WEIGHTLIFTING COMPETITION MANAGEMENT PROGRAM

(Versions dated from 18/09/2020)

This, Excel™ spreadsheet based, program is designed to manage all aspects of the conduct and reporting of weightlifting competitions. It is copyright ©, with all rights reserved, by Michael Noonan.

Contact me at mpnoonan@optusnet.com.au if you have comments, or suggestions for improvement.

Users should be aware that, although all care has been taken, the software may contain errors. I can't imagine how any of this could adversely affect your system, but all liability in the case of error remains the responsibility of the user.

NOTE: If you have a BLUE VANE™ attempt board and such is attached to the operating computer via a COM port (or via a USB to COM port converter) the program will automatically detect and operate it. For further details see the later section on the toolbox icon.

REQUIREMENTS

This program requires Microsoft Excel™ 2007, 2010, 2013, 2016 or 2019 to run. It will not operate properly using earlier versions of Excel™. The program has only been developed for Microsoft Windows™. I am told it will run under "Parallels Desktop®" on a Mac, but cannot validate that statement myself.

The screen resolution should be set to a minimum of 800×600. 1024×768 or higher is recommended.

WARNING: Users should NOT attempt to alter the format of any scoreboard items, as this may have seriously adverse impact on the operation of the program, including the potential of sudden and complete loss of all competition data. In the fullest sense this is not an Excel spreadsheet; all operations are under the control of the program code only. Attempts to alter the screen format can easily create circumstances which the program's code will not anticipate, leading to undesirable outcomes.
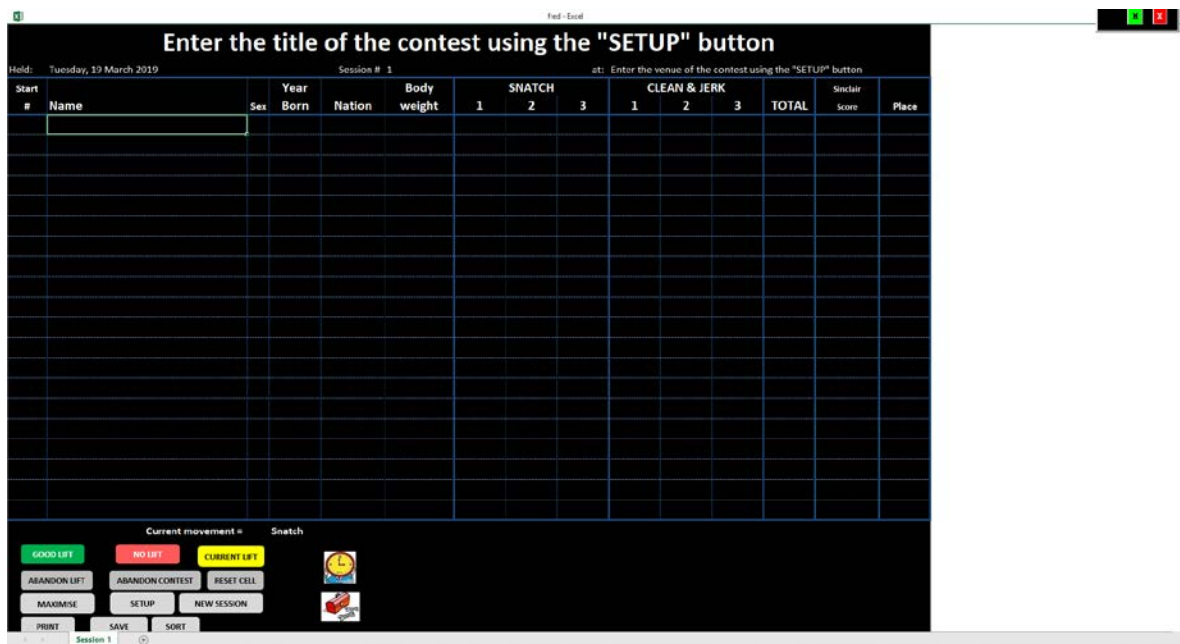
STARTING THE PROGRAM

The program can be started by opening it with Excel™, or by double-clicking on the competition management spreadsheet. Depending on your security settings, you may receive a warning that the spreadsheet contains macro code. You must allow such code to run for the program to work.

