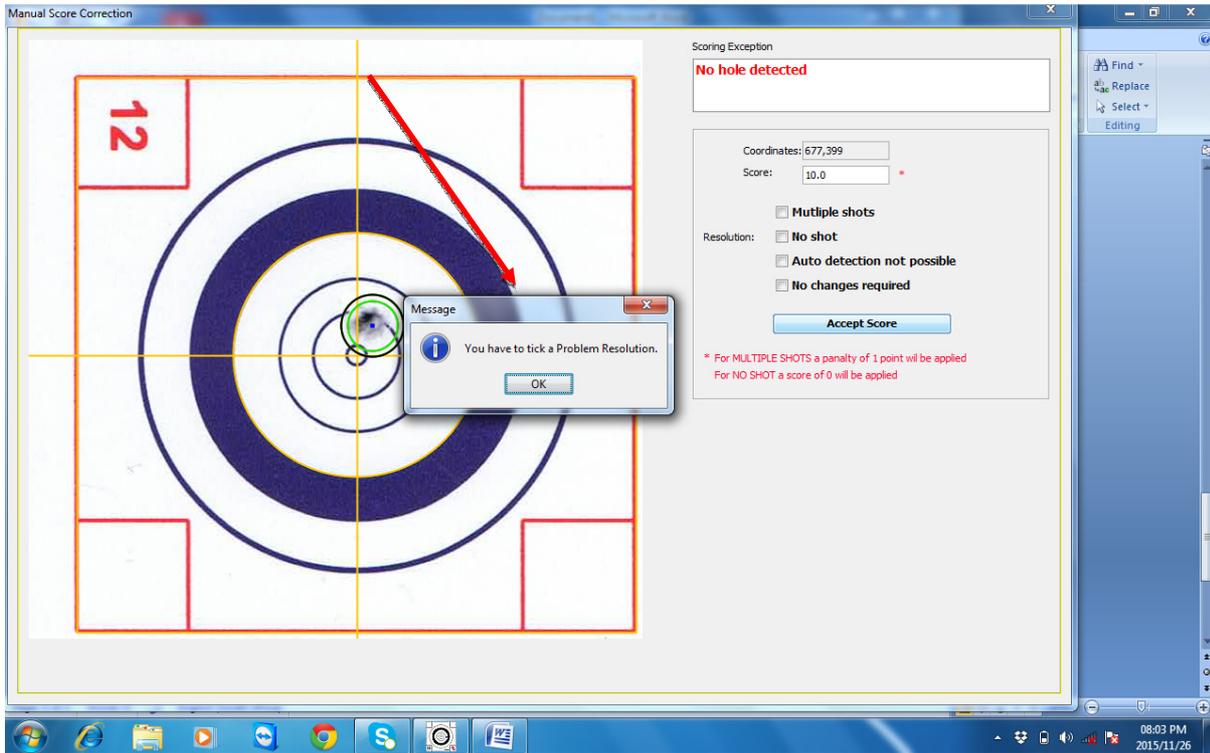


Depending on the quality of the scan and hole sizes, scoring takes about 6-8 seconds per target. You will notice that for RimFire the scoring will go very quickly since the hole sizes are bigger than Air Rifle. You will experience that with Air Rifle the program sometimes cannot detect a hole and you have to position to cursor over the hole.

