## **IARU Region 1 ARDF Working Group**

# LIST OF CHANGES in the Rules for Championships in Amateur Radio Direction Finding Valid from January 1st, 2012

## (changes are highlighted in yellow)

#### 14. Categories

14.7 Each society may enter a team of up to three competitors in each category for classic competitions combined (3,5 and 144 MHz) and possibly up to another three competitors in each category for Sprint and Foxoring competitions combined.

#### 21. Maps

21.3 The competition map shall cover the whole competition area including start, finish beacon and all transmitters. The start, finish beacon, finish corridor and finish line shall be clearly marked on the map. The start is marked by a triangle (symbol 701), the finish beacon by a circle (symbol 702), the finish corridor by a dashed line (symbol 705) and the finish by two concentric circles (symbol 706).

## **Appendix 7: Rules for ARDF Sprint Event**

#### S6. Maps

S6.2 The competitor receives the map along with the receiver in the pre-start area 2 minutes before the start. The start, finish beacon, spectator control, if this differs from the beacon, finish corridor and finish line shall be clearly marked on the map. The start is marked by a triangle (symbol 701), the finish beacon and spectator control by a circle (symbol 702), the finish corridor by a dashed line (symbol 705) and the finish by two concentric circles (symbol 706).

#### Appendix 8: Rules for the ARDF Foxoring Event

## F1. Basic explanation

Foxoring is a special format of the ARDF competition. Its main features are as follows:

- At the start, competitors get competition map with marked start, finish beacon and nominal positions of the transmitters.
- Transmitters except for the finish beacon are placed close to their nominal positions marked on the maps.
- All transmitters except for the finish beacon are very weak and therefore audible only at the close vicinity of the antenna. All transmitters operate continuously.
- The RF field strength of each transmitter is adjusted so that :
  - the transmitter is clearly audible at its nominal position marked on the map AND at the distance of 30m from its real position
  - the transmitter is NOT audible at the distance of 250m from its real position.
- Competitors shall run to the close vicinity of the transmitters by means of the map and then complete the final approach by means of the direction finding receiver.

The Foxoring Rules are based on the Rules for Championships in Amateur Radio Direction Finding. The points as stated below replace identically numbered points of part A and B of the Rules.

#### 15. Training event

F15.1 For training purposes the organising society shall offer a model event on the day prior to the competition to demonstrate the transmitter features, the set-up of transmitters and antennas, the registering devices etc., which will be used in the competitions. One transmitter of each frequency which will be used in the competition shall be installed.

## 16. Starting order

- F16.6 The competitors within one category start at equal start intervals. Minimum start interval is 2 minutes.
- F16.7 All competitors of a particular category shall start in the same start corridor

#### 19. Courses

- F19.3 Transmitters including the finish beacon shall be located not less than 250 meters apart. The transmitter nearest to the start shall be located not less than 250 meters from the start.
- F19.7 Number of transmitters and course lengths assigned to particular categories:

Category	number of transmitters	effective course length
W19	58 + finish beacon	46 km
W21	610 + finish beacon	57 km
W35	58 + finish beacon	46 km
W50	47 + finish beacon	35 km
<mark>W60</mark>	47 + finish beacon	35 km
M19	68 + finish beacon	<mark>68 km</mark>
M21	810+ finish beacon	<mark>79 km</mark>
M40	68 + finish beacon	68 km
<mark>M50</mark>	58 + finish beacon	57 km
<mark>M60</mark>	58 + finish beacon	46 km
<mark>M70</mark>	47 + finish beacon	35 km

F19.8 The composition of the courses (transmitter numbers assigned to particular categories) shall be defined by the siting referee and published on or before the day prior to the competition and before the training.

#### 21. Maps

- F21.3 The competition map shall cover the whole competition area including start, finish beacon and all transmitters. The map start (the point where competitors obtain the maps), nominal positions of all transmitters assigned to the particular category, finish beacon and the finish corridor shall be clearly marked on the map. The start is marked by a triangle (symbol 701), all transmitters by a circle (symbol 702), the finish corridor by a dashed line (symbol 705) and the finish by two concentric circles (symbol 706).
- F21.6 Maps shall be protected against moisture.

#### 24. Start

- F24.1 Spare receivers and components, clearly marked as property of a particular team or competitor, shall be placed at an indicated point just beyond the starting line beside the starting corridor.
- F24.5 Competitors shall enter the pre-start area not earlier than FIVE MINUTES before their own start. At the same time, they shall be given their receivers. Competitors receive maps after their start, at the starting line or at the indicated point within the starting corridor.

## 25. Transmitters

- F25.3 Each transmitter shall be clearly audible during the whole competition at its nominal position marked on the map AND at the distance of 30m from its real position. Transmitters shall NOT be audible at the distance of 250 m from their real positions. The finish beacon operates at normal power and therefore shall be clearly audible during the whole competition from the start point. Audibility of all transmitters shall be considered as using a receiver of average sensitivity.
- F25.9 All transmitters except for finish beacon have no flags. Registering devices shal be placed at the immediate vicinity of each transmitter.

## F25.10 not valid

## 26. Transmitters arrangement

## F26.1 Competitions in Foxoring are organized on the 3.5 MHz band.

F26.2 There are number of transmitters in the competition area plus the finish beacon. Transmitters shall operate continuously.

## **Technical Specifications for ARDF Foxoring**

## FT2.6 Specifications for the 3.5 MHz transmitters:

•	Carrier frequency *	3510 3600 kHz
•	Frequency stability	better than 50 ppm
•	Channel spacing between the beacon and other transmitte	rsmore than 30 kHz
•	Undesired products level	conforming to the national regulations
•	Output RF power (finish beacon)	1 5 W
•	Output RF power (other transmitters)	10 mW
•	Mode	A1A (keyed unmodulated carrier)
•	Keying speed	8 15 WPM
•	Antenna (finish beacon)	vertical
•	Antenna (other transmitters)	vertical (approx. 30 cm long)