When you open the spreadsheet, you will be warned if it already contains competition data. The following form pops up and gives you the option of either retaining the existing contest (the default) or to create a new contest.
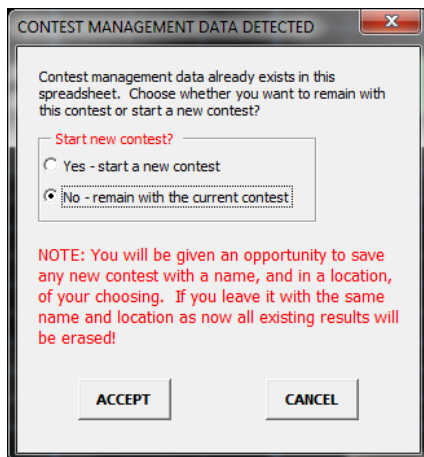
In order to assist users to set up contest management spreadsheets with file names that clearly indicate the name of the event you will be given an opportunity to save any new contest with a name, and in a location, of your choosing. When naming the new contest, if you cancel the standard Microsoft dialog box a new contest file will be created with the same name (and in the same location) as the existing contest and all previous results will be erased.

On creating a new contest management file, you will see a screen like the following.

***NOTE**: Depending on the nature of the monitor attached, and the display resolution set, there may or may not be some white space to the right of the spreadsheet.*

The first thing you may notice is that the normal Windows resize and exit buttons on the top right of the screen have been overlaid by a custom red **e****X****it** button and a custom green **M****aximise** button. The exit button is to ensure that when you exit Excel™ your spreadsheet is set back to its normal state. You can exit via this button at any time by clicking it. Your work to that point will automatically be saved. If at any point you accidently, or otherwise, exit the routine just open the spreadsheet again with Excel™ and accept the presented default option of staying with the current contest. All your existing data will have been preserved and you can resume the contest from the point you were at previously. The maximise button is to give you an easy way to maximise the display of the scoreboard on the screen if for any reason you cannot see some of the scoreboard.

At the bottom left of the screen are the various action buttons used to manage the contest. In the middle bottom is a clock icon. If you want to run an attempt time clock it will pop up on the bottom right of the screen when the clock icon is clicked. If you change your mind about using the attempt clock just click again on the clock icon and it will disappear. Note that the clock must be stopped before you will be able to remove it.

USING THE TOOLBOX

A toolbox icon is at the lower centre of the screen (under the time clock icon). Clicking on this brings up a form which allows users to select options which apply to the whole contest, as follows:

- *LIFTER PLACING*

    The program by default lift-by-lift calculates and displays the place achieved by each athlete at the current state of the contest, based on the Totals to that point. This option allows the placing to be determined by the Sinclair score, or "*Sinclair-Huebner-Meltzer-Faber*" (SHMF) score (if the use of SHMF is enabled on the **"SETUP"** tab), rather than the Total. If you do not want places to be automatically displayed you can turn auto-placing off by clicking on the "*Show updating placings?*" box to remove the tick.
    PLEASE NOTE THAT THIS PROGRAM DOES NOT SUPPORT THE IWF's "ROBI-POINTS" SYSTEM. If you wish to use these you will have to calculate such manually.

    If you have athletes who will not gain places, as they are 'guests' or are ineligible for any other reason to place in any section or category, before the contest begins place some text in the appropriate place column. You can put any text that you prefer (for example: "*Guest*", "*G*", "*NA*", "---", "===", etc.) in the place column. If you use "---" or "===" to indicate that the athlete cannot place in any section you will need to precede it by a single quote, because Excel™ will otherwise interpret the first dash or equal symbol as an arithmetic sign and will become confused.

    If your session has multiple place columns these are independently 'placed'.

    If you change the type of auto-placing (from 'Total' to 'Sinclair/SHMF', or vice-versa) all displayed placings are immediately recalculated. This change occurs regardless of whether the contest is currently running or not.

- *AUTO SAVE OPTIONS*

  All contest data is automatically saved at the end of the Snatches and the Clean & Jerks, and whenever session information or options are changed.

  The program inhibits the normal Excel™ auto-save function while the competition runs. On certain laptop computers, this function causes the program to unexpectedly crash and terminate without warning because of unavoidable interactions between Microsoft's automatic save mechanism and the program code. This is a common problem with program applications running in Excel™.