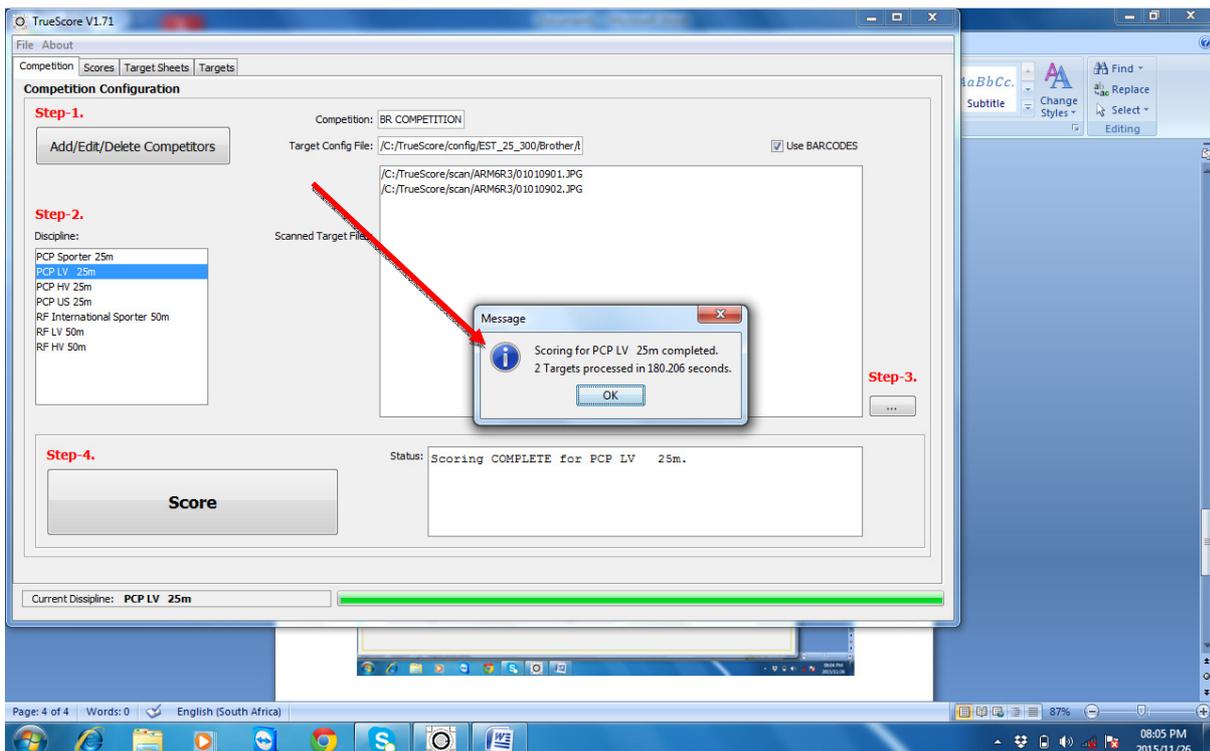


If you have placed the “circle” over the bullet hole, you need to tick a resolution. It is either “Auto detection not possible”, or “No Shot” or Multiple shots”. If multiple shots appear on a target and you select multiple shots, the program will apply the correct scoring rules.

If you do not select a solution the following window will appear.



Once the scoring is done, a message will appear that reads “scoring completed”. Click on the “OK” button.

