Halo League Rules and Scoring

Rules

1. There shall be at least twelve Competition Days designated HALO League events, of which the highest six will count. (As far as is possible, these should not clash with National Events (Level A) or Regional Events (Level B) accessible to HALO members or in which some members would be likely to participate.) An event cannot be both a HALO League event and the HALO Championship event.

   Events to be published, in advance, in HALO NEWS and/or on the HALO website.

2. All HALO competitive Colour Coded and Urban events should be included unless designated as the HALO Championship event. Other events should be YHOA Colour Coded or Urban events but in addition, there could be some competition days when there is an alternative event in another region which would enable those living in the more southerly parts of our region to participate in the HALO League with less travelling. These competition days are be known as 'alternates' (previously 'doubleheaders'). When calculating points only the higher of a pair of alternates will qualify.
3. Planner/Controller of HALO events to be awarded the average of their scores for the event(s) where they officiate. (In the case of alternates, only the higher score will contribute towards the average).
4. Calculations to be based on speed/km (adjusted for climb) for a particular course. Classes are allocated nominated colour or urban courses corresponding to their sex and age – see Appendix 1. The class of a competitor, and hence the allocated course, is determined from the age class on the date of the event, and so may change during the League season. Running 'up' or 'down' one or more courses increases or decreases points by an adjustment of a fixed 10% to the par speed used in the calculation.
5. The only colour courses included in the League for the purposes of allocating colours to classes and eligible to be included in the points calculations are White, Yellow, Orange, Light Green, Short Green, Green, Short Blue, Blue, Short Brown, Brown and Black. The order shown is to be taken as the order to be used when considering running up or down.

For urban events, the designated courses will be those published by the planner/organiser of the event.

6. There will be a minimum points award of 500 to anyone completing a course but scoring less than that in any HALO League event.
7. Scores and HALO League table to be updated and published, when possible, after each event on the HALO website.
8. Awards to be in the following categories:

- Overall Champion
- Super Veterans (M/W60 +) – Harry Milton Trophy
- Masters (M/W45 – M/W 55)
- Senior (M/W21 – M/W40)
- Junior (M/W20 -)

To qualify for an award, competitors must compete in at least six League events during the season. Minor places will only be awarded if there are sufficient qualifying competitors to justify it.

9. As most of the league season takes place after the New Year, the category in which a competitor qualifies for an award, i.e. Junior, Senior or Veteran, will be determined from their age attained in the year the league finishes.

10. One individual may only win one award.
11. Only competitors who are HALO members at the time of an event may be allocated points for that event.

Scoring

Halo League points are calculated by comparing the actual time for a runner in an event with a par time value determined for the runner's class, course run and the distance and climb of that course. For colour courses, the table below shall be used to determine the course to be run; for urban events it shall be the course designated by the planner/organiser of the event.

Firstly the effective course length is calculated as the actual length in Km to which is added the climb in meters divided by 100. For example a Blue course of 6.2Km with a climb of 50m gets an effective length of 6.2 + (50/100) = 6.7Km.

A runner's par speed in m/Km is then calculated. This is taken from the tables below, but adjusted according to whether the runner ran a more difficult or easier course.

Male class	Par speed	Colour	Female class	Par speed	Colour
M10	9.12	Yellow	W10	9.25	Yellow
M12	9.64	Orange	W12	10.89	Orange
M14	8.44	Lt Green	W14	10.38	Lt Green
M16	8.04	Blue	W16	10.07	Green
M18	7.67	Blue	W18	9.64	Blue
M20	7.26	Blue	W20	9.51	Blue
M21	6.75	Brown	W21	8.44	Blue
M35	7.26	Brown	W35	9.51	Blue
M40	7.58	Brown	W40	10.07	Blue
M45	8.04	Blue	W45	10.89	Green
M50	8.54	Blue	W50	11.84	Green
M55	9.12	Blue	W55	12.74	Green
M60	9. 93	Blue	W60	14.06	Green
M65	11.25	Green	W65	15.34	Lt Green
M70	12.74	Green	W70	17.31	Lt Green
M75	14.67	Lt Green	W75	19.29	Lt Green

The adjustment is 10% either way. For example an M65 would be expected to run a Green course with a par speed of 11.25 m/Km but if he ran up to a Blue course then the 10% adjustment would increase (decrease) the par speed to 12.375 m/Km.

The par time for the runner is then calculated as the product of the effective course length and the runner's par speed. Continuing the same example the par time would be calculated as 6.7 x 12.375 = 82.9125. The par time is the time in minutes that the runner would be expected to take to complete the course.

To calculate the points, one hundred is added to the par time and the actual time in decimal minutes subtracted from the result. Thus a shorter time than the par time gives a higher score and vice versa. The points are then multipled by ten to decrease the chances of a tie for a place at the end of the season.

If our hypothetical M65 ran the Blue course in 69 minutes and 28 seconds, we add 100 to the par time to get 182.9125 and subtract the decimal time of 69.46667 minutes to get 113.4458 which is carried forward as 1134.458.

A normalisation process is then performed by finding the average of the points scored by HALO competitors completing a course. If there are more than seven HALO competitors with scores then they are all reduced or increased by a factor that would bring the average to 1000.