  Selecting this option causes the program to additionally automatically save all contest data up to that point every specified number of lifts (from 1 to 20). By default, the program saves information every three lifts. Depending on the speed of your computer, and the drive on which the contest management file resides, you may wish to change the auto-save frequency. You can even turn it off completely if the data saves cause the contest routine to respond sluggishly to commands. The frequency can be changed by clicking on the up or down arrow next to the current numbers of lifts recorded between each save, or stopped completely (without affecting the data saves mentioned in the opening paragraph of this item) by removing the tick on the choice box on the toolbox form by clicking on it. Alternatively, if you are running the program on a fast computer with a fast drive, you can have the routine save the data after each lift by moving the frequency to one.

- *SET UP BLUE VANE™ ATTEMPT BOARD*

  This allows users to select which serial communications (COM) port is used with a BLUE VANE™ attempt board. The default port is COM1. Although the manufacturers of the BLUE VANE™ board require that communications are via a COM port, it is possible to purchase USB to COM port converters from electronics retailers, thus allowing modern computers (which generally are not supplied with enabled COM ports) to operate such a device.

  Please note that it is the responsibly of users to make sure that the BLUE VANE™ board is actually attached to the selected COM port. If such a board is not attached to the specified port, or it is not turned on, this setting is ignored and no error message is given.

  Users may select what port (COM1, COM2, COM3, COM4, …, COM16) is used for communication with the BLUE VANE™ board by clicking on the up or down arrow immediately next to the currently selected COM port number on this form.

- *LIFT SEQUENCING METHOD*

  This option allows users to select the method of lift sequencing used in each contest. Available options are as follows:

  - ***IWF Rules***: Lifts are sequenced strictly according to the IWF Rules. This is the default.
  - ***By attempts, in start number order only***: With this option all lifters will be required to take first attempts in start number order regardless of the weight selected, then second attempts in the same fashion, concluding with third attempts in the same way.
  - ***By attempts, by weight then start number order when same weight***: All first attempts are taken in sequence, starting with the lightest weight requested and moving to the

heaviest selected weight, using start number order only when two lifters select the same weight. Second attempts are then processed in the same fashion, concluding with third attempts in the same way.

- *CUSTOMISE*

  o *Onscreen description of Interstate/Regional*

    This gives the capability of specifying the heading of the scoreboard column used to denote individual lifter Interstate/Regional team representation. You may specify any word (for example "*State*", "*Region*", etc.). The supplied default is "*State*". Whilst you can enter any text you prefer, the maximum length that can be displayed on the screen is six characters. Consequently, any entered text is automatically truncated to six characters.

  o *Show date of birth rather than year of birth*

    Users may select to enter and show each athlete's exact date of birth in new sessions, rather than the default year of birth, by clicking to produce a tick in the box next to the item labelled "*Show date of birth*". Please note that changing this value only affects NEW sessions created **after** this option is selected. The mode of display for existing sessions will not be changed. This behaviour is necessary to protect the integrity of previously entered session data. Birthdates are displayed in the dd/mm/yyyy format (for example 31/12/1991).

  o *Show Sinclair/SHMF scores on screen*

    You have the option of selecting whether to show for each athlete on the scoreboard the column giving Sinclair, or "*Sinclair-Huebner-Meltzer-Faber*" (SHMF) scores (if the use of SHMF is enabled on the "**SETUP**" tab). Please note that this option only affects the visibility of these scores on the scoreboard. Sinclair scores, or SHMF if enabled, are automatically calculated, and can be used to sort or place lifters regardless of whether this column is visible on the screen or not. When results are printed (via the PRINT button) or archived (via the SAVE button) this column is made visible on the printed or saved document notwithstanding what option is here selected.

  o *Show Best Lifts columns on screen*

    You have the option of selecting whether to show on the scoreboard the columns giving each athlete's best successful result in the Snatch and the Clean & Jerk lifts. Please note that this option only affects the visibility of these scores on the scoreboard. Best Lifts are automatically calculated regardless of whether this column is visible on the screen or not. When results are printed or archived these columns are made visible on the printed or saved document notwithstanding what option is here selected. By default, these columns are not shown on the visual scoreboard, but can be turned on as above.

