

## 1. Organizer

Korean Amateur Radio League (KARL)
The Organizing Committee of the 19th World ARDF Championships
Contacts :
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## 2. Event center

Hanwha Resort Seorak Sorano, Sokcho City, Gangwon Province, Korea http://www.hanwharesort.co.kr/irsweb/resort3/eng/index.asp

## 3. International Jury

| Ole Garpestad | LA2RR | NRRL, Norway | Reg1 | Chairman of the Jury |
| :--- | :--- | :--- | :--- | :--- |
| Panayot Danev | LZ1US | BFRA, Bulgaria | Reg1 | Member |
| Igor Lazarev | USOVA | UARL, Ukraine | Reg1 | Member |
| Kurt Smet | ON4CHE | UBA, Belgium | Reg1 | Member |
| PA Nordwaeger | SM0BGU | SSA, Sweden | Reg1 | Member |
| Karl-Heinz Schade | DL7VDB | DARC, Germany | Reg1 | Member |
| Keith Witney | VE7KW | RAC, Canada | Reg2 | Member |
| Yoh Hiroshi Izuta | JF1RPZ | JARL, Japan | Reg3 | Member |
| Kim Duck Ki | DS3EXT | KARL, Korea | Reg3 | Siting referee |
| Choi Seung Mock | HL2OCS | KARL, Korea | Reg3 | Technical Director |
| Choi Hyeong Moon | HL4CFN | KARL, Korea | Reg3 | Secretary of the Jury |
| Yasunori Iwata | JH2DFJ | JARL, Japan | Reg3 | Observer |

## 4. The notice from the Organizing Committee

The deadline for submitting the starting order changes from 15:00 to 12:00 on Sep 3rd because we need more time to do work for making the starting list. It was approved by the International Jury on 17th Aug.
Please each country submits all information on starting groups before 12:00 pm on 3rd of Sep.
17.4 At or before the event check-in and in no circumstances later than 15:00 on the day before the first competition, each team shall allocate its competitors to 3 starting groups, separately for each competition and each category. If a team fails to allocate its competitors to starting groups in time, competitors will be allocated in the order in which they are entered.

## 5. Timetable of the Championships

## 2nd of September, Sun

14:00 Arrivals, Registration
17:00-18:00 International Jury meeting
18:00-20:00 Dinner
19:30-20:00 International Jury meeting

3rd of September, Mon
07:30 Breakfast
09:00-10:30 Training (Sprint)
10:30-11:30 Training (Foxoring)
12:00-13:30 Lunch
13:30 Training (Classics)
15:30 Team Leader Meeting
17:00 Opening Ceremony
19:00 Dinner
21:00 International Jury meeting

## 4th of September, Tue

06:15 Breakfast
07:00 Buses with competitors start to the terrain
08:30 Buses with visitors start to the finishing area
09:00 First start (Foxoring)
Jury meeting at the finishing area
Buses start from the finish to the event center periodically.
17:00 International Jury meeting (if necessary)
17:30-19:30 Dinner
18:45-19:50 Team Leader meeting
20:00 Awarding Ceremony

5th of September, Wed
06:15 Breakfast
07:00 Buses with competitors start to the terrain.

| 08:30 | Buses with visitors start to the finishing area |
| :---: | :---: |
| 09:00 | First start (First Classics 3.5MHz, 144MHz) |
|  | Jury meeting at the finishing area |
|  | Buses start from the finish to the event center periodically. |
| 17:00 | International Jury meeting (if necessary) |
| 17:30-19:30 | Dinner |
| 18:45-19:50 | Team Leader meeting |
| 20:00 | Awarding Ceremony |
| 6th of September, Thu |  |
| 06:15 | Breakfast |
| 07:00 | Buses with competitors start to the terrain. |
| 08:30 | Buses with visitors start to the finishing area |
| 09:00 | First start (Sprint) |
|  | Jury meeting at the finishing area |
|  | Buses start from the finish to the event center periodically. |
| 12:00 | Lunch |
| 13:00 | International Jury meeting (if necessary) |
| 14:00 | Excursion Buses start from the event center |
| 17:30-19:30 | Dinner |
| 18:45-19:50 | Team Leader meeting |
| 20:00 | Awarding Ceremony |
| 7th of September, Fri |  |
| 06:00 | Breakfast |
| 07:00 | Buses with competitors start to the terrain. |
| 08:30 | Buses with visitors start to the finishing area |
| 09:00 | First start (Second Classics 3.5MHz, 144MHz) |
|  | Jury meeting at the finishing area |
|  | Buses start from the finish to the event center periodically. |
| 17:00 | International Jury meeting (if necessary) |
| 18:00 | Awarding Ceremony |
| 19:00 | Farewell Party |
| 8th of September, Sat |  |
| 07:00~09:00 Breakfast |  |
| Not later than | 10:00 Check-out, Departure |