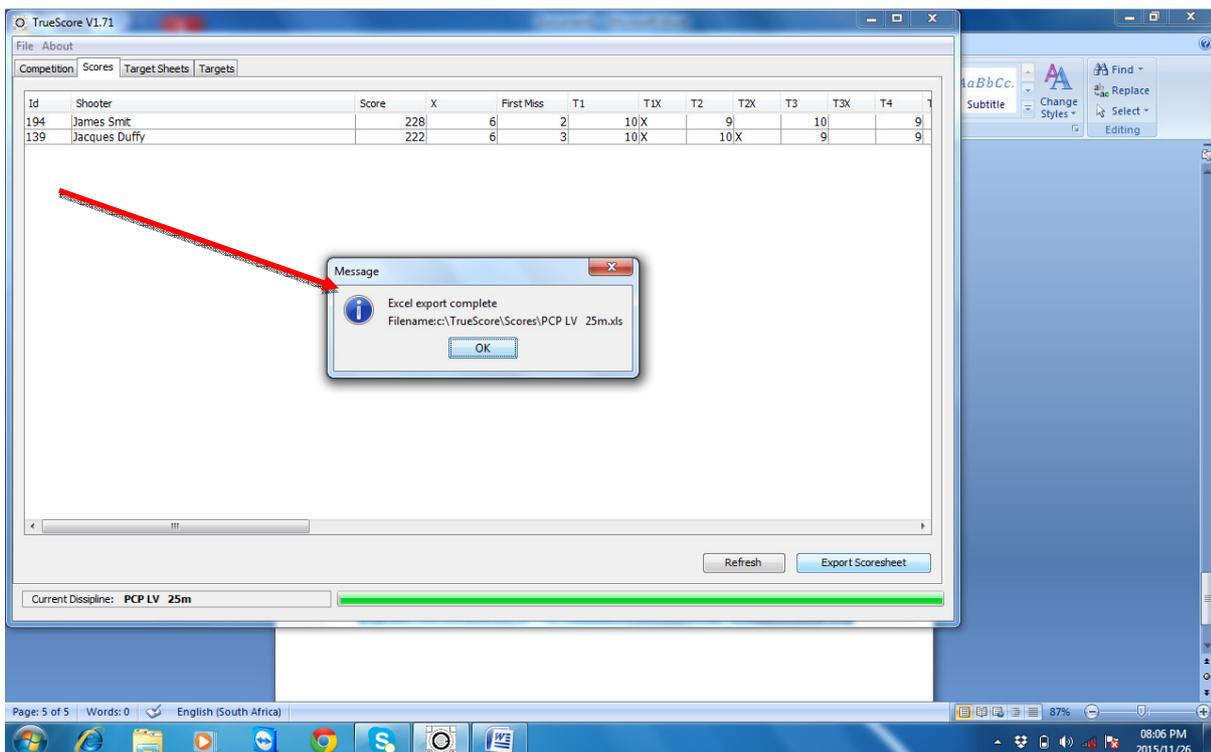
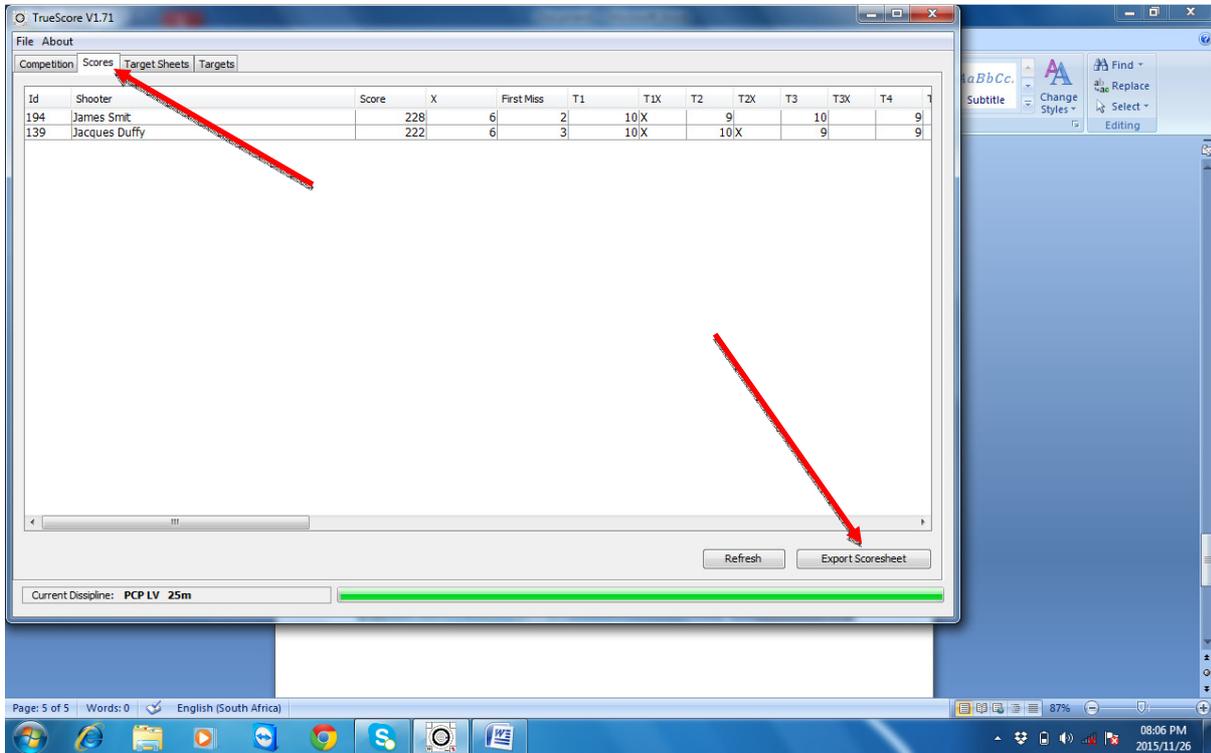


After the scoring is completed you can now export the file by doing the following.