  o *Print and archive Save in colour*

    This allows users to specify that successful and unsuccessful lifts are shown in the appropriate colours whenever a scoresheet is printed or archive saved. The supplied default for this item is to print in black and white only, but this option can be freely altered by each user.

o *Pause before Clean & Jerk start*

After all Snatches are complete the program by default moves immediately to the first Clean & Jerk. Putting a tick for this item causes the contest to pause so that Clean & Jerk starting weights can be entered or edited. When you have finished any editing, you can start the Clean & Jerks by clicking on the (yellow) "**CURRENT LIFTER**" button.

o *Show event title (name) row on screen*

By clicking on this to remove the tick you can turn off the onscreen display of the top line on the normal screen. This line shows the Event Title. When you PRINT or SAVE an archive copy of the event spreadsheet all hidden lines are automatically made visible on the printed or saved copy.

o *Show event details (Session number, date, venue) row on screen*

By clicking on this to remove the tick you can turn off the onscreen display of the second top line on the normal screen. This line shows the session number, the session date and the event venue name. When you PRINT or SAVE an archive copy of the event spreadsheet all hidden lines are automatically made visible on the printed or saved copy.

o *Count lift weight changes*

This option has the effect of including user lift weight changes in the count of when to periodically save all competition data, rather than just count the number of successful or unsuccessful completed attempts. The supplied default is off. Note that should you turn this on it will make the data saves more frequent and perhaps make the program operate sluggishly. My testing suggests that turning on this option with the "*Number of lifts between saves*" set to one (so that the routine automatically saves data on every user change) is only viable if you are running the program on a fast computer with the data being saved to a Solid State Drive (SSD).

Please note that items on the toolbox affect all sessions of a contest (although you can, if desired, vary these during a contest). If you want to customise your choices for all future contests created with your copy of *WLcontest* open the file *WLcontest* and decline the offer to set up a new contest. You should then click on the toolbox icon and choose any desired options. After you have pressed "ACCEPT" on this toolbox form immediately exit from *WLcontest* by clicking on the red X at the top right of the screen. From then on *WLcontest* will default to your selected options automatically.

SETTING SESSION PARAMETERS AND OPTIONS

After creating a new contest, or a new session to that contest, the first thing you should do is set up the session details by clicking on the "**SETUP**" button.

You should enter the contest (or session) title, venue and date in the session details section of the pop-up box above. Additionally, you should specify whether this is an International, Interstate/Regional or Club event. This latter option affects whether the third column on the screen is headed "*Nation*", a user defined six-character text or "*Club*" respectively. In the case of an Interstate/Regional contest the word supplied in the toolbox under "**CUSTOMISE**" is used to head that column.

Session official details can be entered on the right side of this box. If you don't know these at the time the session is set up these can be entered via this button at any time, even during an ongoing contest.

When new sessions of an existing contest are created, they inherit automatically the session details of the previous session of the contest. However, you can change each session's parameters via this "**SETUP**" button if, for example, a session is on a different date or you want it to have a different title.

The two options at the top left of the box by default are not selected for each new session. You can on a session-by-session basis turn them on (or off, if they were previously selected) at any time.

- *Option: Use SHMF for Masters?*

This will cause the program to show the "*Sinclair-Huebner-Meltzer-Faber*" (SHMF) scores of athletes of Master's age in the "*Sinclair Score*" column at the right, instead of the usual Sinclair score. When this option is selected this column will be relabelled as "*SHMF Score*". Lifters who are not Masters will continue to have their Sinclair score shown.

If you alter the previously selected option all scores and placings for that session are automatically recomputed. Please note that if you change this option whilst a session is in progress there will be a noticeable few second pause and the screen may flicker.

- *Option: Show multiple places?*

    By default, only one place column is shown, but you can have up to six. If you select this option you can also choose what headings you want for the 'place' columns. If you don't select any headings, or you only select one, only one untitled place column is shown. As well as the named potential place columns there is a place column option labelled "*Other*". This option, if selected, has a default heading of "*U15*", but there is a text box immediately to the right of that choice tick-box where users may put any characters desired for this place column. There is, as with the other place columns, a limit of three characters of text. If you enter more than three characters any excess will be automatically excised.

