

F3H — Cross Country

Definition

- 1 The object is to fly the course non-stop with one model. Fastest time wins.
- 2 If all flights are less than the course length, then the longest distance flown wins. In the case of ties, the shortest time will determine the winner.
- 3 Any pilot of the team may fly the model.

Entry

- 4 A team consists of a pilot and up to two helpers.
- 5 Each team shall include one timer who will be assigned by the organizers as official timer for another team. The official timer shall also be responsible to certify distance travelled if less than the full course distance.
- 6 Each team may enter any number of sailplanes. Each sailplane must be flown on the same assigned frequency. There is no restriction on the type or number of chase ground vehicles. Suitable space must be provided in one of the vehicles for the official timer.
- 7 There is no restriction on the number of controls or sensors.
- 8 All ballast must be carried internally and cannot be jettisonable, except for water ballast.

Course

- 9 Depending on local conditions, the course may be any of the following —
 - a Point A to Point B (distance to a goal)
 - b Point A round Point B to point C (broken leg distance to a goal).
 - c Point A to Point B and return to Point A (goal and return).
 - d Distance Around a Closed Course with 3 or more turn points (triangle, quad., etc).
 - e Free distance.
- 10 On the day of the competition, the organizers shall define the nature and length of the course, to be consistent with the local wind and weather conditions which exist and/or are forecast for the day.
- 11 The exact nature and length of the course will be announced by the organizers at a pilots' meeting held on the day of the event. A different task may be used on each day of a multi-day competition.
- 12 Minimum event length for a World Championship event shall include at least three days of official flying.

Launch

- 13 All launching shall be by electrical winches which shall be set up and remain in a launching area designed by the organizer.
- 14 All launching sequences shall be at each team's discretion.
- 15 Relaunching on the course is not permitted.

Flight

- 16 Flight time for each attempt will begin only when the sailplane crosses the start line in the direction of the course. Prior to crossing the start line, the pilot is responsible for informing the officials that he is making a start. Flight time will stop when any of the following occurs —
 - a The sailplane crosses the finish line.
 - b The pilot declares the sailplane lost.
 - c The sailplane lands, or
 - d The sailplane ceases to fly on its own e.g. carried in a moving car!
- 17 A team may change planes with no restrictions other than that the initial assigned frequency must be used.
- 18 Any number of attempts will be allowed within the contest time period. The best flight each day will be used in the final scoring.
- 19 Once on the course, the chase vehicle(s) must travel the designated route except for possible off-course retrievals.
- 20 The sailplane need not fly direct over the prescribed route. At all designated turn points, turns must be flown outside of the course perimeter.
- 21 In the event of on-course landings (less than full-course length), the point of landing shall determine the distance flown.
- 22 If the sailplane is destroyed in flight, or goes out of sight for a period of not less than 5 minutes, the official timer will log its point of furthest progress up to that point.

Score

- 23 The winner of each task shall receive 1000 points.
 - a Over pre-determined course events, the fastest finisher is the winner. If there are no finishers, the winner is the team which flew the longest distance.
 - b In Free Distance, the winner is the team which makes the longest distance flight.
- 24 When a team lands off course, an imaginary perpendicular line from the course to the landing spot shall determine the distance flown. A marker shall be placed by the official timer at the projected point on the course.

25 If there is a finisher, score calculations are —

- a The fastest finishing team's score — Score = 1000
- b Other finishing team's score — Score = $700 + (T_w/T_i \times 300)$
- c Non-finishing teams score — Score = $D_i/D_w \times 700$

Where

- T_i = Team's time to finish the course.
- T_w = Fastest time to finish the course.
- D_i = Team's distance flown.
- D_w = Distance of the task.

26 If there are no finishers, each team receives a score as below —

- a Longest distance flight = 1000 points.
- b Other Score = $D_i/D_w \times 1000$.

Where

- D_i = Team's distance flown.
- D_w = Longest distance flown.

27 The overall winner shall be determined by adding together all the daily scores.

Note (Optional)

A fairer and much simpler scoring system has been used with some success in competitions in South Africa.

The 1000 points are divided into 600 for distance and 400 for the speed at which it was done.

Distance score = $(\text{distance flown}/\text{best distance}) \times 600$

Speed score =

$(\text{speed}/\text{speed over best distance}) \times (\text{dist flown}/\text{course length}) \times 400$

(NB. It is possible for this formula to give a score over 400 for speed if a distance just under the best is flown at a very high speed, but this must be reduced to 400).

Flight score = distance score + speed score.