Click on the “**Scores**” tab.

A window will appear with all the scores.

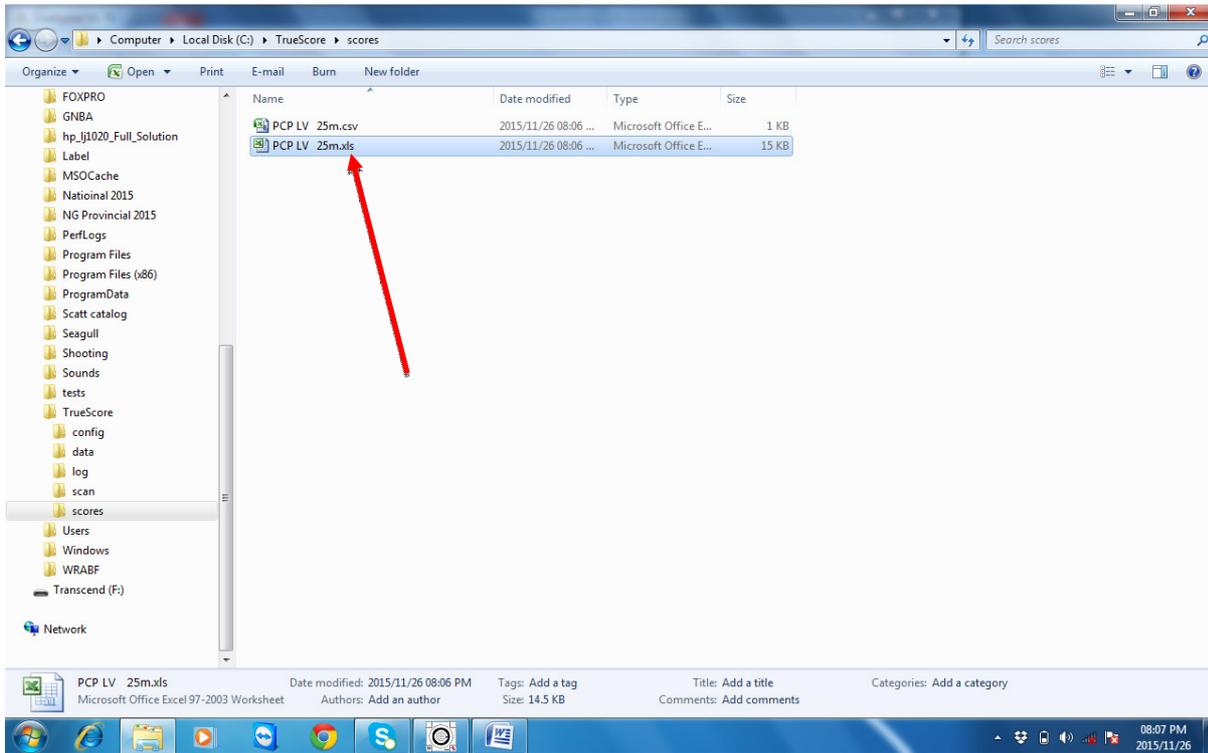
At the bottom of the window is a button “**Export Scoresheet**”. This will create an export file both .xls and .csv.



The window above shows that the export is completed and where the file was created.

You can now go to the directory and open the .xls file.