The exception to this is when there are fewer than seven when the adjustment factor varies from not adjustment for 1 competitor to almost the full adjustment for 6 competitors. For further information, see below.

Finally the points are rounded (not truncated as has been done in the past) and if a result is less than 500, it is set to 500, but a score of zero is recorded for failure to complete the course.

Appendix 1 – Allocation of nominated colour courses

In accordance with the BOF "Event Guideline B: Regional & Local Cross Country Events" January 2009 Draft, the nominated colours for each class are now as follows with the previous colour, if different, in italics.

Class	Course	Class	Course
M10	Yellow (*White*)	W10	Yellow (*White*)
M12	Orange (*Yellow*)	W12	Orange (*Yellow*)
M14	Lt Green (*Orange*)	W14	Lt Green (*Orange*)
M16	Blue (*Lt. Green*)	W16	Green (*Orange*)
M18	Blue	W18	Blue (*Lt. Green*)
M20	Blue (*Brown*)	W20	Blue (*Green*)
M21	Brown	W21	Blue (*Green*)
M35	Brown	W35	Blue (*Green*)
M40	Brown (*Blue*)	W40	Blue (*Lt. Green*)
M45	Blue	W45	Green (*Lt. Green*)
M50	Blue	W50	Green (*Orange*)
M55	Blue	W55	Green (*Orange*)
M60	Blue (*Green*)	W60	Green (*Orange*)
M65	Green (*Lt. Green*)	W65	Lt Green (*Yellow*)
M70	Green (*Orange*)	W70	Lt Green (*Yellow*)
M75	Lt Green (*Yellow*)	W75	Lt Green (*Yellow*)

NOTE: There are none of the new 'short' courses amongst the nominated courses, but 'short' courses may be run as run up or run down courses.

Appendix 2 – Source material

Changes to nominated colour courses

The source data for the new allocations of colours comes from the draft changes to the competition structure as published by the BOF. Specifically the BOF publication *Event Guidelines B: Regional & Local Cross Country Events, Issue 1.0 Effective January 2009 Draft* page 3, which shows the colour courses including the short courses, and the classes to which they should equate.

HALO has taken the decision to exclude short courses from the nominated courses for the 2008/2009 League season. This is because it is felt that events chosen as HALO League events are unlikely to offer the full selection of courses, and any method of picking the correct course to be taken as the nominated course is likely to lead to unnecessary complexity.

This decision will be reviewed for the 2009/2010 League season.

In spite of short courses not being included in the nominated courses, they may nevertheless be chosen as a running up or running down course. This is so that HALO members should have no limitations on which course to run imposed by HALO League rules.

Changes to the par minutes/km values.

The par values have been changed to reflect available published data on running speeds for various ages and gender. The following sources contain relevant data:

- BOF Event Guidelines for Badge Events draft B 2002 for BOF Rules 2003
- OASA (Orienteering Association of South Australia) Course Proformas, Club Information Manual Section 2.1 Updated 16th Feb 2008 (Table 1).
- Course Planning & Route Choice, A. Zissos, (Canada)

The ratios of speeds for different ages and gender for all three of these sources correspond very closely, and the actual figures were taken from the first source.

Normalisation exceptions

In the case that there is a low HALO attendance, the normalisation rules are relaxed. While the usual normalisation factor is calculated as 1000 / Average points, the dividend for between 1 and 6 participants is adjusted as follows:

Divdend = (Average-1000) x f + 1000

where for participants from 1 to 6, f has the values 1, 0.6, 0.4, 0.25, 0.15, 0.07 respectively.

This gives the full un-normalised points to a single HALO competitor, with an increasing amount of normalisation until full normalisation is applied for seven or more.

For Example:

Three competitors score 1039, 500 and 969 giving a total of 2508 and an average of 836. This would normally generate a normalisation factor of 1000/836 = 1.20. However since there are only three HALO scoring competitors, the normalisation factor uses the formula F/836 where F=((836-1000)x0.4)+1000=934.2. So the normalisation facor is 934.2/836= 1.117.

The scores are adjusted to 1161, 558, and 1082 respectively. Note that in this case a minimum score has also been improved – however if the normalisation factor was less than one, the minimum of 500 would not be lowered to comply with the rules.

N.B the observant may see a striking similarity to the scores at Bank Foot 4/11/2012.

Amendments

2009

The rules have been amended to reflect the BOF Draft Event Structure for 2009. See Appendix 2 for details.

Committee meeting 11 May 2011

We have formalised the understanding that a HALO Championship event, even if a HALO event, cannot also be a League event.

Also changed at this time are Level 1 to Level A and Level 2 to Level B. “Local Event” has been changed to “Colour Coded event”.

Committee meeting 13 September 2011

Changes for 2011/12 were decided regarding The Harry Milton Trophy, age classes, minimum number of events to qualify for a prize and prizes for minor places.

Committee meeting 15 November 2012.

The following changes were made for the 2012/13 season:

- Inclusion of urban events in to the HALO League.
- Normalisation of results to allow for different runnability, including a sliding scale for low HALO representation.
- Changing the par score from 100 to 1000 to reduce the likelihood of a tie.