## 6. The notice from the Organizing Committee

Categories: W19, M19, W21,M21, W35, M40, W50, M50, W60, M60, and M70.
Bags will be transported from start to finish on all completion days.
Flags: standard orange and white triangle
Number bibs: Competitors will get 2 pcs of number bibs. It is the same for each competition day. Competitors shall wear bibs on the chest and the back.
Marking device: Sportldent system will be used. SI card numbers will be collected in the entry form. SI-card 8 will be provided for those who do not have SI-cards.

## 7. Information about the competitions

7-1 Sizes of the maps, scales, vertical contours and coordinates of the finish Foxoring $-42 \times 29 \mathrm{~cm}(33 \times 23 \mathrm{~cm}), 1: 10,000, \mathrm{H}=5 \mathrm{~m}, 38.0500 \mathrm{~N}, 128.3629 \mathrm{E}$ Sprint $-29 \times 21 \mathrm{~cm}(22 \times 19 \mathrm{~cm}), 1: 5,000, \mathrm{H}=2.5 \mathrm{~m}, 38.0527 \mathrm{~N}, 128.3931 \mathrm{E}$ First Classics $-25 \times 36 \mathrm{~cm}(18 \times 30 \mathrm{~cm}), 1: 15,000, \mathrm{H}=5 \mathrm{~m}, 38.0753 \mathrm{~N}, 128.3708 \mathrm{E}$ Second Classics $-29 \times 21(24 \times 17 \mathrm{~cm}), 1: 15: 000, \mathrm{H}-5 \mathrm{~m}, 37.5437 \mathrm{~N}, 128.4847 \mathrm{E}$

## 7-2 Courses for Categories

Foxoring

| Date | Competition | Category | Number of Transmitters | Limit <br> min | Controls |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $4-9-2018$ | foxoring | W19 | $2 F, 3,4,4 F, 5, B$ | 140 | 6 |
| $4-9-2018$ | foxoring | W21 | $1,2 F, 3,4,4 F, 5, B$ | 140 | 7 |
| $4-9-2018$ | foxoring | W35 | $1,3,4,4 F, 5, B$ | 140 | 6 |
| $4-9-2018$ | foxoring | W50 | $1,2 F, 4,5, B$ | 140 | 5 |
| $4-9-2018$ | foxoring | W60 | $1,2 F, 3,4, B$ | 140 | 5 |
| $4-9-2018$ | foxoring | M19 | $2,2 F, 3,4,4 F, 5, B$ | 140 | 7 |
| $4-9-2018$ | foxoring | M21 | $1,1 F, 2 F, 3 F, 4,4 F, 5,5 F, B$ | 140 | 9 |
| $4-9-2018$ | foxoring | M40 | $1,1 F, 2 F, 4,4 F, 5, B$ | 140 | 7 |
| $4-9-2018$ | foxoring | M50 | $1,2 F, 3,4,4 F, B$ | 140 | 6 |
| $4-9-2018$ | foxoring | M60 | $1,2 F, 3,4 F, 5, B$ | 140 | 6 |
| $4-9-2018$ | foxoring | M70 | $1,3,4 F, 5, B$ | 140 | 5 |

Starting corridors 40 m , finishing corridors 70 m
Time limits: 140 minutes;

## Classics Day 1

| Date | Competition | Category | Number of Transmitters | Limit <br> min | Controls |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $5-9-2018$ | 80 m | W19 | $1,3,4,5, B$ | 140 | 5 |
| $5-9-2018$ | 80 m | W21 | $2,3,4,5, B$ | 140 | 5 |
| $5-9-2018$ | 2 m | W35 | $1,3,4,5, B$ | 140 | 5 |
| $5-9-2018$ | 2 m | W50 | $2,3,5, B$ | 140 | 4 |
| $5-9-2018$ | 2 m | W60 | $3,4,5, B$ | 140 | 4 |
| $5-9-2018$ | 80 m | M19 | $1,2,4,5, B$ | 140 | 5 |
| $5-9-2018$ | 80 m | M21 | $1,2,3,4,5, B$ | 140 | 6 |
| $5-9-2018$ | 80 m | M40 | $1,2,3,4, B$ | 140 | 5 |
| $5-9-2018$ | 2 m | M50 | $2,3,4,5, B$ | 140 | 5 |
| $5-9-2018$ | 2 m | M60 | $2,4,5, B$ | 140 | 4 |
| $5-9-2018$ | 2 m | M70 | $1,4,5, B$ | 140 | 4 |