1. Open this results file in Excel and print the results.



## 6. Typical errors or problems encountered.

### 6.1 Center not detected.

When targets are scanned it needs to be position and scanned 100% squared. This means that the sides of the targets must be 100% correctly in the corner of the scanner. If not the target will be scanned skew and once the scoring process is started you will get an error that reads "Center of target not detected".. You then need to move with your mouse the cross to the center of the target and then press the button "accept center of target". You need to do this for every target that is off center and it can be all 25 of them.

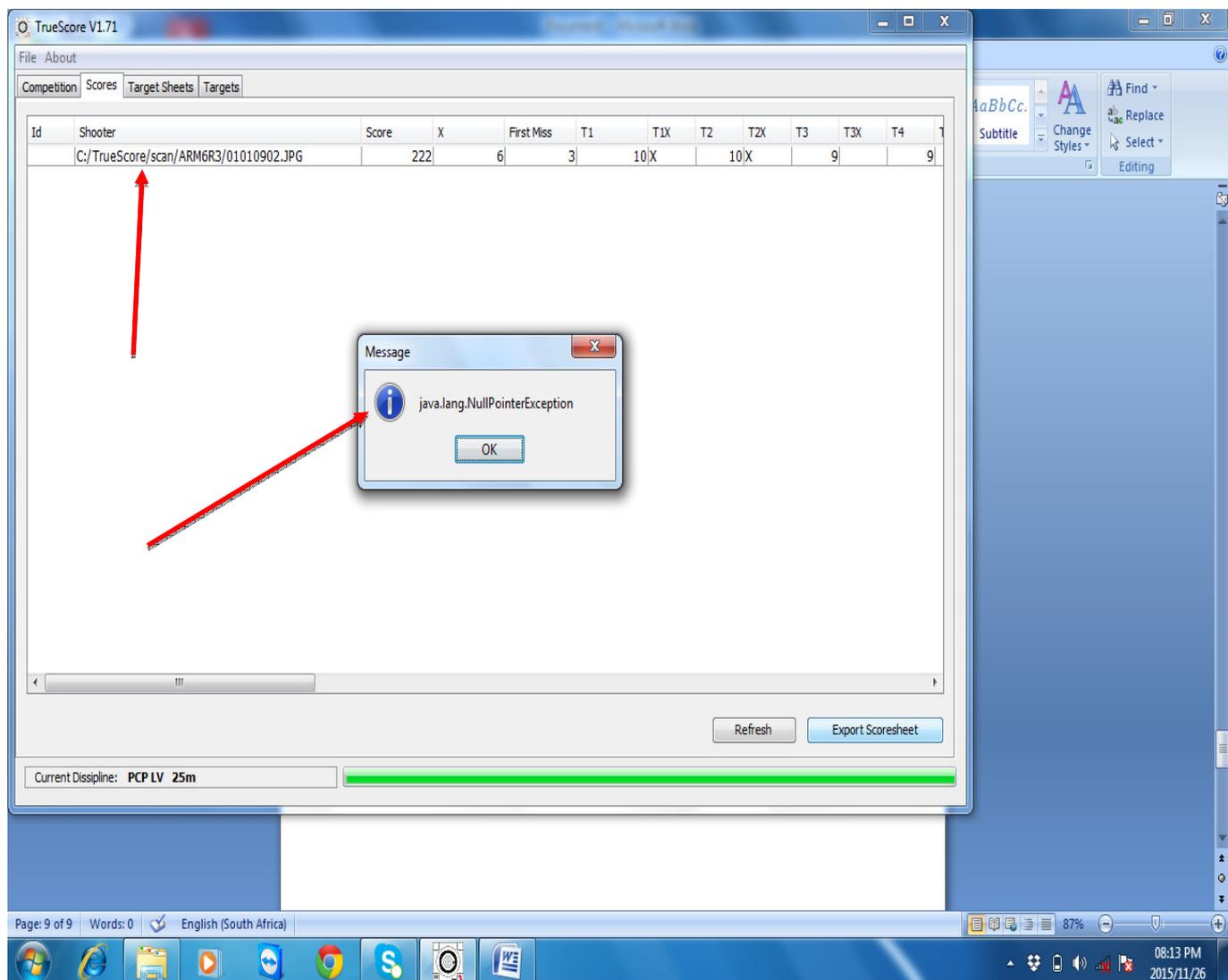
Insert image

### Java Null Pointer

This error will occur when you try and export the file you have just completed scoring. The reason for this is that during the