    If you want to show place columns with Masters Age categories (35+, 40+, 45+, etc.) select "*Show multiple places?*" and "*Select Master Age categories*", as shown above.

    After you have made all other changes necessary on this dialog box, click on "ACCEPT" and the following box will appear, allowing you to then select the desired Master age categories.
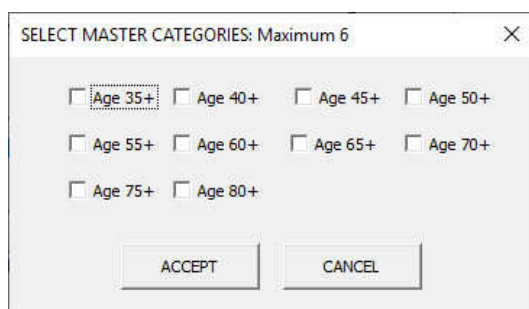
    You can select a maximum of six (6) place columns, including any non-master's categories. If you select more than six the program, after advising you, automatically returns to a single place column.

    Should you want only a single column for Masters (that is, with no specific age categories), instead select "*Master (single)*" in the first dialog box.

- *DEFAULT GENDER*

  If all of the athletes in this session are of the same gender you may specify via this option on a session by session basis whether the competing lifters are male, female, or of mixed gender. If you specify either male or female the then redundant gender ("Sex") choice column is removed. New sessions initially default to being of mixed gender.

  If the default gender for a session is changed during, or after, a contest is conducted all Sinclair scores for that session are automatically recalculated. Please note that if you change this option whilst a session is in progress there will be a noticeable few second pause and the screen may flicker.

  - *Option: Women lift first?*

    If you have specified that the athletes in a session are of mixed gender (that is, men and women will compete together) and (because the women are using a women's bar) you want all women to lift in both lifts before any men appear you should select this option – by clicking on the box to produce a tick – all women athletes will be called on each lift before any men are called, regardless of the weights requested. For example, a woman athlete wanting 70 will be called before a male wanting 60. If you leave this box unticked all athletes will be called in the sequence of their requested weights regardless of their gender.

- *HIDE LOWER SCOREBOARD ROWS?*

  The intent of this option is that for smaller contests, with less than the maximum number of twenty athletes, unused scoreboard rows at the bottom of the scoreboard can be hidden, increasing the visual focus on the competing athletes' performances. Please note a maximum of 10 rows can be hidden. New sessions automatically default to showing all twenty lines. Only the lower rows of the scoreboard can be hidden, so athlete data should be entered towards the top of the scoreboard if you want to use this option. At any point should you want to show all scoreboard lines simply decrease the number of hidden rows to zero. When you PRINT or SAVE an archive copy of the event spreadsheet all hidden lines are automatically made visible on the printed or saved copy.

When you have entered all required data on this box press the "**ACCEPT**" button at the bottom and the screen will be updated to reflect your choices, and your options will be implemented from that point onwards with this session.

Your options are saved with each session's spreadsheet, so whatever options, etc., were selected for each session will be automatically honoured if you exit Excel™ then resume the contest later.

- *DELETE SHEET*

  This button allows you to delete unwanted session scoresheets created by a user accidentally (or otherwise) clicking on the "*NEW SESSION*" button. As a safety precaution, to prevent the unwanted deletion of actual contest data, this option is only available if the current session sheet has no lines marked with start numbers. If a sheet is eligible for potential deletion, a yellow button with red text "DELETE SHEET" is shown on the bottom centre of the "*SETUP*" dialog form. If any lines on the scoresheet have start numbers the "DELETE SHEET" button is not shown. If a user clicks on this button they are reminded twice of the irrevocable nature of this deletion. In order to delete the scoresheet, you must twice click on "Yes" to validate your desire to delete the sheet. The default answer in both cases, in the event that a user just presses the 'Enter' key, is to Cancel the action. If you do answer "Yes" both times the current sheet is immediately, and irreversibly, deleted. If necessary, remaining sessions are renumbered so that they are in correct, unbroken, numerical sequence. You cannot delete the only session scoresheet in a contest file. If a session was currently running on another tab this is automatically stopped. Such session can be restarted by moving to that session's sheet and clicking on the yellow "*CURRENT LIFT*" button.