Starting corridors 40 m , finishing corridors 90 m
Time limits: 140 minutes

## Sprint

| Date | Competition | Category | Number of Transmitters | Limit <br> min | Controls |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $6-9-2018$ | sprint | W19 | $1,2,3, S, 1 F, 3 F, 4 F, 5 F, B$ | 60 | 9 |
| $6-9-2018$ | sprint | W21 | $1,2,3,4,5, S, 2 F, 3 F, 4 F, 5 F, B$ | 60 | 11 |
| $6-9-2018$ | sprint | W35 | $1,2,3,5, S, 1 F, 3 F, 4 F, 5 F, B$ | 60 | 10 |
| $6-9-2018$ | sprint | W50 | $1,2,5, S, 2 F, 3 F, 4 F, B$ | 60 | 8 |
| $6-9-2018$ | sprint | W60 | $1,3, S, 2 F, 3 F, 4 F, B$ | 60 | 7 |
| $6-9-2018$ | sprint | M19 | $1,2,3, S, 2 F, 3 F, 4 F, 5 F, B$ | 60 | 9 |
| $6-9-2018$ | sprint | M21 | $1,2,3,4,5, S, 1 F, 2 F, 3 F, 4 F, 5 F, B$ | 60 | 12 |
| $6-9-2018$ | sprint | M40 | $1,2,3,5, S, 1 F, 2 F, 3 F, 4 F, 5 F, B$ | 60 | 11 |
| 6-9-2018 | sprint | M50 | $1,2,3,5, S, 2 F, 3 F, 4 F, 5 F, B$ | 60 | 10 |
| $6-9-2018$ | sprint | M60 | $1,3,5, S, 2 F, 3 F, 4 F, 5 F, B$ | 60 | 9 |
| $6-9-2018$ | sprint | M70 | $1,3, S, 2 F, 3 F, 5 F, B$ | 60 | 7 |

Starting corridors 40 m , finishing corridors 50 m
Time limits: 60 minutes

## Classics Day 2

| Date | Competition | Category | Number of Transmitters | Limit <br> min | Controls |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $7-9-2018$ | $2 m$ | W19 | $1,2,4,5, B$ | 140 | 5 |
| $7-9-2018$ | $2 m$ | W21 | $1,2,3,5, B$ | 140 | 5 |
| $7-9-2018$ | 80 m | W35 | $2,3,4,5, B$ | 140 | 5 |
| $7-9-2018$ | 80 m | W50 | $1,2,4, B$ | 140 | 4 |


| $7-9-2018$ | 80 m | W60 | $1,2,5, B$ | 140 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $7-9-2018$ | 2 m | M19 | $1,3,4,5, B$ | 140 | 5 |
| $7-9-2018$ | 2 m | M21 | $1,2,3,4,5, B$ | 140 | 6 |
| $7-9-2018$ | 2 m | M40 | $1,2,3,4, B$ | 140 | 5 |
| $7-9-2018$ | 80 m | M50 | $1,3,4,5, B$ | 140 | 5 |
| $7-9-2018$ | 80 m | M60 | $2,3,5, B$ | 140 | 4 |
| $7-9-2018$ | 80 m | M70 | $2,4,5, B$ | 140 | 4 |

Starting corridors 120m, finishing corridors 120 m
Time limits: 140 minutes.

## 7-3 List of transmitters and band assignments

Foxoring: M21 will search for 8 transmitters, W21, M19 and M40 will search for 6 transmitters, W19, W35, M50 and M60 will search for 5 transmitters, while W50, W60 and M70 will search for 4 transmitters;

Sprint: M21 will search for 10 transmitters, W21 and M40 will search for 9 transmitters, W35 and M50 will search for 8 transmitters, W19, M19 and M60 will search for 7 transmitters, W50 will search for 6 transmitters, while W60 and M70 will search for 5 transmitters;
All categories have to search for 'S' transmitter, too

## Classic 1:

W19, W21, M19, M21 and M40 will compete on 3.5 MHz (white-orange prisms). W35, W50, W60, M50, M60 and M70 will compete on 144 MHz (white-orange prisms with vertical blue line);

## Classic 2:

W35, W50, W60, M50, M60 and M70 will compete on 3.5 MHz (white-orange prisms).
W19, W21, M19, M21 and M40 will compete on 144 MHz (white-orange prisms with vertical blue line);
Both days M21 will search for 5 transmitters, W19, W21, W35, M19, M40 and M50 will search for 4 transmitters, while W50, W60, M60 and M70 will search for 3 transmitters.