scoring process a competitor number was not detected in the file and the program cannot create an export file. The export process needs a shooter name and number in the output file. You need to go to the **Scores** tab. There you will find all the scores with the names. The name which could not be detected will be named as "C:/Truescore/scan/ARMxxx/xxx.jpg. You need to change this name to the correct person's details. After you have corrected it you can export the file.

Another problem can be that directory names contain spaces e.g. C:/Score AR LV" instead of " C:/ScoreARLV". **There can be no spaces in directory names.**

This is something that happens often since it is natural behavior to create names in a readable format.



### Competitor number not found

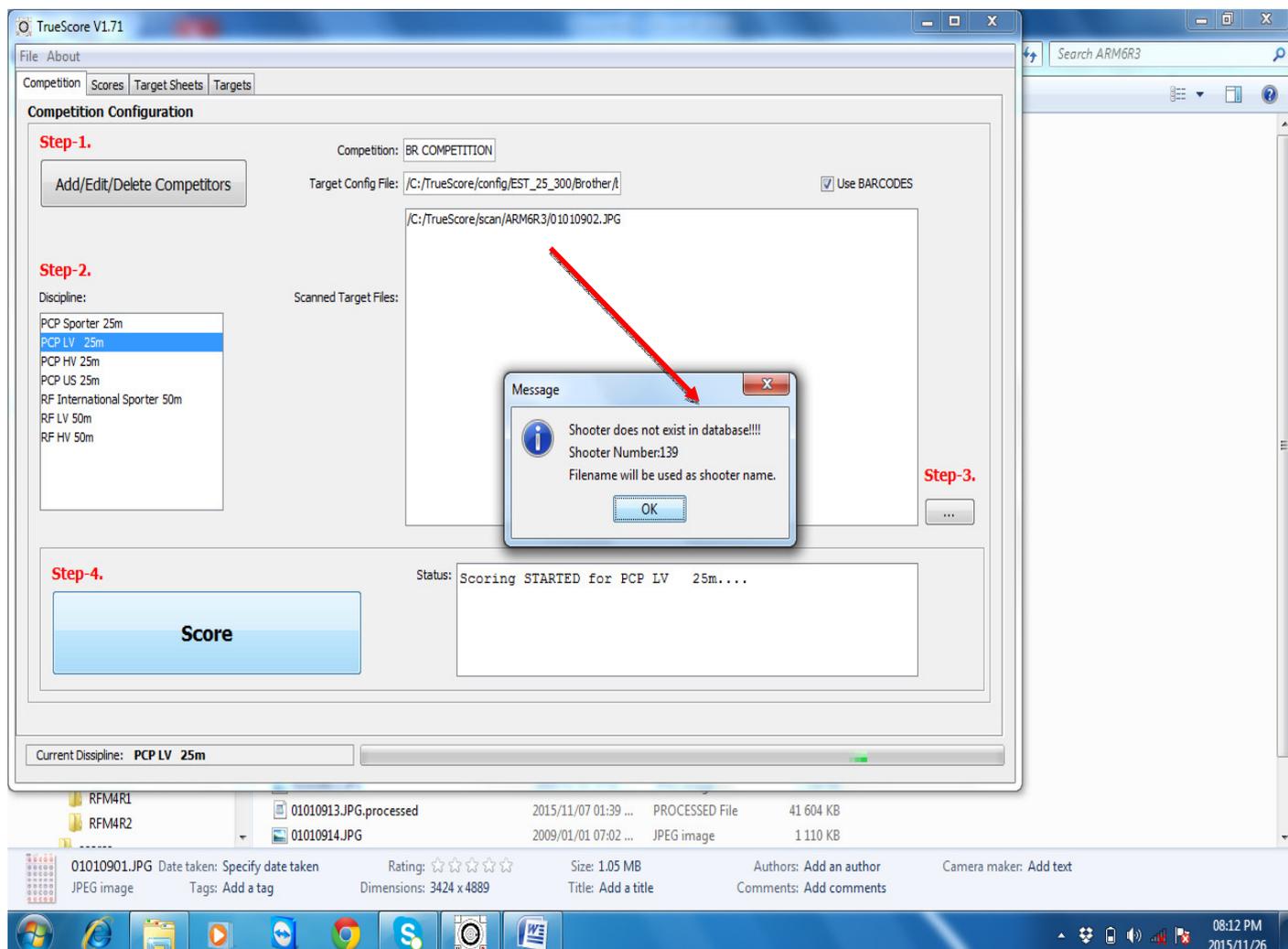
Competitor number not found can be the cause of one of two reasons:

The barcode is not positioned correctly in the top left hand corner and the program could not read the barcode

The shooter.txt file format is incorrect and either is not comma delimited or does not have 4 fields per row.

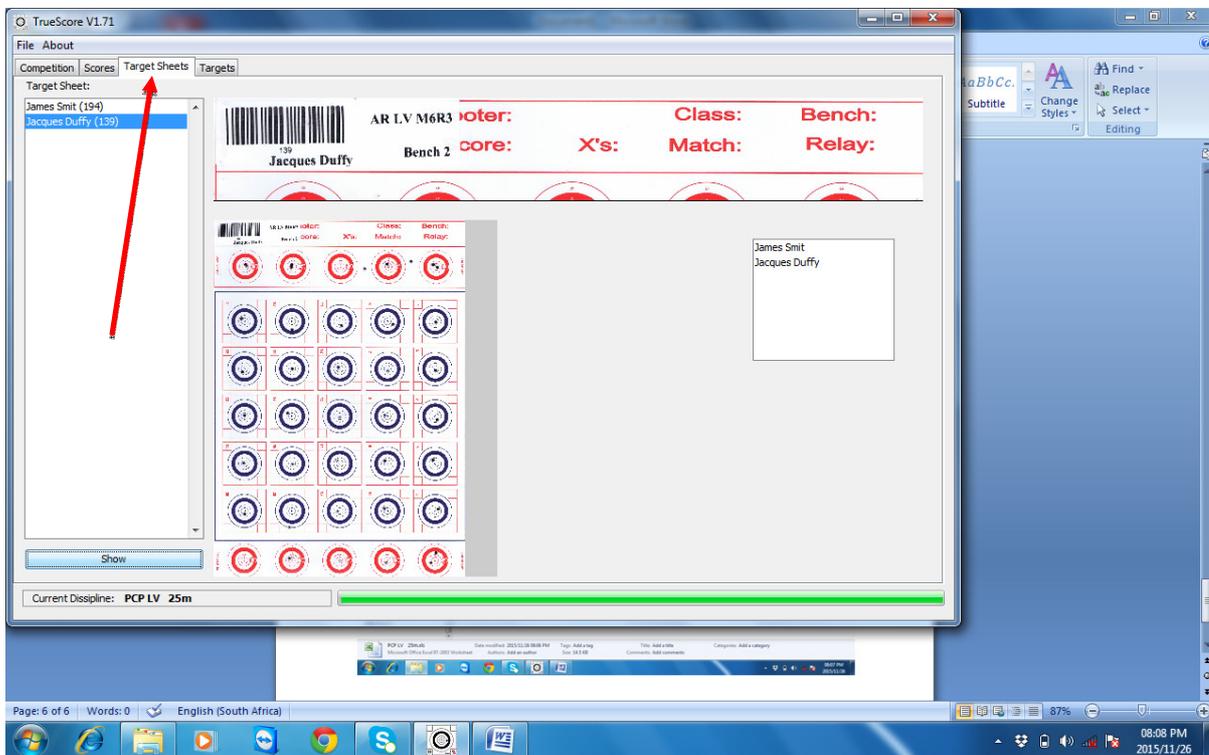
The results is that the program will create a name based on the file name as described in the previous section.