ENTERING DATA

Now is the time to enter the athlete details. Lifters **_must_** have a start number (1 – 999) which can be listed in any order. Lines without start numbers can have any text placed on them. These headings can be used to indicate different bodyweight categories, or for any other purpose at all.

- Lifter names can be shown in any format desired.
- If you haven't specified a default gender for this session's athletes (via the SETUP popup form) each lifter's gender ("*Sex*") ['m' or 'f'] should be indicated. If you omit this Sinclair/SHMF scores will not be computed.
- If you want to use the SHMF Master's option years of birth (either four or two digits; for example, 1963 or just 63) must be shown or the SHMF score will not be computed. If you have selected to display dates of birth, rather than years of birth, the lifter's year of birth is automatically calculated if SHMF scores are required.
- Starting attempts for the Snatch and Clean & Jerk can be entered at any time before the beginning of a session. You can enter the athletes' names, etc., and then later add their bodyweights and starting attempts.
- If you omit bodyweights the contest will run and athletes will be appropriately placed, but Sinclair (or SHMF) scores will not be displayed or calculated.
- NOTE: By design, this program cannot determine placings across different sessions of the same weight category. If you run multiple sessions with the same weight category you must determine placings yourself and manually edit the automatic program placings across the relevant sessions.

Lifters can be shown in any sequence – they don't have to be in start number order. When the athletes' details have been entered, they can be sorted into start number order automatically by clicking the "**SORT**" button and accepting its default of sorting on start number ascending to put the scoreboard into the IWF required start number order.

Note that lines without start numbers are not moved, so that athletes will be in start number order in categories after a sort if headings are used. Additionally, if a sort on start number is undertaken the "**SORT**" button will NOT compute or display placings in categories.

New sessions can be added at any time by clicking on the "**NEW SESSION**" button. You can move between sessions by clicking on the tabs on the bottom of the screen.

RUNNING THE CONTEST

- When you have entered all data, you can start the contest by clicking the "**CURRENT LIFTER**" button. This will highlight (in yellow) the current lift and that athlete's name. During a lift you don't need to keep clicking this button as the highlight should automatically move to the next lift in the correct sequence as attempts are undertaken. At the end of the Snatches by default the program automatically moves on to the first requested Clean & Jerk. If you prefer, by putting a tick on the "**TOOLBOX**" option "*Pause before Clean & Jerk start*", you can make the program halt before moving to the Clean & Jerk, which allows you to more easily edit multiple Clean and Jerk starting attempts if desired. If you select this "**TOOLBOX**" option, when you are ready to start the Clean & Jerks click the "**CURRENT LIFTER**" button. There are unusual circumstances, like printing results in the middle of a lift, which may turn off this automatic lift sequencing. If this happens to you just click again the "**CURRENT LIFTER**" button and automatic lift sequencing will resume.
- The athlete who may be next called (after the current lift) has his/her name shown in yellow text.
- If the current athlete succeeds with a weight click "**GOOD LIFT**" (Green button); if the lift is missed or is failed click "**NO LIFT**" (Red button). The athlete is given an automatic increase of one kilogram after a successful attempt and the same weight if the attempt was failed or missed.
- When any athlete wants to change his or her attempt's weight just click on the cell with that attempt, change the weight as required and either press "*Enter*" on the keypad or click away from the edited cell. If this change causes a different athlete to be called the current athlete indication will change automatically. If the athlete changing weight is the current athlete that cell will already be selected so all you have to do is type the new weight and press "*Enter*" or click away from the edited cell.
- If an athlete abandons remaining attempts <u>**on this lift**</u> click on the cell from where attempts are to be abandoned (unless it is the current athlete, who will already be selected) and press the "**ABANDON LIFT**" button.
- If an athlete abandons all remaining attempts <u>**in the contest**</u> lift click on the cell from where attempts are to be abandoned (unless it is the current athlete, who will already be selected) and press the "**ABANDON CONTEST**" button.
- Should any errors be made in marking lifts as successful, failed, abandoned, or a Jury overrules the referees' decision, any attempt can be reset to the status of not yet attempted by clicking on the appropriate cell and clicking on the "**RESET CELL**" button. Note that any numbers in a cell are left untouched, but they can be changed, or deleted using the keyboard's delete key, if they are superfluous. If you need to change a Snatch lift after all Snatches are concluded you should momentarily change back to Snatch by clicking on the first few letters of the word "*Clean*" on the bottom left of the scoreboard where it says "*Current movement = Clean & Jerk*" (immediately above the action buttons). A selection arrow will appear, from which you can choose "Snatch", then make whatever changes are necessary using the "**RESET CELL**" button.
- There is also a button marked "**MAXIMISE**". This should not normally need to be used, but if for any reason the scoreboard doesn't take up most of the screen, or you've turned the Excel™ menu bars back on, etc., just click on this button and the scoreboard will resume its