All other details will be announced at the Team Leaders meeting before each competition.

7-4 Start and finish area arrangement

## FOXORING START



FOXORING FINISH


## SPRINT START



## S AREA



## SPRINT FINISH



## Classic 1 START



## Classic 1 FINISH



## Classic 2 START



## Classic 2 FINISH



7-5 Technical parameters of the transmitters to be used for each competition
Frequency allocations for the 3.5 MHz competition

| Frequency / Competition | Classic | Sprint | Foxoring |
| :--- | :--- | :--- | :--- |
| 3520 kHz |  | TX 1...5 | TX 1, 1F, 2, 2F |
| 3550 kHz | TX 1...5 | Spectator (S) | TX 3, 3F, 4, 4F |
| 3580 kHz |  | TX 1F...5F | TX 5, 5F |
| 3600 kHz | Beacon | Beacon | Beacon |

Frequency allocations for the 144 MHz competition
144.500 MHz TX $1 . . .5$
144.850 MHz Beacon

## Output RF Powers

3.5 MHz Classic: TX $1 . . .5$ and Beacon 3W
3.5 MHz Sprint : TX 1...5, 1F...5F, S and Beacon 1W
3.5 MHz Foxoring : TX $1 . . .5,1$ F...5F 10 mW and Beacon 3 W

144 MHz Classic :TX $1 . .5$ and Beacon 1W

## Antennas

3.5 MHz Classic: 8 m vertical +8 m counterpoise
3.5 MHz Sprint : 8 m vertical $+3 \times 5 \mathrm{~m} 3$-radial counterpoise
3.5 MHz Foxoring : TX approx. 30 cm vertical,

Beacon 8 m vertical +8 m counterpoise
144 MHz Classic : Crossed Dipoles 3m above ground level

## 7-6 Terrain characteristics, clothing and weather:

The terrains are located within a 60 Km range from the event center and around the beach.

## Foxoring, Classic 1 and 2

These are consisting of low mountains, forests, farmland and villages. There are places with thorns, bushes, deep ravines, and cemeteries. Sometimes you will come up against construction yards, military facilities and out-of-bounds areas. Please do not enter any private or agricultural lands (including orchards), although it is not marked as a restricted area on the map, these are off limits. Fences (including electrical fences) are often installed on private land and farmland boundaries, but are rarely shown on maps. There is not much traffic on the roads, so please be careful when crossing roads.

## Sprint

The terrain for Sprint is a low forest less than 20 meters above sea level and consisting of coastal campsites, gently sloping forests, roads, buildings, fences and out-of-bounds areas.

## All terrains have the following risks. Details will be announced to the team leaders before the competition.

## Animals and Insects

In rare cases, you may encounter snakes, wild boar, elk, dogs, and bees.
Competitors need to wear appropriate clothing. Dressing in light layers is recommended. Trousers must be long, short pants are not recommended. A pleasant and cool weather around $22^{\circ} \mathrm{C}-28^{\circ} \mathrm{C}$ degrees is expected, however be prepared for unexpected rain and cooler temperatures.

## 8. Insurance and Medical care

A First aid facility will be available at the finish areas for all competitors at no cost to the participants. On-site First Aid applies for minor treatment only. However, the cost for any ambulance transportation, emergency department visits, and clinic visits will be the participant's responsibility. Therefore, we recommend that you purchase travel insurance to cover the expense of any extra needed medical care.

## 9. Cultural Program

After finishing the Sprint, you will be able to visit the Unification observatory at the DMZ.
It will take an hour by bus. It is located at Goseong-Gun, Gangwon Do of Korea's northernmost province.
Since 1983 it has been taking a role as the first education center for unification security to experience division reality directly \& inscribe a desire for unification for over 20 years.
The Unification Observatory is an education center of living experiences to console pains for displaced people missing their mountains \& rivers and gives a glimpse into the experiences of division reality \& the will of unification for the children of those
families that were separated.
Also, it shows the actual state of the only divided nation in the world to foreigners. In addition, at the age of peacemaking \& exchange between South \& North Korea, the meaning of the Unification observatory located at the key point for exchange \& Geumgangsan Land Tour has been renewed as the spot of cooperation \& exchange between South \& North Korea.
At Unification Observatory, you can see wonderful four season's view of Geumgangsan called the most noted mountain of North Korea directly with the naked eye.
Enjoy the beauty of Geumgangsan having a view of different seasons like the principal peaks including Birobong as the top peak of Geumgangsan, Haegeumgang as the end of Geumgangsan and Gamho having legend of firewood gatherers \& fairies.