7.

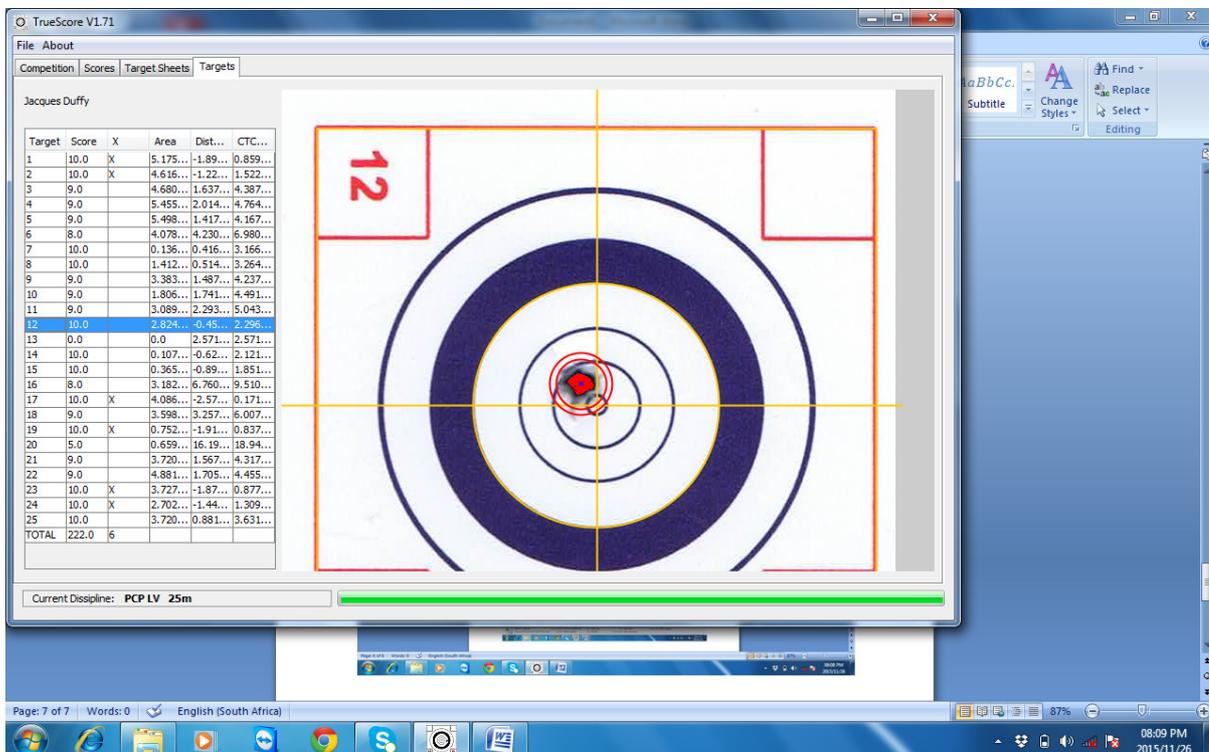


## 8. General.

A very useful function is to be able to view an entire target by selecting the "target Sheets tab.



Once you have selected the target you can select the “Targets” tab. This function will display a single frame so that you can see the shot at an enlarge state. As you move up or down on the left hand side the different frames will be displayed. The actual score is also displayed. This function is no used often but can be used in case of a dispute.



### Sample test files that can be used.

The get familiar with the program some targets are attached that you can use to score. The targets present different scenarios which will simulate real life scenarios.

#### Target 1.

ARLV1 – this target has a barcode and scoring will run through without a problem.

You need to add the following competitor details to the shooter file by using the edit/amend function on the program

118. You can choose any name.

**Target 2.**

RFLV1 - this target has a barcode and scoring will run through without a problem.

You need to add the following competitor details to the shooter file by using the edit/amend function on the program 1155. You can choose any name.

**Target 3.**

RFLV2 - this target has a barcode and scoring will run through without a problem.

You need to add the following competitor details to the shooter file by using the edit/amend function on the program 1151. You can choose any name.