normal maximised display. You can achieve the same effect by clicking on the green maximise button on the top right of the screen.

AFTER A SESSION IS FINISHED

- **SORT**
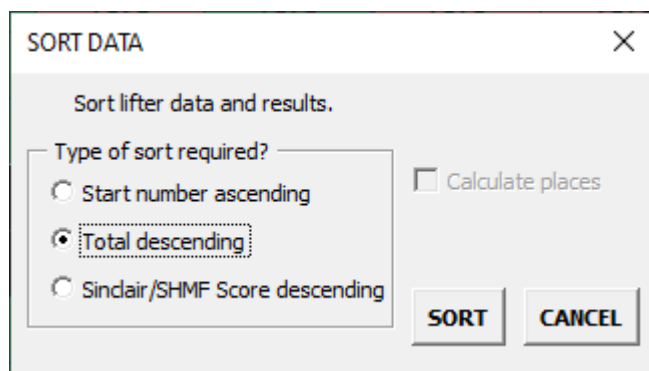
As indicated earlier, this button can be used before the start of a session to sort athletes on-screen into start number order. After a session is finished this button is used to automatically sort athletes into final placing order by either Total or Sinclair/SHMF score. Simply click of the type of sort required. By default, the button also calculates and displays the placings of competitors. If you don't want the routine to calculate placings untick the "*Calculate places*" box.

If you have athletes who will not gain places, as they are 'guests' or are ineligible for any other reason to place in any section or category, before the contest begins place some text in the appropriate place column. You can put any text that you prefer (for example: "Guest", "G", "NA", "---", "===", etc.) in the place column. If you use "---" or "===" to indicate that the athlete cannot place in any section you will need to precede it by a single quote, because Excel™ will otherwise interpret the first dash or equal symbol as an arithmetic sign and will become confused.

If your session has multiple place columns these are independently 'placed'. See the example at the end of this document.

- **PRINT**

This button prints a copy of the current session results on the system default printer. If the printer is not online, or has no paper, no error message is shown. You can print the page at any point. For example, if you need to give Jury members a copy of the preliminary scoresheet, with starting attempts indicated click this button before you begin the competition. If you print partial results during the conduct of the actual lifts you may need to click the "**CURRENT LIFTER**" button to resume the automatic sequencing of lifts.

Note that when a session is printed in black and white mode (as specified by the TOOLBOX option "*Print and archive Save in colour?*") failed lifts are marked with strikeout in order to make printed results more readable on monochrome printers.

- **SAVE**

This button saves an archive copy of the event's sessions results (in the Excel™ 2007/2010/2013/2016/2019 XLSX format) for general distribution – without code or buttons. The standard Microsoft dialog box appears, so that you can save to whatever area of your computer or network you desire. Any previous file of the same name is automatically overwritten without asking your permission.

Note that when a session is saved in black and white mode (as specified by the TOOLBOX option "*Print and archive Save in colour?*") failed lifts are marked with strikeout in order to make printed results more readable on monochrome printers.

Should you need to convert the saved file to the previous Microsoft XLS format for people who only have older versions of Excel™, open the saved file in Excel™ 2007/2010/2013/2016/2019 after and save a copy using the Excel™ menu "Save As" option in the "Excel 97-2003 Workbook" format.

If you save results during the conduct of the actual lifts you may need to click the "**CURRENT LIFTER**" button to resume the automatic sequencing of lifts.

Please note that this saved file CANNOT be used to run the competition! The actual competition management data is saved automatically at the end of the Snatch and the Clean & Jerk, and whenever you click on the red X to exit the competition management program.

OPERATION OF THE ATTEMPT CLOCK

As indicated earlier, in the middle bottom of the screen is a clock icon. If you want to run an attempt time clock it will pop up on the bottom right of the screen when the clock icon is clicked. If you change your mind about using the attempt clock just click again on the clock icon and it will disappear. Note that the clock must be stopped before you will be able to remove it.

The program will automatically determine whether each athlete should receive either one or two minutes for his or her attempt; but you can override this, or select 10 minutes (with the option of increasing to 15 minutes if desired) for the longer competition pauses, by clicking on the radio buttons of the clock form. Note that the clock must be stopped before you will be able to do this. The program's automatic time limits are fully compliant with the IWF Technical Rules.

You MUST start and stop the clock manually. It's impossible for the program to know when is the right time to start or stop. When the clock is stopped it can be restarted from the current displayed time by clicking on "**START**", or the clock renewed to the appropriate starting time by clicking on the "**RESET**" button.

When the currently called lift is marked as completed (that is, as successful, unsuccessful or abandoned), *and the clock is stopped*, the time clock automatically resets to the correct time limit for the next lift in the sequence. All you need do then is click on the clock's **START** button to start the timer for the next lift. If a change of call occurs because of an athlete's change of selected weight, or the clock is still running, you will need to first click the **RESET** button to set the correct time before clicking on the **START** button. This behaviour is necessary because it is possible that a rapid sequence of changed weights, without the clock restarting, may lead back to the same athlete for whom the clock was originally started. In this case IWF rules require the clock to resume from its original time.

The computer will automatically give sound tone warnings, as follows, at critical times:

- A tone of 880 Hertz for 0.5 seconds (a sharp high-pitched beep) after the first 30 seconds (which, under IWF Rules, is the default initial time limit for an athlete to select the next weight), and with thirty seconds to go before time expires.
- A tone of 300 Hertz for 1.5 seconds (a more prolonged lower frequency sound) when the clock reaches zero.

You can direct the output of your computer speaker to a competition amplifier with audio cables if desired.

AN EXAMPLE FINISHED SCOREBOARD

AN EXAMPLE PRINTED FINISHED SCORESHEET

SAMPLE CONTEST

Held: Thursday, 9 May 2019   Session # 1   at: Anywhereville Town Hall, Anywhereville

Start #	Name	Sex	Year Born	State	Body weight	SNATCH 1	2	3	CLEAN & JERK 1	2	3	Best Snatch	C & J	TOTAL	Sinclair Score	SEN Place	U23 Place	JUN Place
	WOMEN																	
1	GREEN Belinda	f	2000	NSW	48.67	40	43	-45	50	-55	55	43	55	98	153.653	---	2	1
2	GUEST Julie	f	1978	VIC	53.98	-50	55	57	61	65	-68	57	65	122	177.041	Guest	Guest	Guest
3	SMITH Jane	f	1997	SA	75.83	52	55	57	61	65	-70	57	65	122	144.565	1	1	---
	MEN 55kg - 67kg																	
4	SMITH John	m	2001	WA	54.85	45	-53	53	-55	-55	55	53	55	108	167.989	2	2	1
5	NURK Fred	m	1998	QLD	61.00	54	60	-63	64	75	-80	60	75	135	194.416	1	1	---
6	GUEST Jason	m	2003	ACT	66.75	77	78	80	90	---	---	80	90	170	230.672	Guest	Guest	Guest
	MEN 73kg																	
7	BROWN James	m	1999	TAS	72.20	75	80	-85	90	95	100	80	100	180	232.900	1	1	1
8	FREDERICK Frank	m	1997	NT	72.10	70	75	-77	95	100	105	75	105	180	233.088	2	2	---

REFEREE 1	REFEREE 2	REFEREE 3
BROWN James	SMITH Fred	GREEN Susan
Signature:	Signature:	Signature:

JURY:
KIRBY Gordon, MacBAIN Harold, BARBERIS Vern

TECHNICAL CONTROLLER(S):	TIME-KEEPER:	SPEAKER/ANNOUNCER:
SEAGOON Neddy	BLOODNOCK Denis	GRAY Ernestine
MARSHALL(S):	DOCTOR(S):	
SMITH Sarah	BLUETT John	